

# Economic Survey of Karnataka - 2015-16



Department of Planning,  
Programme Monitoring & Statistics  
Government of Karnataka



# **ECONOMIC SURVEY OF KARNATAKA**

## **2015-16**

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## **PREFACE**

The Economic Survey is a document which is published every year by the State Government. The objective of the Economic Survey is to analyse the performance of the State across sectors and to identify specific gaps and challenges for initiating appropriate action. The document highlights the macro-economic profile of the State and provides basic information and data on economic policies and development programmes being implemented by the Government.

It is widely read by policy makers, current and prospective investors and entrepreneurs, researchers, academics and students. The users of the Economic Survey include foreign investors and domestic investors. The document has been found to be useful to potential investors to evaluate Karnataka as a destination for their investments and consequent business activities.

Concerted efforts have been made to check the accuracy and relevance of the data and information presented in the document. Efforts have been made to enhance the presentation of data & information, and improving the analysis of issues and performances.

The preparation of the Economic Survey 2015-16 has been coordinated by Mr. K. V. Subramanyam, Director, Directorate of Economics & Statistics and Smt. C. H. Vasundhara Devi, Additional Director, Directorate of Economics & Statistics.

Preparation of the Economic Survey document has been strengthened by inputs from officers of the Government and subject experts. The support received from nodal officers, Mr. K. Raghuram Reddy, Mr. M. N. Narasimhamurthy, Mr. M. Vijendra Babu, Mr. M. B. Shankarappa, Mr. K. C. Lakshmi Narayan, Smt. Subodha Nayaka, Mr. K. S. Shankar, Dr. B. Janakiram, Mr. U. R. Subramanya, Mr. K. Gururaja Rao, Mr. H. V. Nagaraj, , Smt. S. K. Kalpana, Mr. Ramachandra Hegde, Smt. C. S. Lathadevi, Mr. K.

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We thank the officers of the line departments who have provided data and the information on new initiatives and challenges. The nodal officers and coordinators have tried their best to present the information with due care and accuracy.

I look forward to your feedback for further improvements.

**Rajeev Ranjan**  
**Secretary**

**Uma Mahadevan**  
**Secretary**

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**KARNATAKA AT A GLANCE**

Sl. No.	Item	Units	1960-61	1970-71	1980-81	1990-91	2000-01	2009-10	2011
1	Geographical Area	'000 Sq.Km.	192	192	192	192	192	192	192
	<b>Administrative Setup</b>								
2	Revenue Divisions	No.	4	4	4	4	4	4	4
3	Districts	-do-	19	19	19	20	27	30	30
4	Taluks	-do-	175	175	175	175	175	176	176
5	Inhabited Villages	-do-	26377	26826	27028	27066	27481	27481	27397
6	Uninhabited Villages	-do-	2972	2707	2362	2127	1925	1925	1943
7	Towns	-do-	231	245	281	306	270	270	347
	<b>Population as per Census</b>		<b>1951</b>	<b>1961</b>	<b>1971</b>	<b>1981</b>	<b>1991</b>	<b>2001</b>	<b>2011</b>
8	Total	(in 000s)	19401	23587	29299	37136	44977	52851	61095
9	Males	-do-	9866	12041	14972	18923	22952	26899	30967
10	Females	-do-	9535	11546	14327	18213	22025	25952	30128
11	Rural	-do-	14945	18320	22177	26406	31069	34889	37469
12	Urban	-do-	4456	5267	7122	10730	13908	17962	23626
13	Scheduled Castes	-do-	2583	3117	3850	5595	7369	8564	10475
14	Scheduled Tribes	-do-	80	192	231	1825	1916	3464	4249
15	Density of Population	Per Sq.Km.	262 <sup>a</sup>	123	153	194	235	276	319
16	Literacy Rate	Percentage	19.26 <sup>b</sup>	29.80 <sup>b</sup>	36.83 <sup>b</sup>	46.21 <sup>c</sup>	56.04 <sup>c</sup>	66.60 <sup>c</sup>	75.40 <sup>c</sup>
17	Sex Ratio	Females per 1000 males	966	959	957	963	960	965	973
18	Urban Population	Percentage	22.96	22.33	24.3	28.89	30.92	33.99	38.7
	<b>State Income - at Current Prices</b>		<b>1960-61</b>	<b>1970-71</b>	<b>1980-81</b>	<b>1990-91</b>	<b>2000-01</b>	<b>2014-15<sup>e</sup></b>	<b>2015-16<sup>e</sup></b>
19	State Income	Rs.Crore	751	2016	5587	20551	96348	907839	1022729
20	Primary Sector	-do-	432	1063	2573	7626	31473	117416	121340
21	Secondary Sector	-do-	122	418	1160	4734	18684	199848	214719
22	Tertiary Sector	-do-	197	535	1854	8191	46191	513651	598812
23	Per capita Income	Rupees	321	696	1520	4598	18344	130897	145799
	<b>Agriculture</b>		<b>1960-61</b>	<b>1970-71</b>	<b>1980-81</b>	<b>1990-91</b>	<b>2000-01</b>	<b>2012-13</b>	<b>2013-14</b>
24	Net Area Sown	'000 Ha.	10228	10248	9899	10381	10410	9793	9923
25	Gross Cropped Area	-do-	10588	10887	10660	11759	12284	11748	12267
26	Gross Irrigated Area	-do-	NA	1355	1676	2598	3271	4007	4112
27	Gross Irrigated Area to Gross Cropped Area	Percentage	NA	12.45	15.72	22.09	26.63	34.11	33.52
	<b>Area under Principal Crops</b>		<b>1960-61</b>	<b>1970-71</b>	<b>1980-81</b>	<b>1990-91</b>	<b>2000-01</b>	<b>2013-14</b>	<b>2014-15</b>
28	Rice	'000 Ha.	1028	1170	1114	1173	1483	1330	1326
29	Wheat	-do-	324	343	322	198	266	214	198
30	Jowar	-do-	2969	2224	1991	2155	1782	1176	1047
31	Bajra	-do-	500	562	564	425	462	286	234
32	All Cereals	-do-	6274	5971	5573	5415	5757	5043	4873
33	All Pulses	-do-	1306	1444	1531	1621	2047	2461	2320
34	Total Foodgrains	-do-	7579	7416	7104	7036	7804	7504	7193
35	Sugarcane Harvested Area	-do-	NA	NA	NA	NA	NA	420	480
36	Cotton	-do-	984	1142	1012	596	552	654	875
37	Groundnut	-do-	915	1027	790	1212	1063	725	654
	<b>Production of Principal Crops</b>		<b>1960-61</b>	<b>1970-71</b>	<b>1980-81</b>	<b>1990-91</b>	<b>2000-01</b>	<b>2013-14</b>	<b>2014-15</b>
38	Rice	'000 tonnes	1328	2000	2258	2428	3847	3758	4025
39	Wheat	-do-	77	130	174	123	250	230	261
40	Jowar	-do-	1154	1565	1506	1282	1547	1300	1174
41	Bajra	-do-	129	211	192	203	342	309	248
42	All Cereals	-do-	3578	5235	5714	5705	10004	11040	11232
43	All Pulses	-do-	352	511	488	539	956	1465	1390
44	Total Foodgrains	-do-	3930	5746	6202	6244	10960	12505	12622
45	Sugarcane	-do-	5184	8106	12127	20750	42924	35910	43776
46	Cotton <sup>d</sup>	-do-	382	570	597	640	855	1437	2312
47	Groundnut	-do-	448	780	475	816	1081	708	502
	<b>Agricultural Census</b>		<b>1970-71</b>	<b>1980-81</b>	<b>1990-91</b>	<b>2000-01</b>	<b>2005-06</b>	<b>2010-11</b>	<b>2010-11</b>
48	No. of Operational Holdings	'000s	3551	4309	5776	7029	7581	7832	7832
49	Area of Operational Holdings	-do-	11368	11746	12321	12307	12385	12162	12162
50	Average size of Operational Holdings	Ha.	3.2	2.73	2.13	1.74	1.63	1.55	1.55
	<b>Live Stock Census</b>		<b>1972</b>	<b>1977</b>	<b>1983</b>	<b>1990</b>	<b>1997</b>	<b>2007</b>	<b>2012</b>
51	Total Livestock	'000s	21965	21800	24680	24968	30688	32883	27701
52	Total Poultry	-do-	10163	9696	12096	15694	21399	42433	53442

<b>Forest</b>			<b>1962-63</b>	<b>1970-71</b>	<b>1980-81</b>	<b>1990-91</b>	<b>2000-01</b>	<b>2010-11</b>	<b>2014-15</b>
53	Forest Area	'000 Ha.	3522	3621	3838	3872	3828	4335	4335
<b>Factories</b>			<b>1971</b>	<b>1981</b>	<b>1991</b>	<b>2001</b>	<b>2009</b>	<b>2014 *</b>	<b>2015 *</b>
54	Working Factories	No.	3668	4985	7768	9440	11983	8762	15515
55	Employees	-do-	252074	434202	777900	903895	1079681	880047	1646670
56	Employees per lakh population	-do-	860	1169	1730	1710	1785	1440	2745
<b>Industrial</b>			<b>2006-07</b>	<b>2007-08</b>	<b>2008-09</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2013-14</b>	<b>2014-15</b>
	Project investments - Rs.3 crore to Rs.50 crore								
57	Projects Approved	No.	871	727	310	359	439	209	72
58	Investments	Rs. Crore	11511	10267	5182	7750	6880	354821	199633
59	Employments	No.	612620	349015	135623	115932	110505	43759	24248
<b>Project investments - above Rs.50 crore</b>									
60	Projects Approved	No.	66	108	50	110	186	46	36
61	Investments	Rs. Crore	92056	160523	105266	288549	187186	38733	52148
62	Employments	No.	781966	1996504	410842	284934	580161	127692	31819
<b>Electricity</b>			<b>1970-71</b>	<b>1980-81</b>	<b>1990-91</b>	<b>2000-01</b>	<b>2010-11</b>	<b>2013-14 (P)</b>	<b>2014-15 (P)</b>
63	Total Generation	Mu	4833	6389	12431	21985	47112	59024	62035
64	Total Consumption	-do-	3187	5189	12182	17860	37202	56737	59760 \$
65	Industrial Consumption	-do-	2488	3864	5429	4882	8425	10268	9935
66	Agricultural Consumption	-do-	179	384	4486	7350	12802	17897	17872
67	Domestic Consumption	-do-	217	696	1803	3909	7893	9843	10620
<b>Banking</b>			<b>1970-71</b>	<b>1980-81</b>	<b>1990-91</b>	<b>2000-01</b>	<b>2010-11</b>	<b>2011-12#</b>	<b>2012-13#</b>
68	Scheduled Commercial Banks	No.	1190	2823	4245	4758	6291	6810	7361
69	Deposits	Rs. Crore	369	2042	9665	55592	349009	4117243	4646394
70	Advances	-do-	275	1524	7985	32984	253121	2912356	3315402
<b>Education</b>			<b>1970-71</b>	<b>1980-81</b>	<b>1990-91</b>	<b>2000-01</b>	<b>2010-11</b>	<b>2013-14</b>	<b>2014-15</b>
71	Primary Schools	No.	32630	35143	40208	50340	59428	60485	60882
72	Enrolment	'000s	4064	4974	6922	8581	7425	7360	8345
73	High Schools	No.	2002	2381	5020	8928	13447	14469	14930
74	Enrolment	'000s	483	713	1334	1955	2604	2646	1767
<b>Health</b>			<b>1970-71</b>	<b>1980-81</b>	<b>1990-91</b>	<b>2000-01</b>	<b>2010-11</b>	<b>2013-14</b>	<b>2014-15</b>
75	Hospitals	No.	195	233	293	297	382	399	415
76	Dispensaries	-do-	791	1730	208 <sup>e</sup>	847	659	661	672
77	Beds per lakh population	-do-	89	94	104	105	112	78	78
<b>Demographic Status</b>			<b>1970-71</b>	<b>1980-81</b>	<b>1990-91</b>	<b>2000</b>	<b>2009</b>	<b>2011</b>	<b>2012</b>
78	Birth Rate	'000s	31.7	28.3	26.9	22.2	19.5	18.8	18.5
79	Death Rate	'000s	12.1	9.1	9.0	7.6	7.2	7.1	7.1
80	Infant Mortality Rate	Per 1000 Live Births	69	69	77	58	41	35	32
<b>Transport</b>			<b>1970-71</b>	<b>1980-81</b>	<b>1990-91</b>	<b>2000-01</b>	<b>2010-11</b>	<b>2013-14</b>	<b>2014-15</b>
81	Railway Route Length	Kms.	2806	2875	3093	3172	3172	3172	3172
82	Total Road Length	-do-	70383	109551	130924	154204	222431	230690	231767
83	Motor Vehicles	'000s	123	400	1433	3691	9930	13335	106446
<b>Co-operation</b>			<b>1980-81</b>	<b>1990-91</b>	<b>2000-01</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2013-14</b>	<b>2014-15</b>
84	Primary Agricultural Credit Co-Operative Societies	No.	4871	4350	4388	4866	4914	5238	5351
85	Membership	'000s	3692	4469	5245	9613	8992	6085	6117
86	Total No. of Co-operative Societies	No.	23159	25083	29930	34927	35502	38430	39627
87	Total Membership	'000s	8289	11800	16167	19904	21534	21552	22399
<b>Local bodies</b>			<b>1990-91</b>	<b>2000-01</b>	<b>2006-07</b>	<b>2007-08</b>	<b>2008-09</b>	<b>2013-14</b>	<b>2014-15</b>
88	Zilla Parishat/Panchayat	No.	20	27	27	29	29	30	30
89	Gram Panchayats	-do-	2532 <sup>f</sup>	5692	5628	5628	5628	5631	6692
90	Taluk Panchyats	-do-	175	175	176	176	176	176	176
91	Municipalities and Corporations	-do-	177	209	219	219	219	219	219

**Source:**

1. Statistical Abstract of Karnataka 1960-61, 1970-71, 1980-81, 1990-91, 2000-01, 2013-14. & 2014-15,
  2. Karnataka at a Glance: 1961-62, 1970-71, 1980-81, 1990-91, 2000-01, 2012-13, 2013-14 & 2014-15,
    - a. Per Sq.Mile
    - b. Population aged 5 years and above
    - c. Population aged 7 years and above
    - d. Bales of 170 Kgs. In lint form
- \* April to Sept.  
P : Provisional  
\$=Including HKRECS.(Hukeri Rural Electrical co-operative Societs)  
# : Rs.in Millions.  
e. Excluding Allopathy dispensaries.  
f. Grama Panchayats.  
g. Total of Primary, Secondary & Tertiary does not equal to State Income

## KARNATAKA COMPARED WITH INDIA

Sl. No.	Item	Unit	Karnataka	India
	<b>Population as per 2011 Census:</b>			
1	Total	'000s	61095	1210570
2	Males	-do-	30967	623122
3	Females	-do-	30128	587448
4	Rural Population	-do-	37469	833463
5	% of Rural Population		61.3	68.8
6	Urban Population	'000s	23626	377106
7	% of Urban Population		38.7	31.2
8	Sex Ratio	Females per 1000 Males	973	943
9	2001-2011 Decadal Growth of Population	Percent	15.6	17.7
10	Literacy Rate	Percent	75.40	73.00
11	Population of SC/ST (2011 population Census)	'000s	14724	305659
12	Total Workers (2011 Census)	-do-	27873	481743
13	Geographical Area (2011 Census)	Lakh Sq.Kms.	1.92	32.87
14	Net Area sown (2010-11)	'000 ha.	10523	141579
15	Gross Cropped Area (2010-11)	-do-	13062	198969
16	Gross Irrigated 2011-12 (P)	-do-	4137	91530
17	% of Gross Irrigated Area to Gross Cropped Area (2010-11)		31.67	46.00
	<b>Area under Principal Crops (2012-13) :</b>			
18	Paddy	'000 ha.	1278	42754
19	Maize	-do-	1322	8673
20	Jowar	-do-	1263	6214
21	Wheat	-do-	225	30003
22	Bajra	-do-	275	7297
23	All Food Grains	-do-	7299	120776
24	Total Pulses	-do-	2269	23257
25	Sugarcane	-do-	425	4999
26	Cotton	-do-	485	11927
27	Groundnut	-do-	589	4721
28	Total Livestock - 2012	'000s	27701	53442
29	Forest Area (2010-11)	'000 ha.	3072	70006
30	Total Electricity Generation (2012-13) P	G.W.H	46338	964489
31	Total Electricity Consumption (2012-13) P	K.W.H	51439.47	708843.39
32	Electricity Consumption in Industries (2012-13) P	G.W.H	15596.20	250531.22
33	% of Industrial Consumption to Total Consumption		30.32	35.34
34	Banking Offices (March 2013)	No.	7361	104647
	<b>State/Nation Income at Current Prices (2015-16) 2011-12 Series</b>			
35	Gross Income	Rs.Crore	1022729	13567192
36	Net Income	-do-	936045	12118824
37	Gross per capita Income	Rs.	159301	104520
38	Net Per capita Income	-do-	145799	93231

P: Provisional FRE: First Revised Estimates.



# STATE OF KARNATAKA'S ECONOMY - AN OVERVIEW

# 1

## 1.1 General Overview

Over the years, the key objective of the Economic Survey has been to provide basic information and data on economic policies and programmes of the state government and the overall performance of the State. The Economic Survey 2015-16 is a snapshot of Karnataka's recent developmental achievements and concerns in various key economic and social sectors.

Karnataka, India's eighth largest state in terms of geographical area (191791 sq.km) is home to 6.11 crore people (2011 Census) accounting for 5.05% of India's population. The state's population has grown by 15.7% during the last decade, while its population density has risen from 276 in 2001 to 319 in 2011, indicating an increase of about 15.6%.

While birth rate in the State has declined to 19.2 in 2011 (from 22.2 in the year 2000), indicating a decline of about 9%, the death rate has declined at a lower rate of 6.5% from 7.6 in 2000 to 7.1 in 2011. The consequent demographic changes are expected to open up new opportunities as well as challenges for the state. 50.80% of the population is male with a child sex ratio of 943 female to 1000 males in 2011 (as against 946 female to 1000 males in 2001) and the adult sex ratio at 968 female to 1000 males (against 965 female to 1000 males in 2001). It is a matter of concern that there has been a perceptible decline in the child sex ratio from 2001 to 2011, and that this decline is especially marked in some of the districts such as Chamarajanagar (decline of 22 as compared to 2001), Davangere (decline of 15), Chitradurga (decline of 13) and Hassan (decline of 12). There is a significant decline of 2.30% in the

state's child population of 0-6 years, but the decline is uneven across the state. In Yadgir district, 0-6 year old children constituted 15.83 % of the population whereas in Udupi, it was just 8.54%, indicating differential developmental needs of districts within the State.

Karnataka State has 133.57 lakh households as per 2011 census as against 104.02 lakh households in 2001 census. The number of households has registered a decadal growth rate of 28.41%. Karnataka has 14.91% (19.65 lakh) female headed households whereas the national average is 10.9%.

In Karnataka 278.73 lakh persons constituting 45.62% of the total population have enumerated themselves as workers. 59% of the total male population and 31.87% of the total female population are workers. Of the total workers in the State, 83.94% are main workers and 16.06% are marginal workers.

The Economic Survey 2015-16 presents an overview and major trends in Income and Prices, State Finances, Investment and Exports, Rural Development, Urban Development, Agriculture and Allied Activities, Natural Resources, Industry, Employment, Infrastructure, Human Development, Gender and Social Equity and Balanced Regional Development. The chapter-wise executive summary of the Economic Survey is presented below.

## 1.2. State Income and Prices

**(i) State Income:** The Gross State Domestic Product (GSDP) Estimates of Karnataka State with 2011-12 as new base year, replacing 2004-05, will be released during this year. In the earlier series (with 2004-05 as base year), the GSDP estimates were presented at factor

cost only. However, in the new series, with 2011-12 as base year, the GSDP estimates are at market prices. Advance estimates show that Karnataka's GSDP at constant (2011-12) prices is expected to grow at 6.2% and reach Rs.780805 crore in 2015-16.

The growth of agriculture and allied sector is expected to show a decline of 4.7% in 2015-16 as against a growth of 1.6 % during 2014-15. This is due to the fall in production of foodgrains from 122.6 lakh tonne during 2014-15 to 110 lakh tonne (expected) during 2015-16 because of drought conditions in 136 taluks in kharif and 62 taluks in rabi. The industry sector (comprising mining & quarrying, manufacturing, construction and electricity, gas & water supply) is expected to grow by 4.5% in 2015-16 as against a growth of 4.7 % during 2014-15.

A slight decrease in the growth rate of the service sector from 10.3% in 2014-15 to 9.1% in 2015-16 (Real Estate, Professional Services & Ownership of Dwellings and Communication, which have each grown by more than 12%) is a key driver of the 6.2% growth of GSDP in 2015-16, i.e. from Rs.734988 crore in 2014-15 to Rs.780805 crore in 2015-16. The Advance Estimates of All India Gross Domestic Product (GDP) at constant (2011-12) prices for 2015-16 project a growth rate of 7.6%. At the all India level, the sectors of Agriculture, Industry and Services are anticipated to grow at 1.1%, 7.3% and 9.2% respectively, during 2015-16.

**(ii) Per capita Income:** Per Capita State Income (i.e. per capita NSDP) of Karnataka at current prices is estimated at Rs.145799 during 2015-16 as against Rs.130897 in 2014-15 with an increase of 11.4%. The Per Capita National Income is expected to reach Rs.93231 during 2015-16 from Rs.86879 during 2014-15 with an increase of 7.3%. The level of per capita income at constant (2011-12) prices for the year 2015-16 is estimated to reach Rs.110624 as compared to Rs.105350 achieved in 2014-15.

**(iii) Sectoral Composition of Gross State Domestic Product:** A perceptible decrease is evident in the composition of GSDP of

agriculture & allied activities and industry sector from 13.4% and 24.8% in 2014-15 to 12.3% and 23.6% in 2015-16 respectively. At the same time, a small but significant increase in the composition of the service sector from 61.8% to 64.1% is apparent. During the last few years, the services sector has been the largest component of GSDP. The composition of 'Real estate, Professional Services & Ownership of Dwellings' is highest with 32.8% in 2015-16. This is followed by Manufacturing (14.6%), Trade and Repair Services (9.2%) and Crops (8.7%).

**(iv) Prices:** At the all India level, the WPI, which was 178.7 in December 2014 decreased to 177.4 in December 2015, showing an annual inflation rate of -0.73%. The inflation rate based on WPI, was -0.50% for the previous year. During 2015-16, the index of all commodities increased from 176.5 in April 2015 to 177.4 in December 2015, showing a very nominal rise of 0.51% as against a decrease of 1.16% during the corresponding period in 2014-15. It can be seen that the 'Primary Articles' group index increased by 5.83%. 'Fuel & Power' group index decreased by 4.07% while 'Manufactured Products' group index decreased by 0.84%.

In Karnataka during 2015-16, the WPI of agricultural commodities has increased from 1178 in April 2015 to 1211 in December 2015 depicting an increase of 2.80% against an increase of 7.32% during the corresponding period in 2014-15. The 9-month average index in 2015-16 was 1206 as against the average index of 1151 in 2014-15, showing an increase of 4.78%. During 2015-16, indices of pulses, condiments and spices, cereals, fiber, and oilseeds group have increased by 48.40%, 14.70%, 6.60%, 5.63%, and 4.06% respectively. Higher increase in index of pulses and condiments and spices, has resulted in the increase of the State index.

At the all India level, CPI (IW) moved to 269 points in December 2015 from 253 points in December 2014. The point-to-point rate of inflation for the month of December 2015 was 6.32%, whereas it was 5.86% in the corresponding month of the previous year.

The average all India CPI-IW during 2015-16 up to December 2015 shows an increase by about 5.60% over the same period in 2014-15. In Karnataka, during 2015-16, among central series centres, Belagavi and Huballi-Dharwad centres have recorded the highest increase in index i.e. an increase of 6.59% in December over April. The general index of this centre for April 2015 and December 2015 was 258 and 276 respectively and for Huballi-Dharwad centre, index of April 2015 was 273 and index of December 2015 was 291. The average general index of Belagavi and Huballi-Dharwad centres was 269 and 284 respectively up to December 2015 during 2015-16 as against the corresponding period average of Belagavi (255) and Huballi-Dharwad (269) during 2014-15, recording an average of 5.49% for Belagavi centre and 5.58% for Huballi-Dharwad center. For food index, the increase was 5.56% in Belagavi centre and 5.38% in Huballi-Dharwad centre. During 2015-16, among the 11 State series centres, increase in index has ranged between 5.40% in Dandeli center to 9.33% in Tumakuru centre. Tumakuru centre recorded the highest increase of 9.33% in index i.e. from 600 in April 2015 to 656 in December 2015. The average general index from April 2015 to December 2015 of Tumakuru centre (627) has increased by 7.55%, while that of food group index increased by 6.35% as compared to the corresponding period of the previous year.

Consumer Price Index for Agricultural Labourers, in Karnataka, recorded an increase of 8.86% in December 2015 over April 2015 as against 5.96% at all India level, whereas the food index in Karnataka showed an increase of 11.95% as against 7.38% at all India level. During 2015-16 (up to December 2015), in Karnataka, the average general index moved to 920 from 857 during same period of 2014-15, thus showing an increase of 7.35%. At the all India level, this increase was 4.26%. The average food index in the State stood at 923 and at all India level it was 804, indicating an increase of 7.95% and 3.21% respectively over the previous year.

In the State, for construction of monthly Rural Retail Price Index (RRPI), retail prices of 29 essential commodities are collected from 352 villages every month. During 2015-16, the index shows a continuous increase from 4285 in April 2015 to 4938 in December 2015, thus showing an overall increase of 15.23%. This rise was mainly due to increase in prices of tur dal and urad dal. Up to December 2015-16, the average RRPI was 4633, recording an increase of 11.02% over the RRPI level (4173) of the corresponding period of the previous year.

During 2015-16, the Urban Retail Price Index (URPI) which was 3042 in April 2015 rose to 3476 in December 2015 showing an increase of 434 points or 14.27%. The rise in index is attributed to the increase in prices of tur dal and onion. During 2015-16 (up to December 2015), the average URPI (3280) increased by 9.96% over the corresponding period of the previous year (2983).

### **1.3 Fiscal Development and State Finances**

**(a) Fiscal Consolidation:** Karnataka's fiscal position is strong and stable. The State's fiscal consolidation efforts have continued to be effective with all the fiscal indicators contained within the stipulated limits of the Karnataka Fiscal Responsibility Act, 2002 (KFRA). The broad fiscal indicators continue to perform well and have largely been within the fiscal rules prescribed. Driven by various fiscal consolidation measures, Karnataka while enhancing its revenues has managed its expenditure well. In 2015-16, the State has estimated: (i) revenue surplus of Rs.910.64 crore, (ii) Fiscal Deficit at 2.75% of GSDP and (iii) outstanding debt at 23.61% of GSDP. Other important expenditure indicators such as proportion of State tax revenue in the revenue expenditure and non-development expenditure in aggregate disbursements place Karnataka in a better position. The State's fiscal deficit declined marginally from 2.78% in 2014-15(RE) to 2.75% of GSDP in 2015-16(BE), while the capital outlay has increased marginally from 99.18 % in 2014-



15(RE) to 101.69% of Gross Fiscal Deficit in 2015-16(BE).

**(b) Karnataka vis-a-vis Other States:**

Karnataka's tax-GSDP ratio is the highest among all states in the country. The State's own tax revenues (SOTR) increased from Rs. 30579 crore in 2009-10 to Rs.68554 crore in 2014-15 and further to Rs.76445 crore in 2015-16, at a CAGR of 16.50 % per annum. While the State has one of the highest own taxes to GSDP ratio, the ratio of non-tax revenue to total receipts has not been increasing over the years on anticipated lines. Apart from enforcement and monitoring of own tax efforts, special emphasis needs to be given for mobilizing non tax revenues during the coming years. Government is committed to rationalizing user charges and reviewing the same regularly. Compared with the rest of the states in the country, Karnataka is in better position with respect to proportion of State tax revenue in the revenue expenditure and proportion of non development expenditure to total disbursement is relatively low.

**(c) State Finances:** The State's revenue receipts have increased to 15.80% of GSDP in 2015-16 from 15.51% in 2014-15(RE). The growth in Revenue receipts is primarily due to the growth of tax revenue. The per capita State's own tax revenue has increased from Rs.13153 in 2014-15 (RE) to Rs.15629 in 2015-16(BE). Revenue from Sales tax/VAT is expected to increase from Rs.36924.80 crore in 2014-15 to Rs.41329.00 crore in 2015-16, thus indicating a growth rate of 11.92%. The State continues to have an overall revenue surplus, albeit at reduced levels. As a result in 2015-16, Development Expenditure increased by about 5.86% compared to 2014-15 (RE), hence some key development sectors such as education, health, social security and welfare have had an increase in per capita expenditure terms implying an enhanced per-head financial outlay.

The per capita development expenditure in Karnataka during 2012-13, 2013-14(RE) and 2014-15(BE) was Rs.10979, Rs.12949 and Rs.14747 respectively as compared to All

State's average of Rs.7905, Rs.9716 and Rs.11761. There has been a significant increase in the State plan outlay by Rs.6693 crore from Rs.65904 crore in 2014-15(RE) to Rs.72597 crore in 2015-16(BE). There has been an increase in plan expenditure as percentage of GSDP from 8.46% in 2009-10 to 9.62% in 2014-15 and further to 9.86% in 2015-16(BE). As regards non plan expenditure as percentage of GSDP, there has been a decline from 11.50% in 2009-10 to 10.39% in 2014-15 and further to 10.30% in 2015-16(BE).

The high percentage of committed revenue expenditure to revenue receipts (82%) in 2014-15(RE) reveals that the State has limited flexibility in allocation of its resources for new schemes. In 2013-14 also, this ratio was 90%. Revenue surplus of only Rs.160 crore in 2014-15 (RE) leaves limited manoeuvrability on the revenue expenditure side. Hence the need of the hour is expenditure rationalization/ re-calibration.

**(d) Current Fiscal Challenges and Way**

**Forward:** Despite the State's broad successes in its fiscal consolidation efforts, the State government faces several fiscal challenges arising from limited upside potential for resource mobilization relative to GSDP, rigidities in the form of committed expenditure, and weak linkages between expenditure and development outcomes.

Capital (net) outlay as percent of GSDP in expenditure front has decreased from 4.15 in 2009-10 to 2.69 in 2014-15 and slightly increased to 2.79% in 2015-16. This poses a great challenge and is a matter of concern for Karnataka due to the infrastructure inadequacies prevailing in the State. In this context, the Expenditure Reforms Commission (ERC) constituted by the Government of Karnataka has recommended that capital outlay needs to be insulated from revenue adversities.

The ratio of non-tax revenue to total receipts has been continuously declining over the years. Further, the State has one of the lowest non-tax revenues to the GSDP ratios in the

country. It hovered around the 1% mark over the past two to three years. This is due to low recovery of costs. In many departments, the revision of user charges, fees & fines and other such non-tax receipts have not taken place for many years. Even with revision of rates and better collection mechanisms, increase in revenues from this avenue may not be large due to existing low base. Expenditure Reform Commission has made a number of recommendations to enhance revenues from user charges.

As the state already has highest tax to GSDP ratio, any further increase in the tax effort is fairly challenging. Similarly, achieving a higher level of tax buoyancy is difficult as the marginal increase in the taxes from a high base is likely to be lower. Hence until the economy as a whole grows at an accelerated rate, the tax collections will not see a quantum jump like in the past.

The State's borrowings are more expensive than the loans advanced by the government. The recipient boards and corporations are unable to service the loans given to them by the State government in view of low recovery of cost of their services from the consumers.

The State is implementing a Comprehensive Integrated Decision Support System in a time bound manner for the transparent resource allocation, better decentralized monitoring and improved implementation of all the plan schemes and programmes. The State is also implementing the Result Framework Document (RFD) which is designed for the departments to set out Vision, Mission and Objectives wherein it requires defining and disclosing quantifiable indicators for measuring the success of the stated activities.

The State is implementing SCP/TSP Act (The Karnataka Scheduled Castes Sub-Plan and Tribal Sub-Plan (Planning, Allocation and Utilization of Financial Resources) Act, 2013) since 2014-15. As per the Act, the allocations made under SCP/TSP are non divertible and non lapsable. The allocations will be made on the basis of SC/ ST population as per 2011 census every year i.e., 17.15% and 6.95% of

the outlay will be reserved for SC and ST category respectively. In 2014-15, an amount of Rs.11518.73 crore and Rs. 4315.07 crore was allocated under SCP and TSP respectively. Similarly, in 2015-16, the amount allocated under SCP is Rs.11773.55 crore and Rs.4582.73 crore are allocated under TSP.

Karnataka has taken major steps towards promoting gender equality and Gender based budgeting is yet another development in the direction. Making a beginning in 2006-07, gender based budgeting helps to prioritize and orient public expenditure to reflect the concerns of women. Subsequently, the State Government established a Gender Budget Cell in Finance Department to identify the quantum of resource allocation and expenditure for women and proper translation of policy commitments. Karnataka is one of the pioneering States in India that has implemented Gender based budgeting.

#### **1.4 Investment and Exports**

**(a) Investment:** Karnataka's investor-friendly and responsive administration which is highly proactive in attracting private Investment from time to time has introduced many reforms and initiatives to make Karnataka a competitive and attractive destination for global investments. Important initiatives include: easing administrative procedures, creating world class infrastructure, creating sector specific industrial zones and SEZs, announcing incentives and concessions, giving special focus on skill development to enhance the availability of technical staff, accelerate excellent telecommunication network, and implementing related policy measures for faster and smoother industrial growth in the state.

The concerted efforts by the State have resulted in a large-scale inflow of investments during the past few years. A successful investors' meet "Invest Karnataka" was held between 3 and 5 February 2016. The Government has attracted over Rs. 3 lakh

crore investment, of which 1080 projects with investments of Rs. 1.77 lakh crore have been approved. This has the potential to create employment for 4.82 lakh persons. Further, 122 Memoranda of Understanding/Expressions of Interest were signed across sectors with a potential of Rs. 1.27 lakh crore of investment and employment creation for 1.7 lakh persons

The State Level Single Window Clearance Committee (SLSWCC) has approved 72 projects with the proposed investment of Rs.1996.33 crore which intends to create employment for 24248 in 2014-15. Further in 2015-16 (up to February 2016), the committee has approved 262 projects with the proposed investment of Rs.15246 crore which intends to create employment for 115827 persons.

The State High Level Clearance Committee (SHLCC) has approved 36 projects with the proposed investment of Rs.52148.05 crore which intends to create employment for 31819 in 2014-15. Further in 2015-16 (up to February 2016), the committee has approved 29 projects with the proposed investment of Rs.90831 crore which intends to create employment for 172074.

**(b) Foreign Direct Investment:** Karnataka is one of the five hot destinations for FDI in India. Hence Karnataka accounts for a significant share in the total FDI that flows into India. Karnataka has attracted US \$ 3444 million in 2014-15 which is 11.13% share in the total FDI inflow into India. Further in 2015-16 (up to September 2015), Karnataka attracted US \$ 2199 million which is 13.22% of total FDI inflow into India. Karnataka attracted FDI of US \$18319 million during the period of April 2000 to September 2015, constituting 6.91% of FDI inflow into India.

**(c) Information Technology:** Karnataka is the pioneer of the IT Revolution in India. Karnataka, today is home to over 3500 IT companies, contributing a sum of Rs. 2.20 lakh crore of exports. The industry contributes to over 25% of the State's GSDP. The share of Karnataka in IT exports is nearly

38% of the country's exports. The IT Industry in the State has emerged as one of the largest job providing sector. The Industry provides direct employment to over a million persons.

Bengaluru, is the 4<sup>th</sup> Best Technology Hub in the world, after Silicon Valley, Boston and London (as per UNDP Report), has become a global brand in the IT space. Almost all the Fortune 500 companies have one or the other of their operations outsourced in Bengaluru. Bengaluru is Ranked 2<sup>nd</sup> in the Global Startup Ecosystem growth index by "Compass". Many global brands such as GE, Texas Instruments, Intel, AMD, SAP, CISCO, Microsoft, Motorola, Nokia Mercedes Benz, Huawei etc., have their R & D activity based in Bengaluru.

Indian Institute of Information Technology (IIIT) is being established in Dharwad. The new IIIT will be set up on PPP mode, with Government of India funding 50% of the project cost. State Government has committed to provide 35% of the project cost besides land in Dharwad. Balance of 15% of the project cost would come from industry partners. Government land of 61 acres has been identified in Dharwad for this project. Meanwhile, the Institute has started functioning this year in a temporary campus in Hubballi IT Park.

Karnataka is the first state to roll out a Multisectoral Start-Up Policy 2015-2020 in the country aiming towards a globally competitive start up eco system. The objective is to set-up 20,000 technology Start-ups by 2020. Bengaluru is now also known as the Startup Capital of India and it is reported that nearly 30% of the startups are from Bengaluru.

**(d) Bio Technology:** Karnataka is a leader in the Biotechnology sector as well, contributing more than 30% of the Indian biotech revenues of \$4 billion in 2014-15. Of this, 50 % comes from exports. There are over 300 Biotech Companies in the State. Karnataka has put in place a strong policy framework to provide all requisite resources for enhancing this industry's research and development capabilities. Being the pioneer of the

biotechnology industry, the State has built up considerable resources and talent pool that are well suited for the needs of the industry. Karnataka was one of first Indian States to frame an industry-oriented biotechnology policy in 2001. The Policy was revised in 2009. Version 3.0 of the policy is now being worked up for release to integrate adoption of new technologies as well as innovation to meet challenges that continue to persist in the society. Bengaluru Bio Innovation Center has been launched in February 2015 in Bengaluru Helix Park, Electronics City. The Center will house over 20 SMEs with access to high tech instrumentation facility to provide impetus for innovation. Karnataka is highest in R&D expenditure in South India.

**(e) Exports of Karnataka:** Karnataka has carved out a niche for itself in the global market as the knowledge and technology capital of the Country. Karnataka apart from coffee, spices, silk, cashew nuts, handicrafts and agarbathies is also exporting electronic and computer software, engineering goods, readymade garments, petrochemicals, gems and jewellery, agro and food processing products, chemicals, minerals and ores, marine products, etc. Karnataka accounts for more than one third of electronics and computer software exports from the country. It is also a leader in exports of readymade garments, gems and jewellery, petrochemicals and engineering commodities from Southern Region.

Karnataka ranks 1st in software/service exports and stands 4th in merchandise exports in the national export basket. Karnataka's exports amounted to about Rs. 313570 crore in 2014-15 which constituted about 13.01% of the Country's exports in that year. The share of merchandise exports in the National exports constitutes around 6.21% and software / service exports around 40% for the year 2014-15.

Karnataka's exports as a percentage of GSDP are increasing. In 1993-94 the share of exports in GSDP was 7.36% which has increased to 33.2% in 2014-15. Exports of electronics and computer software constitute

the largest share in the State's exports. Its share was of the order of 61.8% in 2014-15. The other commodities which have substantial share in Karnataka's exports in 2014-15 are petroleum and petroleum products (13.03%) and gems & jewellery (7%). These three commodities account for about 82% of Karnataka's exports. Other commodities with significant share in State exports are engineering goods (6.68%), readymade garments (3.13%). The exports of silk products, gems and jewellery, basic chemicals, pharmaceuticals and cosmetics and plastic goods have revealed a marginal decline in 2014-15 as compared to 2013-14

**(f) Challenges and Initiatives:** Karnataka in order to become more attractive destinations of FDI has to minimise its adversities. The major adversaries for the investors are bureaucratic hassles, infrastructural deficiencies, power shortages. The Government has taken several steps to address these issues.

Bengaluru is the leading investment destination in the state. In order to have more balanced regional development, Government has taken many initiatives and among them is to develop the ICT industries in the Tier – 2 / 3 Cities of Hubballi – Dharwad, Mysuru, Mangaluru, Kalaburgi and Belagavi. IT Parks have been developed in Hubballi-Dharwad, Shivamogga and Kalaburgi. Skill Development programs are also proposed to be considered in Tier – 2 and Tier – 3 cities, especially for the Karnataka ESDM companies.

### 1.5 Rural Development

**(i) Decentralisation:** Karnataka comprises 6020 Gram Panchayats, 176 Taluk Panchayats and 30 Zilla Panchayats. In recent years, the Karnataka Government has been taking a proactive stance to strengthen the decentralized governance and planning process and to that effect has introduced many administrative innovations. 'Activity mapping', a first of its kind in the country, has evolved a detailed range of activities for all the three Panchayats. The number of

schemes in the Panchayat Sector of the budget is now 318 (190 plan and 128 non-plan schemes). Minor schemes have been merged into larger ones, giving greater flexibility to panchayats to address their priorities.

The District sector plan size is increasing over the years. The District sector plan size which was at Rs. 8921.50 crore during the year 2013-14 rose to Rs. 10480.71 crore during the year 2014-15 to Rs.11327.71 crore in 2015-16. Sectors like education, rural employment, welfare of women and children, welfare of Scheduled Castes and Scheduled Tribes, rural housing have been the priority sectors of panchayats, receiving better allocation compared to other sectors. It can also be seen that there is a perceptible increase in the allocation made to these sectors across the plan years. In Karnataka, initiatives have been taken to enunciate people's participation and involvement of NGOs in implementing several schemes of the Central and State Governments. Continuous efforts have been made to create awareness among the public through these organisations in rural and backward areas and urban slums about government programmes and their implementation. Voluntary organisations have been actively involved in organising skill upgrading and capacity building programmes, training of panchayat members and in creating awareness in the fields of women and child development, social welfare, health, education, watershed development programme etc.

**(ii) Rural Development:** Development of rural areas has a bearing on improving agricultural production and related economic activities, availability of natural and financial resources and their development, improvement of service delivery thereby paving the way for improved human development. The vision of rural development is to provide sustainable and inclusive growth along with empowerment of Panchayat Raj Institutions. The State has to its credit entrusting major responsibilities and devolving all the 29 functions to the panchayats as enlisted under the Eleventh Schedule of the Constitution.

**(a) MGNREGA:** The scheme is under implementation in all districts of the State with effect from 1st April 2008. Karnataka State is implementing MGNREGA at the Grama Panchayat (GP) level, being the first State to transfer funds from State to GPs directly. It is a matter of pride that from 1st June 2012, direct transfer of funds to the accounts of the beneficiaries through electronic Funds Management System (eFMS) has commenced in all districts. This has reduced delay in payments. To widen the scope of the Scheme, the State has identified eight line departments as implementing agencies to execute the works as per the operational guidelines of the Scheme. Social Audit has been conducted in GPs. The fund available for scheme during 2015-16 is Rs 2587.35 crore, of which, Rs.897.80 crore has been spent up to December 2015 and 238.67 lakh person days of employment has been generated benefitting 6.65 lakh households.

**(b) Rural Roads:** The total length of rural roads, as on 31.3.2015, in Karnataka is 155545 km, of which 58184 km is asphalted, 21493 km have macadam surface, and 75866 km consists of mud roads. Improvement of roads and their maintenance is being taken up under Pradhan Manthri Gram Sadak Yojana (PMGSY), Mukhya Manthri Grameena Rasthe Abhivruddhi Yojane (CMGSY) & RIDF schemes. Under PMGSY programme, Rs 4233.96 crore has been spent and 17391.67 Km of road length has been asphalted up to October 2015. Under Mukhya Mantri Gramina Raste Abhivruddi Yojane, a sum of Rs.13371.70 lakh have been provided in the annual budget for 2015-16. The funds so provided have been allocated to Zilla Panchayats as per Dr.D.M.Nanjundappa committee report for maintenance of roads.

**(c) Rural Energy:** Based on the cattle population in the State, 6.80 lakh biogas plants can be constructed, of which, up to October 2015, 73911 biogas plants have been constructed. Beneficiaries are selected by Grama Panchayat level under National Biogas & Manure Management Programme. Karnataka Biofuel Policy is implemented through Karnataka State Biofuel Development Board. Soura Belaku

Programme was started in the year 2009-10 for installation of Solar Street Lights at the Grama Panchayat level. The Programme is implemented through e-procurement in one selected pilot district from each revenue division.

**(iii) Housing:** Housing is both an essential need for every household and also an instrument for employment and development. Government of Karnataka is providing housing for the needy under many of its own schemes and through the centrally sponsored schemes. Rajiv Gandhi Rural Housing Corporation Limited (RGRHCL), the nodal agency to implement all the housing schemes sponsored by the Central and State Governments for economically and socially weaker sections of the Society, constructed 302162 houses and distributed 11069 sites in 2014-15. Further from April 2015 to December 2015, RGRHCL constructed 140664 Houses and distributed 4472 Sites, out of a target of 3.0 lakh houses and 20000 sites respectively, for 2015-16.

**(iv) Rural Water Supply:** The drinking water infrastructure of the State comprises 221004 bore wells fitted with hand pumps, 33831 piped water supply schemes and 47356 mini water supply schemes. Bharath Nirman/National Rural Drinking Water Programme (NRDWP), Rajiv Gandhi National Drinking Water Mission (under Bharath Nirman Programme) World Bank Assisted Jal Nirmal Project, Desert Development Programme (DDP), Multi Village Scheme Project are few major programmes under which potable drinking water is supplied to households removing the contamination of water.

Among the 59945 rural habitations covered under the various schemes, about 7108 (11.85%) of habitations receive above 55 LPCD of water, 50472 (84.20%) receive less than 55 LPCD. The cause of worry is that 2365 (3.95%) are still water quality-affected habitations in the rural areas. The State is geared to cover all rural habitations with adequate potable water supply, along with universal coverage of rural schools and

anganwadis. 90% of rural water supply system in the State is based on groundwater sources. Owing to indiscriminate exploitation of groundwater source by different quarters, established public drinking water schemes are becoming defunct, requiring fresh investment. Coupled with this, water quality problem needs to be tackled in a timebound manner.

**(v) Rural Sanitation: Swachha Bharat Mission (SBM):** Karnataka has been the forerunner in putting forth concerted efforts to implement Nirmal Bharat Abhiyan in the Rural parts of the State. Incentive amount to an extent of Rs.12000.00 (Rs.9000.00 from GOI, Rs.3000.00 from the State Government) is made available, to undertake the construction of Individual household toilets. The mission aims at making all villages in the State defecation free villages. Besides, it has a wide focus of providing individual sanitation, house sanitation, safe drinking water, suitable disposal of human excreta, disposal of waste and used water etc. In 2014-15, 8.77 lakh Individual Household Latrines (IHHL) were covered. During the current year, up to December 2015, 4.50 lakh IHHL have been covered. Use of toilets cannot be sustained without provision of water supply and safe drinking water cannot be ensured without assured quality sanitation either. Thus, there is a need for convergence between drinking water and sanitation schemes during design and implementation.

## 1.6 Urban Development

The State's cities are under immense pressure to meet the growing demands and aspiration of their citizens in a qualitative, cost economic and sustainable manner. Urbanization in Karnataka increased from 22% in 1951 to 38.6% in 2011. The State is expected to reach an urban population proportion of 50% in 2026. Karnataka is India's 7<sup>th</sup> most urbanized State in India. Among the districts, Bengaluru is the most urbanised district with 90.94% of its population residing in urban areas followed by Dharwad (56.82%) and Dakshina Kannada (47.67%). The least-urbanised district in the

State is Kodagu with 14.61 per cent, preceded by Koppal (16.81%), Mandya (17.08%), Chamarajanagar (17.14%) and Yadgir (18.79%). Urbanization gives rise to various issues like, urban poverty and slum improvement, increased pressure on basic services/civic amenities of housing, water supply, sanitation, electricity, need for focus on urban schooling and healthcare, and proper solid waste management and maintenance of roads. Addressing these concerns is a big challenge for the State Government. There are various agencies under the umbrella of urban development department which are working together to build better cities tomorrow.

**(i) Urban Housing:** Housing has evolved as a prime component over the period of time not only in providing shelter but also providing employment opportunities and in development of locations. The State Government has given greater attention to the problem of housing scarcity and increased the budgetary allocation year after year along with formulation of facilitating policies and guidelines.

Karnataka Housing Board (KHB) is endeavouring to meet the rise in housing demand by undertaking layout formation, construction of houses, land development schemes under joint venture scheme policy approved by Government of Karnataka and KHB Act. At present KHB is implementing the schemes approved by the Government such as 100 Housing Programme, Suvarna Karnataka Housing Programme and 225 Housing Schemes. Under these three schemes over 7540 Houses have been constructed and about 48676 house sites have been formed.

Under Vajpayee Urban Housing Site Scheme, in the last 3 years 25,853 house sites have been formed and distributed as against the target of 40,000 house sites. During the current year, up to the end of December 2015, 791 house sites have been formed and distributed.

To meet the housing demand the Government is also implementing certain schemes such as

Nanna Mane, Slum Improvement Programmes, Basic services to the urban poor, Integrated Housing and Slum Development Programme, Rajiv Awas Yojana, Affordable Housing in Partnership Scheme etc.

**(ii) Urban Infrastructure:** Provision of infrastructure services is fundamental to economic growth and urban development. Urban infrastructure covers, Water supply (for drinking, industrial, commercial and public usages), Sanitation (including Sewerage and Drainage), Domestic Energy, Road Infrastructure and Urban Transport.

**(a) Water Supply:** BWSSB is one of the first water supply & sanitation utilities in India with the jurisdiction of entire Bruhath Bengaluru Mahanagara Palike Area of 800 sq.kms. At present BWSSB is supplying treated Cauvery Water to Bengaluru City under the Cauvery Water Supply Scheme (CWSS) Stage I, II, III & Stage IV, Phase I & II with total installed capacity of 1310 MLD. The State has prepared a Detailed Project Report for seeking financial assistance from funding agencies for CWSS Stage V with capacity of 775 MLD for Bengaluru City. The challenges faced by BWSSB mainly being, supply management with fresh water resources, engineering solutions to fetch water from far off places and managing the financial resources. A number of water supply projects have been taken up to augment water supply considering the existing shortage of water supply to the urban areas in the state. KUIDFC, acts as a Nodal Agency for implementation of various Urban Infrastructure Projects through BBMP, City Corporations and other Urban Local Bodies in the State of Karnataka.

**(b) Sanitation (Including Sewerage and Drainage):** The Ministry of Urban Development, GOI brought out a National Sanitation Policy in 2008. The vision for urban sanitation in India is set forth thus: "All Indian cities and towns become totally sanitized, healthy and livable and ensure and sustain good public health and environmental outcomes for all their citizens with a special focus on hygienic and

affordable sanitation facilities for the urban poor and women”.

**(c) Domestic Energy:** The census 2011 revealed that 64.33% of households in urban areas are using LPG/PNG for cooking followed by firewood(21.23%), Kerosene (11.67%) and the remaining Households use the other sources such as Crop residue(0.91%), Biogas (0.80%), Electricity (0.21%), Coal/Lignite (0.11%), Cowpat (0.10%) and other sources (0.11).

**(d) Urban Land Transport:** The Directorate of Urban Land Transport focused its attention on preparation of mobility plans for 12 cities. The directorate has now submitted a proposal for sanction of grant from the Government of Japan for pilot project for implementation of Bengaluru Traffic Information Centre and other interventions relating to traffic management.

**(iii) Solid Waste Management:** Municipal Solid Waste Management is one of the basic functions of the Municipalities. Rapid urbanization, heterogeneous nature of waste, lack of awareness among the public and various other stake holders, lack of appropriate infrastructure, disintegrated & unscientific approach of waste management has made the waste management into an unmanageable situation.

As per 2011 Census, Karnataka has an urban population of 2.36 crore (38.67% of the State population) and approx. generates about 4000 – 4500 tonne of MSW everyday (excluding BBMP) with a per capita waste generation rate of 200 grams to 400 grams per day.

**(iv) Bengaluru Metropolitan Region Development Authority (BMRDA):** BMRDA is an Authority established under the Bengaluru Metropolitan Region Development Authority Act, 1985 (Karnataka Act No. 39 of 1985), for the purposes of planning, coordinating and supervising the proper and orderly development of the area within the Bengaluru Metropolitan Region and allied matters. The Structure Plan has mooted

development of a pair of ring roads and several radial roads with a view to improve the connectivity in the Region.

**(v) Bruhath Bengaluru MahanagaraPalike (BBMP):** BBMP at present comprises of 8 zones with an area of 800 square kms. It has 198 wards spread across the city. The city is rapidly developing and hence the government is contemplating to bifurcate the BBMP. BBMP has taken up many infrastructure projects to improve the infrastructure of the city. flyovers, underpasses, grade separators, signal free roads etc. Certain roads widening has smoothened the traffic flow of the city. BBMP has taken up certain other major infrastructure works such as comprehensive development of lakes, construction of grade separators etc.

**(vi) Bengaluru Metro Rail Corporation Limited (BMRCL):** Bengaluru Metro Project Phase-1 physical progress is 96%. The section between Baiyappanahalli and M.G. Road (6.7 Km with 6 stations) including Baiyappanahalli Depot was commissioned on 20-10-2011. The section between Peenya and Sampige Road part of North South Corridor along with Peenya Depot (10.3 Km. and 10 stations) has been commissioned on 28.02.2014. The Extension of Reach-3a that is 3b from Jalahalli to Nagasandra Station commissioned on 1st May 2015. The section between Magadi Road and Mysuru Road terminal with a length of 6.50 Km with 6 stations was commissioned on 16th November 2015. The entire Phase-1 is expected to complete by mid of 2016.

Phase-2 preliminary works such as Geo Technical surveys and concept designs of structures have been completed. The process for land acquisition, shifting of utilities and calling of tender for civil works has been started. Reach-4 Extension (Puttenahalli to Anjanapura) tenders for civil work have already been invited and technical evaluation is under progress. The tenders for civil works in Reach-2 Extension (Mysuru Road to Kengeri) have been awarded and work will be started shortly.



**(vii) Bengaluru Development Authority (BDA):** BDA established on 16<sup>th</sup> January 1976 under a separate Act of the State Legislature viz the BDA Act 1976. The authority aims at checking the haphazard and regular growth of the city. In this direction it aims at construction of houses, formation of layouts for economically weaker sections, formation of peripheral ring roads, development of lakes etc.

**(vii) Directorate of Municipal Administration (DMA) –** DMA is the Nodal Agency to monitor the Administrative, Developmental and Financial Activities of the Corporations & ULBs coming under its jurisdiction. The role and responsibilities of DMA is to regulate day to day governance of 271 ULBs including 10 corporations coming under its purview, Supervising administration in Corporations & ULBs as mandated in Corporations Act, Municipal Acts and its interpretation, facilitating implementation and monitoring of schemes/programmes of State and Central Government, formulating service rules and conditions for corporations/municipal employees, recruitment of staff and officers and Regulating service delivery in Corporations & ULBs.

**(ix) State Urban Livelihoods Mission – (SULM):** The State Urban Livelihoods Mission will aim “to reduce poverty and vulnerability of the urban poor households by enabling them to access gainful self-employment & skilled wage employment opportunities, resulting in appreciable improvements in the livelihood on a sustainable basis, through building strong grassroots level institutions of the poor”. The main components of the SULM include Social Mobilisation & Institution Development (SM&ID), Employment through Skill Training & Placement (EST&P), Self-Employment Programme (SEP) and Support to Street Vendor (SUSV).

**(x) Externally Aided Projects:** Karnataka has taken up certain externally Aided Projects such as Karnataka Municipal Reforms Project (KMRP) which is assisted by World Bank, North Karnataka Urban Sector Investment Programme (NKUSIP) assisted by Asian

Development Bank, Karnataka Integrated Urban Water Management Investment Programme (KIUWMIP), Karnataka Urban Water Supply Modernisation Project (KUWSMP) assisted by World Bank etc. for the development of urban areas.

**(xi) Specific Challenges and the Future Outlook:** The Urban Local Bodies have a vital role in the State’s socio economic transformation. Most of the ULBs are severely stressed in terms of infrastructure and effective service delivery. The major challenges of the ULBs include the rapid increase in the growth of urban population, Migration from Rural to Urban Areas. Growing population widens urban infrastructure deficit, such as Water Supply, UGD, Solid Waste Management, Roads and Power. Improving, Monitoring and Delivery of Public Services and addressing Regional Imbalances need utmost attention.

## 1.7 Agriculture and Allied Activities including Food Security

### 1.7.1 Agriculture and Allied Activities

Agricultural growth of 4% and above is a necessary condition for inclusive growth. It is also important as it brings in price stability, food security and income and livelihood of the majority. The Department of Agriculture implements various schemes for the overall welfare of the farming community and ensures timely supply of essential inputs i.e. seeds, fertilizers, plant protection chemicals, farm equipments along with effective transfer of technology through demonstrations to achieve maximum output from the available natural resources viz. soil, water etc. This in turn leads to improvement in the economic status of the farming community and food grain needs of the people. Though the contribution of agricultural sector in the Gross State Domestic Product is declining; Agriculture continues to be the largest employment generating activity.

**(i) Monsoon:** The southwest monsoon commenced in parts of South Interior and Coastal parts on 5<sup>th</sup> June, its normal date of onset and covered all parts of the State by 13<sup>th</sup>

June. Deficit rainfall during June in major parts of North Interior Karnataka (7 out of 12 districts) hampered normal sowing progress of rainfed kharif sowings. Rainfall during July was deficit/scanty in all the districts except Udupi. The percentage of deficit Rainfall in: South Interior Karnataka was -47%, North Interior Karnataka was -71%, Malnad region -53% and Coastal region was -34%. This situation resulted in severe setback in the sowing of rainfed kharif crops in major parts of the State and the early sown rainfed crops suffered severe moisture stress. During August also, rainfall continued to be deficit in North Interior Karnataka (except Ballari, Koppal and Gadag districts), Malnad (except Hassan district) and Coastal region. This situation further affected the prospects of kharif crops in Northern districts of the State. Monsoon remained weak in many parts of North Interior Karnataka and Coastal region during September. Cumulative rainfall from 1<sup>st</sup> June to 30<sup>th</sup> September was 652.5 mm as against a normal of 838.7 mm, thus deficit by 22%.

Northeast monsoon rain commenced from 28<sup>th</sup> October in the State, but only south interior, coastal and malnad regions received widespread rainfall. Rainfall during October was deficit by 32% in the state and in North Interior Karnataka it was deficit by 48%. During November the State witnessed a very unusual rainfall scenario, the South Interior districts received 2 to 5 fold excess rainfall and the North Interior districts received  $\frac{1}{4}$  of the normal rainfall, thus deficit by 76%. Excess rainfall during November caused damage to Ragi crop at harvesting stage in some parts of southern districts. Rainfall continued to be deficit/scanty in North Interior districts during December also (-74%). Cumulative rainfall in the State from 1<sup>st</sup> October to 31<sup>st</sup> December was 178 mm as against a normal of 187.50 mm(-5%), but it was deficit by 55% in North Interior Karnataka districts which account for 90% of the total area under rabi crops in the State; this affected the prospects of rabi crops.

The low water storage in majority of the reservoirs and minor irrigation tanks along

with depleted ground water table on account of deficit/scanty rainfall is likely to affect the summer crop production programme. Overall, the State witnessed another drought situation during 2015 due to erratic and poor rains in major parts of North Interior regions and some parts of South Interior region. Failure of rains and long dry spell during July, August and first fortnight of September affected kharif crops in an area of about 33.10 lakh hectares. Rabi crops have also suffered due to deficit/scanty rains and long dry spell during October, November and December in the Northern districts in an area of about 24.61 lakh hectares.

**(ii) Agricultural Area and Production:** The average (average of 2010-11 to 2014-15) area under agricultural crops grown in three seasons viz. Kharif (69.20 lakh ha.), Rabi (30.30 lakh ha.) & summer (5.90 lakh ha.) is 105.40 lakh hectares. Cereals, Pulses, Oilseeds, Cotton, Sugarcane and Tobacco account for 49%, 24%, 15%, 6%, 5% and 1% respectively of the total agricultural cropped area. Maize, Tur, Bengal gram, Cotton and Soyabean are witnessing higher trend in recent years, whereas as crops like Sunflower, Jowar, Ragi etc. are witnessing declining trend.

Advanced estimates of agricultural production are worked out considering the progress in area coverage under various kharif and Rabi crops, likely coverage during Summer, likely loss in yield on account of failure of rains and long dry spell in major parts of the State. The estimates indicate production of 97.50 lakh tonne Cereals and 12.50 lakh tonne of Pulses against the target of 124 and 16 lakh tonne respectively. Oilseeds production is estimated to be 9.60 lakh tonne against the target of 15 lakh tonne. Production of cotton is likely to be 14.04 lakh bale against the target of 18.54 lakh bale. The shortfall in production can be attributed to decline in area coverage and drought situation in major parts of the State.

**(iii) Land Utilization and Operational Holdings:** As per the land utilization statistics for 2013-14, out of the total 190.50

lakh hectare geographical area of the State, the net cropped area was 99.23 lakh hectare accounting to 52% of the total geographical area. Gross cropped area was 122.67 lakh hectare including 23.44 lakh hectare area sown more than once, this works out to 124% cropping intensity. Around 16% of the area was covered under forests, 8% area was under non-agricultural uses, 4% land was barren and uncultivable land and 2% land was cultivable waste. Permanent pastures, grazing land and miscellaneous tree crops constituted 6% of the total geographical area. About 12% of the total area falls under current fallow and other fallow land. The decrease in current fallow over the previous year was on account of better rainfall distribution.

2010-11 Agriculture Census shows 78.32 lakh farm holdings operating 121.61 lakh hectare. Small and marginal holdings account for 76.44% of total holdings and operate only 40.05% of the total operated area, while semi-medium, medium and large holdings account for 23.57% of the total holdings and their operational land holding is 59.95% out of the total operational area.

**(iv) Distribution of Inputs:** For Kharif 2015, the State Government has projected a requirement of 22.70 lakh tonne of different grades of fertilizers consisting DAP 4.00 lakh tonne, MOP 2.50 lakh tonne, NPK 6.50 lakh tonne, Urea 8.50 lakh tonne and SSP 1.20 lakh tonne. At the end of Kharif season 22.45 lakh tonne of Fertilizer has been distributed consisting DAP 3.68 lakh tonne, MOP 1.62 lakh tonne, NPK 6.72 lakh tonne, Urea 8.62 lakh tonne and others 1.81 lakh tonne fertilizers has been utilized. For Rabi 2015-16, the State Government has projected a requirement of 15 lakh tonne of different fertilizers consisting of DAP 2.00 lakh tonne, MOP 1.50 lakh tonne, NPK 5.50 lakh tonne, Urea 5.50 lakh tonne and SSP 0.50 lakh tonne. At the end of Rabi season (up to December 2015), 6.60 lakh tonne of fertilizer has been distributed and utilized consisting of DAP 0.60 lakh tonne, MOP 0.34 lakh tonne, NPK 2.02 lakh tonne, Urea 3.44 lakh tonne and SSP 0.52 lakh tonne.

Production and supply of Breeder Seeds of different crops is being done by the State Agricultural Universities and Indian Council of Agricultural Research Institutes (ICAR). These organizations produce and supply Breeder Seeds required for the State based on the advance indents placed by the Department of Agriculture. The Seed Association of India is the Nodal agency for supply of breeder seeds to the private seed producing agencies. Certified Seed production and distribution in the State is being done by Karnataka State Seeds Corporation, National Seeds Corporation, Karnataka Co-operative Oilseed Growers Federation, State Agricultural Universities and number of private seed supplying agencies. Seed producing and supplying agencies fix the procurement and selling rates of various seeds taking into account, procurement rates, production costs, certification, processing, packaging and other overhead charges. Totally 4.36 lakh quintal seeds have been distributed and Rs. 7420.46 lakh subsidy amount is utilized for this purpose. Totally 17.53 lakh farmers have been benefited. During Rabi/Summer 2015-16, it was programmed to distribute seeds of 12 crop seeds under subsidy. Up to the end of December 2015, totally 3.24 lakh qtl seeds have been distributed and Rs. 7722.51 lakh subsidy amount is utilized for this purpose and 6.81 lakh farmers have been benefited.

The Department of Agriculture, Government of Karnataka has prepared a plan to issue soil health cards to all the farmers in the state in the next three years.

**(v) Watershed Development:** The productivity of any crop mainly depends on crucial natural resources namely, land and water, in addition to management practices. Therefore, conservation, up-gradation and utilization of these natural resources on scientific principles are essential for the sustainability of rainfed agriculture. The watershed concept for development of rainfed area is gaining importance over the years.

The geographical area of the State is 190.50 lakh hectares, out of which 129.70 lakh hectares are available for watershed

development. 75% of the cultivable land in Karnataka is depending on low and indefinite rainfall. 65.49 lakh hectare of area has already been treated under different watershed projects by the end of March-2015 and remaining 64.21 lakh hectare of land will be treated stage by stage in future years. It is targeted to treat and develop 157517 hectare of land during 2015-16. Up to December 2015 an area of 60622 hectare has been developed through implementation of bunding, water harvesting structures like checkdam, vented dam, farm pond, percolation tank and nalabund etc.

As a result of implementation of watershed development projects farmers have realized several benefits compared to non watershed project areas. Among them there is a shift/diversification from agriculture to agro-horticulture and agro-forestry, with this farmers have got significant increase in their income and there is also upgradation of environment. Implementation of soil and water conservation programmes in watershed areas has resulted in the significant increase in the underground level water through recharge.

**(vi) Agricultural Marketing:** The state has 157 Agricultural Produce Market Committees (APMC's) to facilitate and regulate the marketing of agricultural commodities. The Department of Agricultural Marketing supervises and guides the working of APMCs to implement the provisions of the Act and Rules of the department. The aim of the department is to develop and regulate participative, transparent and scientific agricultural marketing system with adequate infrastructure and user friendly e-initiatives in the state. Since department has provided infrastructure facilities for better marketing of the commodities, the value of total arrivals in the regulated markets in the state has increased from Rs.33,165 crore during 2013-14 to Rs. 34,116 crore during 2014-15. The challenges of the Department are to provide additional required infrastructure for trade in the markets, to ensure transparency in the markets, to modernize the markets, and to ensure competitive price to the farmers

produce. In this regard, action has been taken to implement online trading system in all the APMCs of the state in phase wise manner. On line trading system is introduced in 103 markets during 2015-16 up to December. 908507 farmers have registered their names so far to participating at Unified Marketing Platform.

**(vii) Animal Husbandry & Dairy Development:**

Karnataka livestock sector plays an important role in improving the economic status of the rural farmers who are dependent on the livestock for their livelihood. Karnataka has 2.9 crore of livestock and 5.3 crore of poultry population as per the 19<sup>th</sup> Livestock Census 2012. Government of India has declared the State as a render pest disease free zone. To provide health care to the animals and for improvement and development of breeds of animals, various programmes are implemented successfully by the Department of Animal Husbandry and Veterinary Services, through its institutional network.

The share of Animal Husbandry in Gross State Domestic Product (GSDP) of Agriculture and Allied activities was 20.51% during 2013-14. The share of Karnataka in all India livestock and poultry population was 5.41% and 7.33%, respectively. The density of livestock in the state was estimated at 151.21 per sq.km and 47468 per lakh human population. The production of milk in the State was 5.99 million MT during the year 2013-14 and 6.12 million MT for the year 2014-15. During 2015-16, the production of milk in the State is 5.37 million MT till December 2015

During 2014-15, the health of livestock and poultry are rendered through a network of 4112 Veterinary Institutions, comprising of 364 Veterinary Hospitals, 1943 Veterinary Dispensaries, 1181 Primary Veterinary Centers, 229 Artificial insemination centers and 174 mobile veterinary clinics and 221 other Veterinary Institutions. During 2014-15, 107.98 lakh cases were treated for various diseases. In 2014-15, 627.14 lakh vaccinations were carried as preventive

measure for various diseases and during 2015-16, 252.05 lakh vaccinations were carried as preventive measure for various diseases up to the end of December 2015.

Karnataka Cooperative Milk Federation organization has the responsibility of providing remunerative price and market to the rural milk producers of the state and supplying pure milk and milk products to the consumers. The Karnataka Milk Federation has 22 dairy processing plants with a capacity of 56.80 lakh liters / day. Organization has 44 chilling centers to process 21.40 lakh liters of milk and also 5 milk product dairies which manufacture 100 MT milk powder every day. The Karnataka Milk Federation in its jurisdiction has 5 cattle feed plants which produces 45000 MT's of cattle feed / month, The plant has ISO 9001/2000 certification for quality production and supply of cattle feed to producers. At present, 13207 dairy co-operative societies are functioning, 23.38 lakh farmers are enrolled as members, out of which, 7.98 lakh farmers are active members.

**(viii) Fisheries:** Fisheries Sector contributes to production of quality animal protein required for human being besides providing more employment opportunities. The vast marine, brackish water and inland freshwater resources are the source of fish production in the State. Karnataka State has 320 Km long coast line along with 27000 sq. km continental shelf area, 5.65 lakh hectare of various inland water resources and has vast scope for fisheries development. The brackish water area of 8000 hectare also provides good scope for shrimp/fish culture. There are about 9.61 lakh fishermen in the state of which 3.28 lakh fishermen in marine and 6.33 lakh fishermen are in inland who are involved in various fisheries activities. During the year 2014-15, the total fish production of the state was 6.13 lakh tonne. Karnataka is in 6<sup>th</sup> position in marine fish production and 8<sup>th</sup> position in inland fish production when compared to fish production in the country. During 2015-16, the total fish production is 4.33 lakh tonne till December 2015

**(ix) Horticulture:** Horticulture sector has emerged as an important component of the economy of our State and has contributed more than one third share to the economy of agriculture and allied sectors. In many dry regions of the State, Horticultural crops have evolved as an alternative crop to agricultural crops. Horticulture crops cover an area of 19.22 lakh hectare and the annual production is 162.57 lakh MTs. The average Productivity of Horticultural crops in the state is 8.46 MTs per Hectare. The annual value of Horticultural products produced in the State is Rs.35307 crore and constitutes 40.25% of the total income from entire agriculture sector. The share of Horticultural produces in total GSDP of the state is 5.74%.

For overall development of horticulture, the National Horticulture Mission (NHM) Scheme is being implemented in all 30 districts of the state. At present, this scheme is a sub scheme of Mission for Integrated Development of Horticulture (MIDH). The objectives of the mission is enhancing quality and productivity of major horticultural crops by adopting new innovative technology to develop horticulture in clusters approach, improve standard of living of farmers by increasing their income and to provide employment opportunities to unemployed youths.

During 2014-15, under RKVY, the amount was utilized for area expansion and production of major categories of horticulture crops like fruits, plantation crops, spices, flowers and aromatic crops etc. During 2015-16 more emphasis is given for providing infrastructure, protected cultivation and Post Harvest Management.

Introduction of advanced technology in cultivation of flower crops in Karnataka was started in 1990's. The progress made in this field attracted the entire Nation. More and more farmers were attracted towards the cultivation of Roses, Carnation, Gerbera, Chrysanthemum, Orchids, Anthurium and other flower crops under green house using advanced technology which was lucrative in internal as well as international markets.

### 1.7.2 Food and Nutrition

National Food Security Act, 2013 came into effect from January 2014. The Act aims at providing food and nutritional security by ensuring access to quality food at affordable price.

Food Corporation of India with other central and state agencies is the nodal agency that undertakes open ended procurement, distribution and storage of food grains. Essential Commodity Act, 1955 is implemented by the Food and Civil Supplies Department. The Act empowers the Central and State Governments concurrently to control production, supply and distribution of certain commodities including pricing, stock holding etc.,

Food and Civil Supplies Department implements Targeted Public Distribution System which is one of the strategy for Food Security to population Below Poverty Line. The other programmes implemented are Anthyodaya Anna Yojane for poorest of BPL population, Anna Bhagya Yojane for BPL card holders and Padithara Khatari Scheme, which guarantees the availability of foodgrains from the first of every month. The Department of Legal Metrology aims at protecting the interest of the consumers in respect of weights and measurement. It enforces the Legal Metrology (packaged Commodity) Rules, 2011.

## 1.8 Natural Resources

### 1.8.1 Forest and Biodiversity

Karnataka's geographical area of 191,791 sq. km. constitutes 5.83% of India's area, and accounts for the second largest land use after agriculture. Forests are of immense importance to all life forms. Karnataka has 43356.47 sq.km of forest cover, which is 22.61% of the states geographical area, as per the States Forest Department Annual report of 2014-15. Of this, the reserve forest constitutes 15.48%, protected forest constitutes 1.85%, village forest constitutes 0.03%, unclassified forest constitutes 5.23% and private forest constitutes 0.03 %. The forest resources of the State are under severe

pressure with drastic fall in the area of dense forest cover between 2001 and 2013. The dense forest cover was estimated at about 26156 sq. km (70%) in 2001 and declined to 21956 sq. km (60%) in 2013, which is a 10% decline over 12 years. However, the open forest cover increased from 10835 sq. km. to 14176 sq. km. during this period. As per the Forest Survey of India Assessment Report 2013, the Forest cover under various density classes is 18.84% of the State's geographical area, where as the National Forest Cover is 21.23% of the country's geographical area.

To protect and develop biodiversity, the state has formed 4467 Biodiversity Management Committees at Grama Pachayat level. Biodiversity heritage sites (such as the 400-year old tamarind grove at Nallur, Devanahalli taluk) are being protected to conserve and develop the unique genetic biodiversity. The forests of Karnataka support a wide range of flora and fauna (bio-diversity) through a network of well-connected and protected wildlife sanctuaries and National Parks. The State has 5 National Parks/Tiger reserve and 29 Wild life Sanctuaries spread over an area of 9526.03 sq.km, constituting 21.97% of the State's forest cover. These protected areas occur across the various Forest types ranging from the evergreen to scrub forests. These have different ecosystems with rare and endangered species of plants, animals and birds. With about 6072 wild elephants and nearly 406 tigers, Karnataka ranks first in Tiger / wild Elephant population of India. The floral and faunal biodiversity is very rich with about 4500 species of flowering plants, 500 species of birds, 120 species of reptiles, 70 species of frogs and 800 species of fish. Among the visitors to the sanctuaries, 98% are domestic visitors while 2% are foreigners. The reported deaths of wild animals in 2014-15 (including the natural and unnatural causes), elephants had the maximum number 36%, followed by other animals 58.5% and tigers 5.8% which was 42%, 56% and 2% respectively in the year 2013-14.

The State has been active in formulating and implementing various programmes for

development of forests and protection of its natural environment. Of the various schemes of the Forest Department dealing with wildlife and national parks, Project Tiger attracted 15.37%, Nature conservation activities attracted 10.54%, Integrated Development of Wildlife habitats 4.21% of the total expenditure during 2014-15.

Forest resources significantly contribute to the State's Gross Domestic Product by being a major source of timber, medicinal plants, non-timber forest produce, grazing, recreational activities, carbon sequestration etc., The State has realized revenue of Rs.17410.98 lakh during 2014-15 from sale forest produce such as timber, firewood, sandalwood, bamboos, canes and other NTFPs. Of this, revenue from timber formed 51% of the total revenue.

Further, today, environmental sustainability is a cardinal issue to be addressed. Short-term goals of growth and development may lead to new environmental challenges. Afforestation, human-animal conflict, improvement in air quality, soil and water conservation, prudent use of natural resources and developing the alternate source of energy is a daunting task. The state is constitutionally duty bound to ensure environment protection. With this objective, the Department of Ecology and Environment oversees the formulation and implementation of the laws, rules, regulations for the protection of environment with assistance of Karnataka State Pollution Control Board (KSPCB), Karnataka Bio-diversity Board (KBB), Karnataka Lake Conservation and Development Authority (KLCDA), Environment Management & Policy Research Institute (EMPRI), Karnataka State Coastal Zone Management Authority (KSCZMA) and State Environment Impact Assessment Authority (SEIAA).

### 1.8.2 Water Resources

Irrigation is an important source of raising productivity in agricultural sector. Expansion of both the groundwater and surface water resources has helped to increase the cultivated area under irrigation in the State

over time. The net irrigated area has increased considerably from 13.62 lakh hectare in 1980-81 to 35.56 lakh hectare in 2013-14. Similarly, gross irrigated area which was 16.76 lakh hectare in 1980-81, has increased to 41.12 lakh hectares in 2013-14. The gross irrigated area (122.67 lakh hectare) as percentage of total cultivated area has doubled from 16% in 1980-81 to 33.5% in 2013-14.

The surface water (canal) irrigation projects are classified into major, medium and minor irrigation projects based on the cultivated command area generated by them. Karnataka announced its State Water Policy in January, 2002 with an objective to create an ultimate Irrigation potential of 45 lakh hectares under major, medium and minor irrigation projects. The cumulative Irrigation potential under major, medium and minor irrigation projects is expected to reach 39.77 lakh hectare in 2015-16 as against 38.82 lakh hectare in 2014-15, registering an increase of 2.45%.

The Krishna Water Disputes Tribunal-II has passed an award in December, 2010 allocating 177 TMC of water to Karnataka State. Out of this, 130.90 TMC is the share of UKP Stage -III. Irrigation will be provided for 5.30 lakh hectare of command area falling under Vijayapura, Bagalkot, Kalaburagi, Yadgir, Raichur, Koppal and Gadag districts of Northern Karnataka.

Among all irrigation sources, tube wells/bore wells accounted for the highest proportion of 37 % of the net irrigated area followed by canals (35%) and dug wells (12%). The share of tanks, which were historically a major source of irrigation, has accounted for only about 4% of the net irrigated area.

### 1.8.3 Mines

Karnataka is rich in mineral resources and has a dominant position on the mineral map of the country. Karnataka State is abundant in mineral resources which cover an area of

1.92 lakh sq.km. Karnataka has more than 40000 sq.km. of green stone belt which are a treasure trove of several mineral deposits.

During 2015-16 up to December 2015, 16 quarry leases for ornamental stones and 166 leases for building stone have been sanctioned where as in 2014-15, 30 leases for ornamental stone were sanctioned and in 2013-14, 13 quarry leases for ornamental stones were granted. Up to December 2015, the Department has realized revenues of Rs.1318.93 crore as against the annual target of 2048.26 crore for 2015-16.

As per, the new sand policy up to November 2015, 743 sand blocks had been identified in the State. The availability of sand stood at 11.2 million tonne as against a demand for 23 million tonne / year. As on December 2015, the State's mining sector have registered 12019 Quarry Leaseholders, 1118 Mining Leaseholders, 91271 Stockiest, 592 Weigh Bridges Integrated with Online e-Permit System for Iron ore. In the current year, approximately, 1918 Bulk Permits, 11.26 lakh Trip sheets, 2799 Rake Permits have been generated. A special paper has been developed to make the system foolproof against misuse.

#### **1.8.4 Climate Change and Mitigation Measures**

India responded to the challenge of climate change in 2008 with the National Action Plan on Climate Change (NAPCC). It sets out the pursuit of development goals that offer growth with long-term "climate change co-benefits". Through eight sectoral missions, the NAPCC focuses on key sectors impacted by or impacting climate change, including agriculture, water, forestry, energy and urban planning. Environmental Management and Policy Research Institute (EMPRI) prepared the Karnataka State Action Plan on Climate Change (KSAPCC)-1st Assessment. The report covers key sectors like Agriculture, Animal Husbandry, Water Resources, Biodiversity, Forestry, Urbanization and Health. An action plan has been proposed for

every sector as roadmap for the concerned state departments.

Ministry of Environment, Forest & Climate Change has also established a state unit of climate change in EMPRI under the Capacity Building for Climate Change programme. The purpose of the capacity building at the state level is to strengthen the capacity at State level to address climate issues and to integrate climate change and development imperative in policy, plans and programmes in various sectors. The coordination committee on State Action Plan on Climate Change headed by Additional Chief Secretary and Development Commissioner has designated EMPRI as the nodal agency for providing technical support in conducting research, trainings and capacity building in climate change programs.

A New Scheme on Climate Change has also been announced by Govt. of Karnataka in the budget for 2015-16 for strengthening the capacity of EMPRI to steer the climate change policy and initiate strengthening of the existing climate change cell at EMPRI with necessary technical manpower and infrastructure. The aim is to create and generate awareness among various stakeholders, to evolve strategies and policies for implementation, to impart training, capacity building and human resource development and also to coordinate with different universities, research institutions, Government Departments and NGOs to pursue theme based scientific research on climate change and its impacts. Karnataka took initiative first of its kind in the country to create awareness among all stakeholders and also to frame adaptation/mitigation strategies to combat Climate change in the State.

#### **1.9 Industry**

Industries play an important role in the economic development of the state.



Karnataka has been driving force in the growth of Indian industry, particularly in terms of high-technology industries in the areas of electrical and electronics, information & communication technology (ICT), biotechnology and, more recently, nanotechnology. The industrial structure of Karnataka presents a blend of modern high-tech capital goods and knowledge intensive industries on the one hand and traditional consumer goods industries on the other.

**(a) Trends in Industrial Production:** The general index of industrial production (IIP) of Karnataka covering mining, manufacturing and electricity sectors for 2014-15 stood at 181.15. The overall organized industrial sector of Karnataka has registered 2.00% growth in 2014-15 as compared to 2013-14. Within the organized industrial sector, Manufacturing sector recorded highest growth of 2.93% followed by the electricity sector (1.91%) and mining sector registered negative growth of (-26.16%). Contraction in mining activities and deceleration in manufacturing output moderate growth was observed in industrial sector.

The compounded average growth rate (CAGR) for the overall organized industry from 2005-06 to 2014-15 with base year as 2004-05 was about 6.1% whereas it was 6.6% for manufacturing and 7.4% for electricity. A decline of 8.9% was seen in the output of the State's mining sector. In 2014-15, with reference to the use-based classification of industries among the four broad groups, Consumer goods registered the highest growth of 5.83% followed by Basic goods at 1.91% Capital goods at 1.70% & Intermediate goods 1.54%.

**(b) Annual Survey of Industries:** The Annual Survey of Industries (ASI) statistics indicates that Karnataka accounted for 5.29% of the total number of registered factories in 2012-13 in the country. The contribution of registered factories of Karnataka stood at 6.66% of total fixed capital, 6.63% of total output and 6.35% of Gross Value Added (GVA) in the same year. In terms of GVA per worker, at a value added of Rs. 49801,

Karnataka performed better than the all - India average of Rs. 44347.

**(c) MSME:** In 2014-15, 28742 MSME Units have been registered in the State with an investment of Rs.279291 lakh and providing employment to 175469 persons. As compared to 2013-14, there is 10.69% increase in the number of units registered, 2.02% increase in investment and 4.85% increase in number of persons employed during 2014-15.

**(d) Nuthana Javali Neethi:** Karnataka is the first State in the Country to launch State Textile Policy known as **"Nuthana Javali Neethi 2013-18"**, which aims to attract Rs. 8000 crore of investment by 2018 and creating employment to nearly 4 lakh persons. This policy is being implemented after completion of Suvarna Vastra Neethi 2008-13. In 2015-16 (up to December 2015) 38.68 million meters of handloom textiles was produced in Karnataka providing employment to 1.06 lakh, whereas during 2014-15, 41.29 million meters of handloom textiles was produced in Karnataka providing employment to 0.84 lakh persons.

**(e) Sericulture:** Sericulture has immense employment generation potential, particularly in rural Karnataka. The area under mulberry cultivation in the State was about 87.93 thousand hectares at the end of December 2015. There was relatively higher growth in 2014-15 with 53.00 metric tons of cocoons production, 41.43 metric tons of cocoons marketed and 7.38 metric tons of raw silk produced and 11.43 lakh of employment generated. During 2014-15, the estimated mulberry silk production in India was about 21280 MTs of which Karnataka's share was 9645 MTs. During 2014-15, Karnataka Silk Marketing Board has made a turnover of Rs.2310 lakhs as against the turnover Rs.3860 lakh in the previous year. During this year up to December 2015 the turnover was Rs.804.00 lakh.

**(f) Other Policy Initiatives:** Karnataka Mobile One project is to render services "Any Where, Any Time, Any Device" to the residents. Mobile One has the unique distinction of being certified as India's first

and the world's largest multi-mode mobile governance platform with over 4000 services. It is a unified mobile platform for delivery of citizens services both from the Government and Private sector. These anytime, anywhere, anyhow services will be available 24x7x365 days at any location in India on any mobile device.

Keonics is poised to play a vital role in the upcoming Information Technology Investment Region (ITIR) project conceived and being developed by the Government of India and Government of Karnataka near the international airport, Bengaluru with an initial investment of Rs. 1600 crore in an area spreading over 2100 acres in the first phase. The Project is aimed at housing IT SEZ, Electronic Hardware park among other ancillary industries with an integrated township.

In order to recognize, motivate and appreciate the best performing Public Sector Enterprise, the Government gives Annual 'Chief Minister's Ratna Award' for the three best performing Public Sector Enterprises, every year. Karnataka Power Transmission Corporation Limited, Mangaluru Electricity Supply Company Limited and Dr.B.R. Ambedkar Development Corporation Limited are the winners during 2014-15.

**(g) Global Investors Meet – February 2016:**

A successful investors' meet "Invest Karnataka" was held between 3 and 5 February 2016. The Government has attracted over Rs. 3 lakh crore investment, of which 1080 projects with investments of Rs. 1.77 lakh crore have been approved. This has the potential to create employment for 4.82 lakh persons. Further, 122 Memoranda of Understanding/Expressions of Interest were signed across sectors with a potential of Rs. 1.27 lakh crore of investment and employment creation for 1.7 lakh persons.

**(f) Tourism:** The tourist flow in to the State has continuously been increasing steadily from 8.41 crore in 2011 to 11.82 crore in 2014, which indicates comprehensive increase of 40.54%. For development of Golf

Tourism in the State, the Department is supporting by creating tourist infrastructure facilities at various golf clubs in the State.

Karnataka Tourism has got Condé Nast Traveller 5<sup>th</sup> edition award under reader choice category for Kodagu as emerging tourist destination. For integrated development of Tourism in the State, Department of Tourism has introduced new tourism policy "2015-20". It is envisaged that during policy period investments will be made which will generate new employment. More investments are expected from the private sector or under PPP. World Travel and Tourism Council reports that the contribution of tourism sector to India's GDP was 6.6% during the year 2012.

**1.10 Employment and Labour Welfare**

In the policy context the most critical factor that impinges on labour supply is the Labour Force Participation Rate (LFPR). Other than Labour Force Participation Rate, Worker Population Ratio and Unemployment Rates are also very important indicators in social and economic area. Low LFPR primarily implies high dependency ratio. Annual Employment and Unemployment Survey, 2013-14 of Labour Bureau, Government of India is fourth in the series. The Usual Principal Status (UPS) and Usual Principal and Subsidiary Status (UPSS) or (PS+SS) approaches are considered for each parameter. The parameters considered are Labour Force Participation Rate (LFPR), Worker Population Ratio (WPR), Proportion of Unemployed (PU) and Unemployment Rate (UR).

**(a) Labour / Work force Participation:** The LFPR for persons aged 15 years and above according to PS+SS status approach is 57.8% in Karnataka, whereas this is 55.6% for India. This rate is 81.7% for males in rural Karnataka, which is fourth highest among the neighbouring States of Karnataka. Lowest rate of 28.0% is for urban female and this is much more than the all India rate of 19.7% (urban female). The Labour force participation rate is highest for the 30 years

and above category and the same is lowest for the age group 15-17 years. It explains that, the children in these age groups are normally pursuing their education. Quite interestingly Kerala has very low LFPR in the age group 15-17 years which explains the focus of the state on education. In this age group even Maharashtra and Tamil Nadu are having lesser LFPR when compared to Karnataka.

**(b) Worker Population Ratio (WPR):** WPR under PS+SS approach for Karnataka is 56.8% which is more than all India average of 53.7%. Highest WPR in Karnataka is 80.6% i.e., for rural male and for rural female it is 38.8%. Both are more than the all India average of 74.3% and 35.1% respectively. For urban male it is 74.4% and for urban female it is 27.1% and again higher than the all India average of 71.4% and 17.5% respectively. The state average male and female worker population ratios (78.2% and 34.5%) are also higher than all India average

**(c) Unemployment:** Under UPSS approach, UR of Karnataka is 1.7% for all persons i.e., urban and rural put together which is very less compared to India's rate of 3.4%. In Karnataka, in rural areas unemployment rate is 1.3% for males and 2% for females. Whereas, in urban areas, for males it is 1.5% and for females, it is 3.1%. At all India level, for males in rural areas it is 2.7% and for females 3.4%. The corresponding figures, for urban male and female are 3.5% and 10.8% respectively. In Karnataka, in the age group of 18-29 years, the unemployment rates are 3.9% for males and 6.1% for females and average is 4.6%. Karnataka has almost 50% lesser rates when compared to all India average.

**(d) Proportion Unemployed (PU):** Proportion Unemployment under Usual Principal and Subsidiary Status approach indicates that, Karnataka has comparatively the lowest rates among the southern states and compared to Gujarat. For males and females in rural areas, it is 1.1% and 0.8% respectively and the corresponding figures for males and females in urban areas are 1.2% and 0.9% respectively. The proportion unemployed in Karnataka is lesser than the all India average.

**(e) Labour Force Parameters as per Social Group:** In Karnataka, the overall rate of employment among Post-graduates is 74.1%. Only 3% is unemployed and the remaining 23% are not in labour force. It means that, they are not seeking for employment. The same rates for SC workers are 68.3%, 9.7% and 22% respectively. The rate of unemployment is high among graduates and above followed by diploma holders. Among all the social groups, the rate of employment is high among ST post-graduates (88.7%) followed by OBC (76.4%) and others (73%). Among SC (71.3%), highest rate of employment is found among people with just primary education. In Karnataka, in all the social groups with different education backgrounds, the rate of employment is much higher than all India average.

**(f) Distribution of Workers According to Work Conditions (UPSS Approach):** In Karnataka the highest numbers of persons are self-employed (43.7%). This is followed by casual labourers with 36.4% and wage earners with 18.6%. The proportion of contract workers is just 1.3%. The State has more number of casual workers than the national average of 31.1% and wage earners of 15.4%. Among the total working force, self-employed and casual labourers account for more than 81%, at all India level. In Karnataka also their share is 80%. This once again reiterates the importance of sustainable livelihood opportunities for this category of workers.

**(g) Sectoral Distribution of Workers:** The sectoral distribution of workers across industry shows that agriculture and allied sector is the most important sector wherein about 49.0% of the workers in Karnataka and 53.8% of workers at all India level are engaged for their livelihood during 2011-12. The corresponding share in the Karnataka and India was 61.0% and 58.2% respectively in 2004-05. This shows that the share of agricultural employment in Karnataka and all-India level has declined between 2004-05 and 2011-12, which is a positive trend towards structural transformation. There is an urgent need to devise appropriate policies

to ensure rapid structural transformation process in coming years.

**(h) Labour Productivity:** The overall labour productivity in Karnataka is Rs.163340 for 2011-12. However, given the sectoral composition of employment, there are wide variations in the labour productivity across the sectors of the economy. Labour productivity in services is Rs.288176 per worker which is almost 5 times of that in agriculture (Rs.54028 per worker). At the same time, labour productivity in industry (Rs. 235843 per worker) is more than 4 times that of agriculture. Across the sub-sectors of the economy, labour productivity is the lowest for agriculture and highest for financial intermediaries and business services. Electricity and water supply utilities are the most productive with labour productivity of Rs.814274.

**(i) Employment Exchange Statistics:** The number of job seekers as per the live register of employment exchanges was 3.45 lakh in December-2015 compared to 3.53 lakh at the end of March-2015, a decrease of 2.4 %. As compared to previous year, there is a slight increase of 0.8% in Post Graduates & 0.4% in Graduate registrants. There has been -7.8 % decline in the registrants of Below Matriculates followed by I.T.I., Apprenticeship & Other Certificate Holders (-6.9%), Diploma Holders (-3.4%), Matriculates and Stenographers (-0.7%).

The Government of Karnataka has established various institutions and implemented projects for promotion of social security for unorganized workers, training for self employment, skill development, and implementation of labour laws, maintenance of industrial relations and management of industrial safety.

### 1.11 Economic Infrastructure

Infrastructure development is a pre-condition for propelling growth of an economy. It mainly comprises of Energy, Transport, Telecommunication, Banking and Finance. The Government continues to attach high

priority to infrastructure development through several ongoing and pipeline projects. A brief summary of these sectors is presented below.

#### 1.11.1 Power Sector

Karnataka State has been experiencing conditions of power shortage because of the ever growing demand for power influenced by the rapid economic progress. The State Government has been taking various initiatives to implement projects in the public as well as private sectors for adding new installed capacities for power generation. Both the peak demand and peak energy supply per day are showing increasing trends since 2007-08. Karnataka was one among first few Indian States to implement power sector reforms.

The total installed generation capacity both in the public sector and private sector including the State's share in the central generation stations (CGS) as on 31<sup>st</sup> December 2015 was 15720.43 MW, which was 5.7 percent higher than the previous year. The installed capacity in the public sector was 9201.35 MW (including CGS allocation) and the private sector's share was 6519.08 MW. The status of the installed capacity of power generation as on 31-12-2015 suggests the continued domination of hydro power in the State with a share of 29.4% in total installed capacity. It may be observed that out of the total installed capacity of 15720.43 MW, the renewable energy accounts for 4395.62 MW with a share of 27.9 %.

The anticipated capacity addition during 2015-16 is 903.43 MW (if CGS of 503 MW is included) of which 329.62 MW is under renewable energy. The addition to the installed capacity during 2014-15 was 461 MW (including CGS of 248 MW) of which 403 MW was under renewable energy. There were a few major Independent Private Power Producers (IPPs) whose contribution during 2014-15 was 6149 MW and during 2015-16, IPPs are expected to add about 370 MW.

The peak demand met during 2014-15 was 9503 MW, and in 2015-16 the anticipated peak demand is likely to be around 10000 MW. The Generation of electricity during the current year was 36747 MU up to December 2015. The total power generation in 2014-15 was 46204 MU, which was higher than 46166 MU in 2013-14, an increase of 38 MU. The Hydro: Thermal mix in generation in public sector is in the ratio of about 4:3. Karnataka has successfully encouraged private sector investments in power generation from non-conventional or renewable energy sources of generation.

Karnataka's power sector has reduced its Transmission & Distribution losses from 29.6% (in 2005-06) to 18.52 % by 2014-15, which will further be reduced to 17% by March 2016. The utilities in the sector are making planned investment for strengthening and augmenting the network for reduction of technical losses. The Aggregate Technical & Commercial losses during 2005-06 were 38%, which were brought down to 17.08% in 2014-15.

To improve distribution of power, two new CSS schemes have been launched viz. Integrated Power Development Scheme and Deendayal Upadhyaya Gram Jyoti Yojana. In the year 2014-15, the agricultural sector accounted for highest share of electricity consumed with a share of 36% with domestic occupying a distant second position with a share of 21%. There are a total of 23,40,563 Bhagya Jyothi / Kutira Jyothi connections and 23,44,486 irrigation pumpsets in the State as of December 2015. In the State almost all the villages have been electrified except a few for which extending the grid is extremely difficult. Electrification of such villages is being taken up by concerned ESCOMs through Decentralised Distributed Generation under RGGVY scheme. During 2015-16, up to December, 25 Hamlets/Harijan Bastis, Thandas are electrified

The cost of supply of free power to agricultural sector has been provided by the State Government through subsidy. The subsidy provided by the State Government during

2014-15 amounted to Rs.6200 crore and in 2015-16 (Up to December 2015) it was Rs.4432.18 crore.

To provide a big push to solar energy, the Government published its Solar Policy for 2014-2021 for giving impetus to exploitation of solar energy. The installed capacity of renewable source of energy is 5196 MW, while the capacity addition during 2015-16 (up to December 2015) is 355.85 MW.

### 1.11.2 Road, Transport and Communications

**(a) Road Development:** In the State, the average length of the PWD roads (viz., NH, SH & MDR) per 100 sq.km area is 40.07 Km. Among the districts, the road length per 100 sq.km in Mandya district is highest at 69.34 Km and Kalaburagi district has the lowest length of 26.02 Km. Further, the road length per 100 sq.km in Chamarajanagar, Raichur, Bidar, Chikkaballapura, Vijayapura, D.Kannada, Yadgir, Chikkamagaluru, Kodagu, Chitradurga, U.Kannada, Ballari, Shivamogga, Kolar, Koppal & Udupi districts are below the State average. During 2014-15, 1884 Km of National Highway road length has been increased. The increase in road length of National Highways is due to up gradation of State Highways as new National Highways during May-2014. 99.4 percent of National Highways and large extent of State Highways are covered with Asphalt (B.T) and 93% of Major District Roads are covered with Asphalt. 18 percent of National Highways and 1 percent of State Highways have four lane widths. Similarly, 62 percent of NH, 17 % of SH and 1.4 % of MDRs have two lane width.

The Pradhan Mantri Gram Sadak Yojana have been implemented in the State to build all-weather surface roads. Under this programme 17391.67 km of road length has been asphalted as on October-2015. In the State 1771 habitations (population between 250-499) & 10269 habitations (population less than 250) do not have road connectivity. Under KSHIP-II, Phase-I, it is proposed to develop 1216 km of roads with the assistance of World Bank and under the Asian Development Bank component, 615 km road

length is proposed to be developed. Road length of 552 km has been developed since inception incurring an expenditure of Rs.1270.08 crore.

KRDCL constructed 642 bridges and 1398 km length of road have been completed. Further, the development of 7 State highways for a length of 194 km is taken up at an amount of Rs.644 crore and these works are under final stage of completion. Under PPP, a length of 102 km is being developed. Further, 360 km State Highway will be improved with World Bank co-finance (annuity).

**(b) Road Transport:** Karnataka provides efficient public transport to people of different income groups across the State as well as in neighbouring States. The Govt. of Karnataka has bifurcated KSRTC into four separate Corporations to fulfil the diverse needs of commuters through effective and efficient control by distributing areas.

**BMTC** is operating in 25 kms radius from BBMP area of Bengaluru, with a workforce of 36848 and 6420 fleet. BMTC is operating 12.33 lakh kms, earning daily Rs.5.46 crore, carrying around 52 lakhs commuters and providing services to commuters in and around suburbs of Bengaluru city. **KSRTC** operates in seventeen southern districts of Karnataka and provides services to 14296 villages out of 20005 villages, the percentage service provided being 71.5. It operated 7565 schedules utilizing 8130 vehicles, operating 26.29 lakh kms/day and earning gross revenue of Rs.803.07 lakh. It carries 26.25 lakh commuters daily with workforce of 36367 employees. North Eastern Karnataka Road Transport Corporation (**NEKRTC**) is having 9 Divisions, 48 Depots. The Corporation has jurisdiction of 7 districts namely Kalaburagi, Yadgiri, Raichuru, Bidar, Koppala, Ballari and Vijayapura. During the year, the Corporation operated 4055 schedules utilizing 4450 vehicles, inducted 367 new vehicles and scrapped 220 old vehicles which were not fit for operation. During the year 2015-16 (up to December 2015), the Corporation earned total revenue of Rs. 10.63 crore and making a cumulative

profit of Rs.17.23 crore. North West Karnataka Road Transport Corporation (**NWKRTC**) covers six Districts in the State. During 2015-16 the Corporation had a workforce of about 23947 employees, operated 15.88 lakh Kms daily by utilizing fleet strength of 4762, catering to 22.75 lakh passengers on an average and earning Rs. 450 lakh daily. NWKRTC has extended services to 4600 villages out of 4719 villages (97.4%) which are in the nationalized routes.

As on December 2015, out of 158 lakh vehicles on road in the State, 15 lakh vehicles are transport vehicles, and 143 lakh vehicles are Non-Transport vehicles. out of 143 lakh Non-Transport Vehicles, 80 percent or 115 lakh vehicles are Two Wheelers. From April 2015 to December 2015 total 10.81 lakh new vehicles have been registered.

**(c) Other Transport:** Ports and Inland Water Transport department constructed 975 m long Seawall at severe erosion places of 3 coastal districts during 2014-15. During 2015-16 1000 m length of long term sea wall is under construction. Ports and Inland Water Transport handled significant volumes of cargo and by the end of March, 2016 it is likely to reach the target of 780 thousand Metric Tons, registering an increase of 18 percent compare to previous year.

**(d) Railways:** Karnataka has the lowest rail route and broad gauge densities as compared to other Southern States. The rail density in the State is 16.60 km per 1000 km. The State Government with a view to increase the rail density and increase the pace of implementation has agreed with Ministry of Railways for taking up new railway projects on 50:50 cost-sharing basis. Government of Karnataka has released Rs.375.17 crore so far and work in 139 km is completed, the remaining 28 km is in progress. As on date following 5 projects have been completed & commissioned for traffic.

1. Sholapur – Gadag (GC)
2. Shivamogga – Talaguppa (GC)

3. Kadur – Chikkamagaluru New Railway Line Project
4. Kottur- Harihara New Railway Line Project
5. Kolar-Chikkaballapur Guage Conversion Railway Project

Under Ramanagara-Mysuru railway doubling line project, except a small stretch of about 1.5 km, the entire line of over 125 km has been completed and commissioned. The Bidar-Kalaburagi and Bengaluru-Hasana new Railway lines are in progress and likely to be opened for traffic shortly. Govt of Karnataka has approved setting up Railway Fiat Coach Factory at Yadagiri. 150 acres of land has been handed over to Railways for this. The entire cost will be funded by the Ministry of Railways.

(e) **Bengaluru Metro Rail:** Bengaluru Metro Project Phase-1 physical progress is 96%. The section between Baiyappanahalli and M.G. Road (6.7 Km with 6 stations) including Baiyappanahalli Depot was commissioned on 20-10-2011. The section between Peenya and Sampige Road part of North South Corridor along with Peenya Depot (10.3 Km. and 10 stations) has been commissioned on 28.02.2014. The Extension of Reach-3a that is 3b from Jalahalli to Nagasandra Station commissioned on 1st May 2015. The section between Magadi Road and Mysuru Road terminal with a length of 6.50 Km with 6 stations was commissioned on 16th November 2015. The entire Phase-1 is expected to complete by mid of 2016.

Phase-2 preliminary works such as Geo Technical surveys and concept designs of structures have been completed. The process for land acquisition, shifting of utilities and calling of tender for civil works has been started. Reach-4 Extension (Puttenahalli to Anjanapura) tenders for civil work have already been invited and technical evaluation is under progress. The tenders for civil works in Reach-2 Extension

(f) **Kempegowda International Airport(KIA):** KIA is the country's first Greenfield international airport, conceived under the Public Private Partnership (PPP)

mode. The airport has been developed at a cost of Rs. 2470.29 crore at Devanahalli near Bengaluru. Presently, it is handling around 15.40 million passengers annually. With the aim of establishing Kempegowda International Airport as India's leading airport in terms of quality and efficiency and to set a benchmark for the future amongst Indian airports. Planning and preparatory works of construction of second parallel runway and terminal 2 has been taken up. With this, the airport would have the capacity to handle 35 million passengers per annum.

(g) **Telecommunication:** The overall teledensity of the State (i.e. number of telephone connections per 100 population) is 97.50, which is higher than the national average of 79.98. In the State there is also a wide gap between rural and urban teledensity. The rural teledensity as on 30-6-2015 stood at 50.55, while the urban teledensity was 172.11. The number of telephone exchanges has increased over the years. In the last 8 years, 218 new exchanges were added in the State. Though the number of exchanges has increased, the number of landline connections has declined significantly. The decline in landlines can be partly attributed due to increased private participation in the mobile telephony sector and switchover to mobile phones. The trends in postal services suggest that there is a decline in the total number of post offices over the years. The number of post offices which were 9826 in 2007-08 were reduced to 9340 in 2014-15. This may be due to merger of post offices in urban areas.

### 1.11.3 Banking and Finance including Co-operatives

Karnataka State has a fairly well developed financial infrastructure. The State has pioneered in establishment of many leading commercial banks and is home to a wide network of commercial bank branches in the country. Currently, twenty six public sector banks, sixteen private commercial banks and three regional rural banks are operating in the State. As on March 2015, the State had 10074 branches. The population per branch in Karnataka is 7748 which is less than national

average and also many states. The aggregate deposits of all the banks (Commercial, RRBs and Cooperative) stood at Rs.612697 crore as at end of March 2015 and total outstanding advances of all the banks in the state stood at Rs.395327.85 crore. The credit-deposit ratio (C-D ratio) of the state as on March 2015 is 74.76 per cent, which is marginally lower compared to last year.

The Priority sector advances of all banks in the State amounted to Rs.184503 crore in March 2015 as against Rs.158455 crore as at March 2014 showing an increase of Rs.26048 crore and recording a growth of 16.44%. It contributed to 40.28% in total advances, which is marginally higher than the benchmark level of 40% stipulated by RBI. The agricultural advances as on March 2015 were to the tune of Rs.87860 crore and advances to weaker section stood at Rs.67765 crore. The advances to Small & Marginal farmers was to the tune of Rs.44733 crore covering about 50.40 lakh accounts. The advances paid to Minority communities amounted to Rs.19801 crore. Advances to SCs/STs were Rs.12480 crore as on March 2015. Credit disbursed by banks to MSME sectors in the state in March 2015 is Rs.66925 crore, up from Rs.57051 crore in the previous year.

In Karnataka, till December 2015 an aggregate amount of Rs.7,543.29 crore has been sanctioned by the National Bank for Agriculture and Rural Development (NABARD) under various tranches of RIDF. The normative allocation to the state for financial year 2015-16 was Rs.800 crore towards implementation of works under RIDF-XXI. The rate of interest charged on loans to State Government is at 6.25% with effect from 29.09.2015.

Karnataka State Financial Corporation (KSFC) has extended assistance to the extent of 67% for Small Scale Industries, 54% for Development of Backward Areas and 51% for the promotion of First Generation Entrepreneurs, as at end of 31st March 2015. During 2014-15, the Corporation Sanctioned 67514.60 lakh, Disbursed 55362.41 lakh &

Recovered 81399.70 lakh and during 2015-16 ( up to December 2015), KSFC has assisted 763 cases to an extent of 44331.44 lakh, disbursed 38863.15 lakh and recovered 61339.34 lakh.

Government has also waived the interest on Overdue of short term, medium term and long term Agricultural loans as on 30-9-2015, for the farmers who pay the principal amount within 31-03-2016. It is estimated that this will this will approximately benefit 2.07 lakh farmers and amounting to Rs.188.37 Crore to the provisioned by the state government.

## 1.12 Human Development

### 1.12.1 Education

Karnataka has been a fast growing economy due to the large knowledge base of the society, which can certainly be attributed to significant reforms in education sector.

**(a) Literacy:** The literacy rate in Karnataka has increased to 75.60% in 2011 from 66.64% in 2001 exhibiting significant achievement. Urban male literacy rate has crossed 90%, however, rural female literacy rate is yet to cross 60 %. The literacy rank of the State was 9<sup>th</sup> among 16 major States (States with a population of more than 100 lakh) during 2001 and the same is continued even in 2011.

**(b) School Education (Elementary and Secondary):** School education in Karnataka is imparted through Lower Primary Schools (class I to V), Higher Primary Schools (class I to VII / VIII) and High Schools (VIII to X). The Education Department participation in elementary education is significant with 82.91 per cent of the lower and 64.51 per cent higher primary schools being managed by the Department. However, Department's participation is low in secondary education with only 30.77 per cent of the high schools being managed by the Government. While the Government schools are mainly located in rural areas, private schools are largely urban based. There are 60913 Elementary schools in the State, of which 26118 are LPS, 34795 are HPS during 2015-16. The State Rules under the RTE Act were notified in 2011. Over



the years, the enrolment has decreased marginally in the primary stage. Enrolment during 2015-16 in primary (class I to V) and in upper primary (class VI to VIII) stage is estimated to be 54.06 lakh and 29.34 lakh respectively. The number of SC / ST children in class I to VII in the State is 2004613. During 2015-16, GER and NER at lower primary are 102.98 and 96.40 respectively and at higher primary stage, they are 93.36 and 79.16 respectively. The dropout rate in LPS and HPS during the year 2015-16 is 2.02% and 5.49% respectively. A total of 166083 teachers of the sanctioned 203658 teachers (81.54%) are working in the LPSs and HPSs under the State Government (2015-16). In addition 17309 teachers sanctioned out of 22607 teachers are working in aided schools at the elementary stage. The average Pupil-Teacher Ratio is 1: 24.75 at the elementary stage.

With significant gains in primary education, the State has set in motion the planning process for universalisation of secondary education to achieve the target of 65% enrolment in 14-18 age group in classes 9 to 12. The State has a total of 15140 secondary schools of which 4659 schools are run by the DoE, 566 SW and LB schools, 3818 by aided managements, 6013 by private unaided managements and 84 by others. The concentration of the secondary schools in the private unaided sector may be one of the reasons for the low access of children from marginalized groups to higher education. 37.31 percent of girls are enrolled in Govt. schools, and only 27.43 percent of them study in private unaided schools. A total of 37091 out of 108195 teachers are working in unaided secondary schools.

**(b) Pre-University Education:** As per the report of the Education Commission (1964-66), the State has adopted the 10+2+3 pattern of education since 1971-72 with one year pre university course having been converted in to a two year pre-university course. All colleges imparting PU education come under the purview of the Directorate. The PU-course provides for two languages and four electives, which are to be selected from a wide range of subjects classified under three different

subject combinations – Arts, Science and Commerce. The Government participation is more in PU-education. The number of PU-colleges has been increasing over the years with increase in enrolment rate. It is observed that there is an attrition of around 17% to 20% between I and II years of PU-education.

**(c) Collegiate and Technical Education:** The Department of Collegiate Education oversees the administration of 411 Government First Grade Colleges and 321 Private aided colleges affiliated to 14 State universities through its 6 regional offices located at Bengaluru, Mysuru, Mangaluru, Shivamogga, Dharwad and Kalaburagi. The number of students enrolled in graduation in both government and aided institutions are 528394. The average strength in each government college is 738.59 and each aided degree colleges is 700.42. Enrolments for degree courses are not increasing year by year with negative growth being observed in case of boys since 2010-11. This is certainly not a case of improvement in gender parity. Enrolment in Science courses is also very poor. Recently, Government of India has sanctioned Indian Institute of Technology (IIT) to Karnataka at Dharwad.

In 2014-15 there are 589 institutes across the State ranging from Degree to Diploma, Junior Technical Schools and Fine Arts Schools/Colleges. In order to provide the Human Resources and enhance the teaching efficiency of the staff, the teaching faculties have been deputed to higher education and also improve their skills through short term training programmes. In order to strengthen Technical Education, the Government of India with the assistance of World Bank has introduced Technical Education Quality Improvement Programme (TEQIP) in three phases.

**(d) Medical Education:** There are 50 Medical Colleges (MBBS degree) in the State with a summated intake capacity of 6245 students. 15 colleges are run by the Government along with eight other Super Speciality Institutions. The Governments presence is visible in nominal strength in other system. Relatively, the turnout of Ayurvedic doctors (GCIM) is

quite significant. 2843 Doctors graduate from 56 Ayurvedic colleges. Ayurvedic, Homoeopathic and Unani Doctors serve rural India in larger proportions. There are 287 Nursing Colleges recognized by Indian Nursing Council with a turnout of 12725 Nurses (B.Sc. graduates) every year, making Karnataka a nursery for nursing services not only for the State but also for other regions of India, Gulf countries and Europe.

**(e) Mass Education:** The Saakshar Bharath Programme is implemented with central and state grants in 20 districts of the state where female literacy is less than 50 percent. The aim is to provide literacy to rural non literates of 15+ age group with priority to women, SC, ST, Minority and General categories. Saakshar Samithis, 117 Taluk Loka Shikshana Samithis and 3788 Gram Panchayats Loka Shikshana Samithis were implemented this programme. Total physical target fixed by NLMA was 51.80 lakhs. The target for the amount released is 34.68 lakh. Out of this 3378744 have registered, 2939054 have completed learning and remaining non literates have been learning. Further in the year 2015-16, 831 Master Trainers, 836 Preraks & 22690 Voluntary Persons have been trained. During August 2015, 549656 got registered and 413657 neo-literates have appeared for examination and result is awaited. 3.66 lakhs neo-literates is the target for 2016 march examination.

**(f) Karnataka State Higher Education Council (KSHEC):** Karnataka State Higher Education Council was established in 2010 with the objective of framing policies for higher education and to give suggestions to State Government, Universities and other higher educational institutions regarding issues related to higher education.

### 1.12.2 Health and Family Welfare

Health is an important human development indicator and has a great significance for the overall development of the State. Achieving and maintaining health is an important and on-going process. Health is a basic human

right. It is a priority item on the national and international development agenda. The Millennium Development Goals (MDG), which encompasses child and maternal health, form a blueprint agreed to by all the countries in the world. MDGs have inculcated a sense of urgency and galvanised efforts among nations to achieve minimum standards of health and development of their people. The State has a wide institutional network providing health services both in urban and rural areas. There are 20 district Hospitals, 11 other Hospitals and 32 Autonomous and Teaching Hospitals in the state. The primary health infrastructure in rural areas has fulfilled the norms required under the minimum needs programme at the aggregate level. There are 8871 sub centers, 2353 primary health centers, 206 community health centers and 146 taluk hospitals catering to the health needs of the rural population.

Karnataka has witnessed considerable improvement in health status in last few decades and its overall health indicators are better than all India average. However, they are still not as good as other South India states, such as Kerala and Tamil Nadu. Karnataka, India's eighth largest State in terms of geographical size (191,791 sq.km), is home to 6.11 crore people (2011 census) residing in 30 revenue districts, and accounting for 5% of India's population. The changing demographic profile of the State is expected to result in an increased population in the 15-59 age groups. A pre-requisite to reap this 'population dividend' is to ensure a healthy and empowered population.

The progress of the health indicators has been encouraging in the state during the last few years. The death rate is already at a lower level and the birth rate is declining faster. However, there are wide inequities in the health status within the state. These range from geographic inequity (such as urban/rural, north/south), gender based disparities that good health is enjoyed by select sections of society only. Karnataka has performed relatively better in population control with total fertility rate reaching the twelfth five year plan target of 1.9 children per

woman in the year 2013 itself. The infant mortality has declined faster during the last few years to the tune of around 10 per 1000 live births from about 41 in 2009 to 31 in 2013 and has further reduced to 28 per 1000 live births as per NFHS-4. The maternal mortality rate (MMR) has been reduced from 178 to 133 for 100000 live births between 2007-09 and 2010-15. Institutional delivery increased from 65% to 99.08%, fully immunized children from 80% to 100% from 2009-10 to 2014-15 and no Malaria deaths have been reported since 2012.

With policies and reforms within the health sector, the State continues to grapple with preventable diseases, like diarrhoea and tuberculosis, and faces issues such as malnutrition and low vaccination rates. Data indicate that wide variations exist across regions in the State with respect to demographic and health indicators. Perhaps one of the important reasons for Karnataka lagging behind in respect of some of the health indicators is the prevalence of wide disparities across regions within the State. While the southern districts have moved far ahead of other districts with respect to most health indicators, the northern districts often depict a scenario worse than the all India average.

National Rural Health Mission (NRHM) was launched on 12<sup>th</sup> April, 2005 by the Government of India to improve medical facilities in the rural areas of the country. The NRHM seeks to provide accessible, affordable and quality health care to the rural population, especially the vulnerable sections. At present, schemes such as the National Vector Borne Disease Control Programme and Revised National Tuberculosis Control Programme come under the NRHM. The NRHM is renamed as National Health Mission (NHM) which covers the urban pockets also along with rural areas. Health department, under the banner NRHM has implemented various programmes to cater to the needs of all section of people, focus being for the reproductive and child health activities.

Geriatric and Palliative care is given importance in all district hospitals. HIV, Pulse Polio and other national programmes were implemented in the department on priority. Arrangements are made to fill up the shortage of health personnel to implement the health programmes. The ASHAs (Accredited Social Health Activist) are playing a significant role in RCH activities. Individual pregnant women and child were given individual care at their doorsteps through ASHAs. Online application for monitoring of pregnant women for complete ANC care and child for complete immunization is developed in the department. Community participation is ensured at all levels for improving the health of communities and to orient them towards the better health conditions. Real time data for better monitoring and supervision is available online for the programme implementing officers.

Apart from the centers of excellence in Ayush, there are 112 Ayurvedic Medical Institutions and 563 dispensaries, 18 Unani hospitals, 49 Unani dispensaries, 16 Homoeopathy hospitals and 43 dispensaries, 6 Nature cure and Yoga hospitals and 5 dispensaries in the state. 12 Yoga & Nature cure units are functioning on Public Private Partnership mode across the State.

### **1.12.3 Human and Gender Development**

The comparison of Human Development Index (HDI) in Karnataka with that of the other major States in India over the period of three decades, shows that performance of Karnataka in human development has been improving over the years, with HDI value of 0.346 in 1981 having improved to 0.508 in 2011. In comparison the HDI of India in 2011 is 0.504 and the HDI of the best fared State Kerala is 0.625.

Karnataka has been in the forefront to have been publishing regularly the Human Development Reports (HDRs) at different levels. The first and the second State HDRs were brought out in 1999 and 2005 respectively and the third State HDR is under preparation and is expected to be brought out in 2016. On pilot basis, four District Human Development Reports (DHDRs) for the districts of Kalaburagi, Mysuru, Udupi and

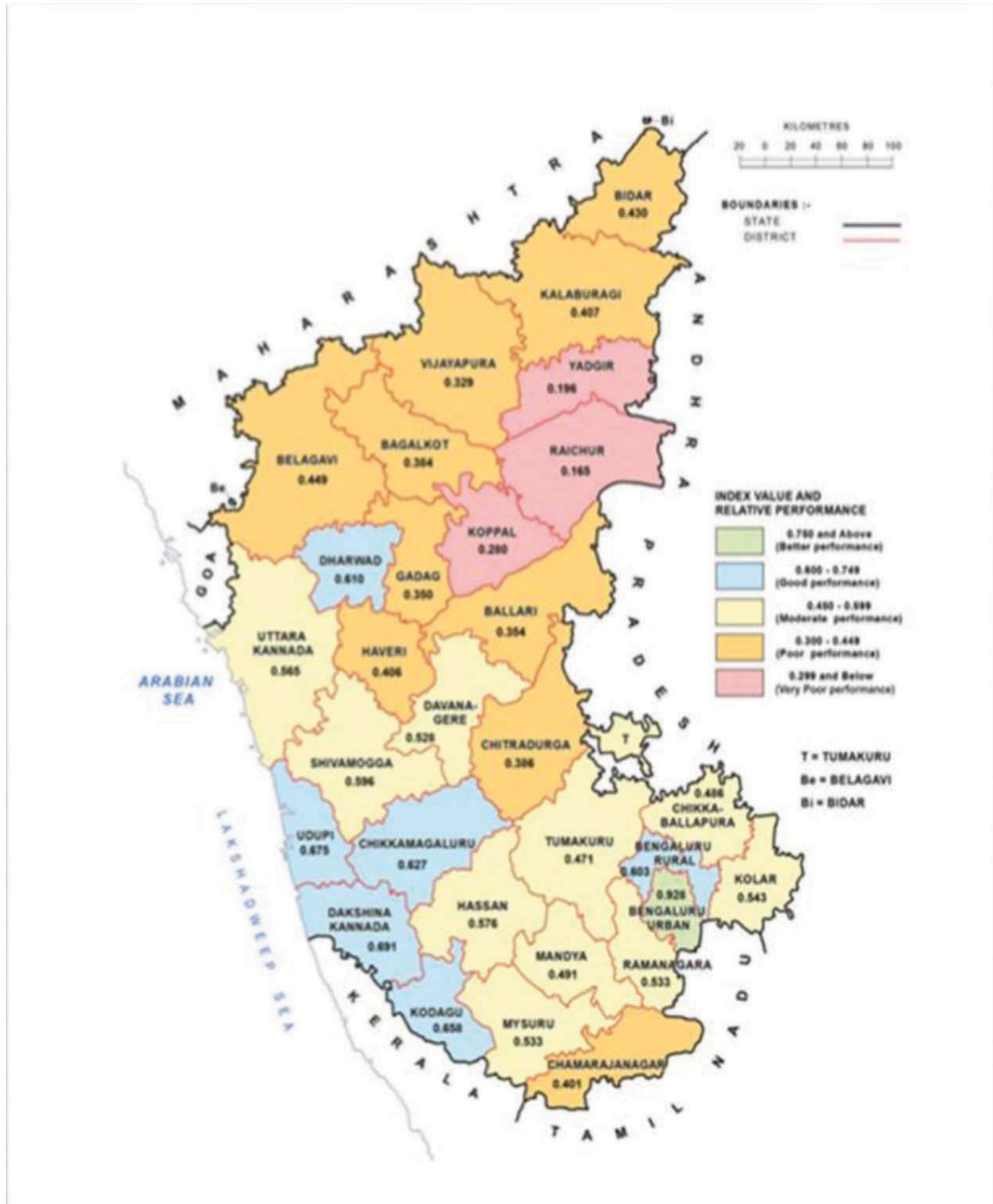
Vijayapura were brought out in 2008. For the first time in the country, the DHDRs for all the 30 districts of the State have been simultaneously brought out in 2014. Also, for the first time in the Country, Grama Panchayat Human Development Index (GPHDI) has also been computed for all the 5898 Grama Panchayats in the State and presented through a recently released report titled, 'Human Development: Performance of Grama Panchayats in Karnataka – 2015'.

The DHDRs, 2014 discuss at length the various issues of human development in the taluks and Urban Local Bodies (ULBs) of the concerned districts through seven unique human development indices. Based on all the 30 DHDRs-2014 values of various HD-Indices

for all the 30 districts, 176 taluks and 219 ULBs in the State, a document titled, "Human Development: Performance of Districts, Taluks and Urban Local Bodies in Karnataka, 2014 – A Snapshot" has also been prepared.

To understand the relative performance of districts in HDI, the HDI values are classified into five groups and the same has been depicted in Thematic Map. It is found that 13 districts have poor performance as far as HDI is concerned. Other 10 districts show moderate performance. Only 7 districts fall under good or better performing districts. It is important that more attention is paid among the very poor and poor performing districts for achieving better human development in the coming years.

**Thematic Map Showing HDI in Districts of Karnataka, 2011**



### 1.13 Gender and Social Equity

The main focus of Social Sector development is to improve the conditions of the weaker sections, the disadvantaged and the differently abled persons.

#### 1.13.1 Women and Child Development

According to 2011 Census, women comprise 49.31 % of the total state population. The pattern is more or less same in the southern States of India. However, the percentage of SC women to total population is more in Tamil nadir (10.03%) compared to Karnataka (8.53%) and All India (8.08%). But percentage of ST women to total population is more in Andhra Pradesh (3.49%) compared to Karnataka (3.46%) and other Southern States.

The Development of Women and Children is at the core of the state's human resource development efforts. The Department formulates policies and programmes and coordinates the efforts of both governmental and nongovernmental organizations to improve women and children. The department implements programmes in the areas of employment, training for women, awareness generation and gender sensitization. The emphasis is on helping women to become self sufficient and economically independent with the help of training and income generating activities so as to enhance their earning capacity and to bring up their status in life.

The Women and Child Development Department has taken up various programmes with a view to ensure protection of Women and Children against negligence, abuse and exploitation and to guarantee their basic human rights, including survival, development and full participation in social, cultural, educational and other endeavors necessary for their individual advancement and well being.

With growing recognition of women's empowerment as a development objective, Government of Karnataka has designed many

schemes that aim, not only on empowering women, but also for their well-being in various spheres. The details of the important schemes are presented below.

For economic empowerment, it is necessary for a woman to have access to and control over productive resources to ensure some degree of financial autonomy. The Stree Shakthi programme launched in 2000-01, aims at empowering rural women through the formation of self help groups (SHGs). Up to December 2015 an amount of Rs. 4663.50 lakh revolving fund has been released by the Government to 93270 SHGs groups to take up income generating activities. So far 1.40 lakh groups have been formed with 20 lakh women members. Out of which, 4.07 lakh are SC members, 1.62 lakh are ST members and 1.51 lakh belongs to minority communities. These groups have so far mobilized savings of Rs. 1738.26 crore since inception.

Santhwana is a scheme aimed at rehabilitation of women who have been subjected to atrocities like rape, domestic violence, dowry, sexual harassment, etc. In addition to provision of legal assistance, support is also provided in the form of financial aid, temporary shelter and protection and training / education to equip them with skills needed to get back into the normal course of life through 187 Santhwana Centers, which are run with assistance from various NGOs.

Bhagyalakshmi a flagship programme implemented by Government of Karnataka aims at improving the sex ratio in the State by encouraging the birth of girl child in the BPL families. The programme also aims to eradicate social evils such as child labour, female foeticide, child marriage, and child trafficking. Two girl children born in a BPL family are eligible to be enrolled under the scheme. A fixed amount will be deposited with the selected financial partner institution. Maturity amount will be paid to the girl child after completing 18 years of age only after fulfilling Bhagyalakshmi scheme conditions. Under Bhagyalakshmi scheme during 2015-16 an amount of Rs. 473.35 crore has been

provided, out of which Rs. 350.01 crore has been spent and 183351 beneficiaries have been covered up to the end of December 2015. Child Tracking System under Bhagyalakshmi Scheme is being developed. Under this project, a software is being developed with the assistance from NIC to track Bhagyalakshmi beneficiaries till 18 years. All information such as health education and migration pertaining to the beneficiaries will be tracked in the software.

Karnataka State Women Development Corporation has been implementing various schemes such as Udyogini, Women Skill Training Programme, Devadasis Rehabilitation programme, Marketing Assistance Scheme for the upliftment of the women.

The ICDS scheme was started in Karnataka on 2<sup>nd</sup> October 1975. Since, then the programme has been expanded to all the taluks in the State. The welfare of pregnant women, nursing mother, adolescent girls and children below 6 years has acquired a prime place in the programme. Under this scheme, 61227 AWCs and 3331 mini AWCs were functioning. Under the Supplementary Nutrition Programme, in the year 2015-16 an amount of Rs. 68513.23 lakhs of expenditure has been incurred assisting 5483158 beneficiaries, up to December 2015.

Karnataka is the first state in the Country to introduce “Karnataka Mahila Abhivrudhi Yojane” scheme for the empowerment of women. The scheme is to earmark 1/3<sup>rd</sup> of resources for women in individual beneficiary oriented schemes and labour intensive schemes of the various departments of the Government. During 2015-16, 239 schemes are involved in the Yojane across Central, State and Districts Sectors. Allocation towards K MAY for the current financial year is Rs. 17554.35 crore, of which 1/3 allocation for women is Rs. 6089.95 crore. An amount of Rs. 2904.26 crore was spent up to December 2015.

Government of Karnataka has launched number of programmes and schemes for women’s welfare and development over the

period. Bhagyalakshmi, Kishori Shakthi Yojane, Stree Shakthi, Balasanjivini, Sabala are some of the popular women and child development programmes implemented by the state government. These schemes are very helpful and contributed for the socio-economic development of women and child. No doubt the Government programmes which meant for women and child development bring changes in their social and economic status. The Bhagyalakshmi programme helps every girl child to empower herself with deposited amount, parents also concentrate on girls education and it helps to restrain the child marriages, which is in practice in rural areas.

Through Kishori Shakti programme the pre-matured girls avail valuable and useful training and develop the good health with supplementary health practices. The implemented programmes increase the standard of living of selected beneficiaries. The training programme provides a platform for women who are interested in home and small scale industries and improve their participation in public functions, seminars and to exhibit their production without any hesitation. The programme like Stree Shakti increases the capabilities of women in various ways. The economic contribution of Government and beneficiaries are helpful to bring the stability in life. It is useful to improve economic and social status in changing society.

### **1.13.2 Welfare Programmes for SC’s, ST’s, BC’s, Minorities, Disabled and Senior Citizens**

In its endeavor towards ensuring “faster, sustainable and more inclusive growth”, the Government of Karnataka has committed itself to improving capabilities and productive endowments among the economically disadvantaged and socially marginalized sections of the State. In this direction, the welfare departments and development corporations of the State are implementing several multi-faceted and multi-pronged programmes for welfare of SCs, STs, BCs, minorities, the disabled and senior citizens

and thereby placing them on the path of mainstream development.

**(i) Welfare Programmes for Scheduled**

**Castes:** As SCs continue to be deprived of adequate access to education, health care facilities, housing, sanitation, productive assets like land, etc., the Department of Social Welfare and the Development Corporations are implementing various schemes for their socioeconomic uplift.

In order to encourage children belonging to SC households, whose annual income is less than Rs. 2.00 lakh, a Pre-Matric scholarship of Rs. 750 for boys and Rs.850 for girls studying from 1st to 5<sup>th</sup> standards, Rs. 900 for boys and Rs.1000 for girls studying from 6th to 7th standards and Rs. 1000 for boys and Rs. 1100 for girls studying 8<sup>th</sup> standard is being sanctioned annually. The scholarship for 9<sup>th</sup> to 10<sup>th</sup> standard students is sanctioned by Central Government. The State has provided pre-metric scholarships to 8.43 lakh students in 2014-15 as compared to 6.50 lakh students in 2013-14.

Post-matric scholarship is sanctioned for children whose parents' household annual income is less than Rs. 2.5lakh. Maintenance allowance of day scholars will be credited directly to the student's bank account. The State has provided post-matric scholarships to 3.13 lakh students in 2014-15 as compared to 2.58 lakh students in 2013-14.

The progress of the scheme for prize money to meritorious students has increased from year to year. 66571 students have benefited from the scheme in 2015-16 (up to Dec. 2015) compared to 41229 students in 2014-15. Pre-matric hostel facilities are being provided for students studying from 5<sup>th</sup> to 10<sup>th</sup> standards. 82676 students have benefited from the scheme in 2015-16 (up to Dec. 2015) compared to 79183 students in 2014-15. The Government is running 566 post-matric hostels by accommodating 55552 eligible students.

A specific budgetary provision under all sectors of the State Annual Plan is made by

the State Government for socio-economic development of SCs. The Karnataka Scheduled Castes Sub-Plan and Tribal Sub-Plan (Planning, Allocation and Utilisation of Financial Resources) ACT, 2013 came into effect from 20.03.2014. Accordingly, the funds are earmarked under SCSP as per SC population percentage (17.15%) of 2011 Census.

A new scheme is being implemented from 2015-16 for construction of one lakh houses in urban areas and 50,000 houses in rural areas at the cost of Rs.1.50 lakhs. The Dr. B.R. Ambedkar Development Corporation has launched various programmes focusing on economic welfare of the SC community in the State. The corporation has adopted RTGS payments system to the beneficiary account directly in all the schemes in order to avoid delay and misuse of schemes funds.

**(ii) Welfare Programmes for Scheduled**

**Tribes:** In order to improve productive endowments and exchange entitlements among the ST households, the State Government has been implementing various programmes in social and economic domains through Department of Scheduled Tribes Welfare and Karnataka Scheduled Tribes Development Corporation.

To provide quality education to the meritorious ST students studying at 5th standard and above are given admission in reputed residential or non-residential schools. All fees and maintenance charges are borne by the department.1422 students in the State were benefited during 2014-15 while it was 1200 during 2013-14. In the current year up to December 2015, 1614 students are already benefited.

An amount of Rs.750 for boy students studying from 1st to 7th standard and Rs.1000 for those studying 8th standard will be provided annually. Similarly Rs.850 for girl students studying from 1st to 5th standard, Rs. 1000 for those studying from 6th to 7th standard and Rs.1100 for those studying 8th standard is being sanctioned annually as pre-matric scholarship. During 2015-16 (up to



Dec. 2015), 47174 students are benefited under this scheme.

Financial assistance is being provided to ST students whose family income is less than Rs.2.50 lakh per annum and are pursuing post-matric education including professional courses,. This is a Central Sector Scheme (CSS) implemented to encourage the ST students to pursue college education in the State. 60 students are benefited by the scheme during 2015-16. For continuation of the college education, a cash incentives schemes to ST students is being implemented since 2009-10. The progress of the scheme has increased drastically from year to year. 20754 students have benefited from the scheme in 2015-16 (up to Dec 2015) compared to 14579 students in 2014-15.

The grant-in-aid under Article 275(1) is also being provided to take up special development programmes such as Self-Employment Scheme, Land Purchase Scheme, Ganga Kalyana Scheme & Micro Credit Scheme for the economic development of Scheduled Tribes households in the State. During 2015-16 (up to Dec 2015), 3011, 142, 3618 and 3474 persons, were benefitted under these schemes respectively.

**(iii) Welfare Programmes For Backward classes:** The Department of Backward Classes Welfare and the D. Devaraj Urs Backward Classes Development Corporation (DBCDC) have been implementing various development programmes for socio-economic welfare of the Backward Classes in the state.

Pre-matric and post-matric scholarships are being sanctioned to the pre-matric and post-matric backward class students whose annual family income is not more than Rs. 44,500. During 2014-15, 697070 students were benefited while the students benefited in 2013-14 were 570591.

In order to provide qualitative education to the poor and meritorious students of BC, whose annual family income is less than Rupees One lakh per annum, 133 Morarji desai residential schools have been established in the State. During 2014-15,

28000 students were benefited which has increased to 31650 during 2015-16 up to the end of December 2015.

Students of backward classes with annual family income for category-1 Rs.1.00 lakh and Category-2a, 2b, 3a and 3b is Rs.44,500 studying in pre matric and post matric courses are provided with free boarding, lodging and academic facilities in the hostels run by the Department of Backward Classes Welfare. 159735 students in the State were benefited during 2014-15 while it was 148522 during 2013-14.

In order to encourage the poor backward classes students to avail higher education fee, concession is sanctioned to the students whose annual family income under Category-1 is Rs.2.50 lakh and other Categories is Rs.1.00 lakh. 289564 students in the State were benefited during 2014-15 while 124860 students have benefited during the current year, up to December 2015. The college students of Categor-1, who are not getting hostel facilities, are given extra boarding and lodging charges. The nominal financial assistance of Rs. 1500 per month helps the students to make their own boarding and lodging facilities. 18726 students in the State were benefited during 2014-15 while it was 7617 during 2013-14.

Department has started a new scheme for the students with annual household income limit of Rs.1,44,000 to take up study in foreign universities. Financial assistance is being provided for the students with aid for higher studies like Post-doctoral, Ph.D. and Master degrees in Foreign universities with a maximum allowance of Rs.10.00 lakh per annum. During 2015-16, 80 students have availed the benefits.

The Department has also taken up different skill training programmes for unemployed women under Koushalya Training scheme Tailoring Training & Nursing Training Programmes. With a view to improve the socio-economic status of Nomadic Tribe / Semi Nomadic Tribe, a scheme has been under implementation in the State. 11,921 persons in the group were benefited

during 2014-15 while it was 11,719 during 2013-14.

For the economic upliftment of the backward classes, the Government of India through NBCFDC is providing funds to the State Corporation as loan with 4 to 6% rate of interest. During 2014-15, 10528 beneficiaries were benefited while it was 11923 during 2013-14. The Corporation is implementing several other schemes such as Term loan scheme, Mahila Samrudhi, Education loan, Micro Finance scheme, Krushi Sampada, Shilpa Sampada, New Swarnima for women.

**(iv) Welfare Programmes for Minorities:** In order to promote the welfare of Minority Communities of Muslims, Christians, Jains, Sikhs, Buddhist and Parses on par with other Communities Government of Karnataka has introduced various developmental Schemes.

A cash incentive of Rs. 3000, Rs. 4000 and Rs.5000 is being provided per annum to the meritorious minority students (whose annual household income is not more than Rs. 2.00 lakh) studying in SSLC, PUC and Degree courses respectively. 12645 students were benefited in the State during 2014-15.

To enable unemployed boys/girls of minorities to take up self-employment activities, skill development programmes in nursing and Training in Call Centre, Animation, BPO and Tally is being implemented. 1585 beneficiaries were covered during 2014-15. During 2015-16 up to December 2015 it has increased to 1655.

For the upliftment of the religious minorities, specially for economic upliftment, Minorities Development Corporation Limited is implementing various development programmes like Shramashakti Scheme, Micro Loan Scheme, Ganga Kalyan Scheme and Arivu Loan Scheme. In 2014-15 a large number of minorities were benefited under these schemes.

Similarly, for the development of Christian Community, Directorate of Minorities is implementing various schemes through

KMDC such as Arivu (Educational) Loan Scheme, Shrama Shakthi Scheme, Micro Loan with subsidy Scheme and Interest subsidy Scheme for housing loans. During 2014-15 thousands of persons were benefited under these schemes.

**(v) Welfare Programmes for Differently Abled & Senior Citizens:** The Government is providing assistance to Persons with Disabilities in order to bring them to the mainstream of the society.

Disabled persons whose family income is less than Rs.17000 in urban and Rs.12000 in rural areas per annum with disability percentage 40 and above are entitled for maintenance allowance of Rs.500 per month. During 2014-15, 718466 persons were benefited by the scheme while it was 672934 during 2013-14. Similarly, during 2014-15, 3500 persons were benefitted under Aids & Appliances & 13 persons were benefitted under Medical Relief Fund. Under District Sector Scheme NGO's are given grants to run Special Schools and vocational training centres. 10000 persons were benefited during 2014-15, when compared to 8680 in 2013-14.

In order to encourage disabled students for continuation of their Education, a Scholarship scheme is implemented for disabled students studying from 1<sup>st</sup> Std. to Post Graduate Courses. During 2014-15, 26002 persons were benefitted while it was 25757 in 2013-14. Similarly Sadhane and Prathibhe, Grameena Punarvasthi Yojane, Aadhara, etc., have also been implemented for their safeguard.

During 2015-16, two new schemes are implementing by the Department for the welfare of Persons with Disabilities. Laptops were provided to 811 Visually Impaired Students. Motorized two wheelers were given to the 850 persons in the age group of 20-60 years with severe physical disabilities and hailing from families with income less than Rs. 2 lakhs per annum.

## 1.14 Balanced Regional Development

### 1.14.1 Area Development Programmes

Two autonomous boards have been taking-up works for the development of certain areas of the state viz., Malnad area and Maidan area. The thrust is on development of infrastructure viz., roads and bridges, schools, colleges, hospitals and hostel buildings, rural and urban water supply schemes, soil and water conservation, minor irrigation works and rural electrification programs etc. In addition to these Area Development Boards, the State has constituted the Karavali Development Authority for development of coastal region.

The Malnad Area Development Board since its inception in May 1993, up to December 2015, has incurred an expenditure of Rs. 516.48 crore completing 18698 works. The Bayaluseeme Area Development Board since its inception in 1995, up to December 2015, has incurred an expenditure of Rs. 162.85 crore completing 4896 works. Karavali Development authority was formed in the year 2008. Since its inception an amount of Rs. 956.20 lakhs have been spent up to December 2015.

The Karnataka Legislator's Local Area Development Scheme (KLLADS) has been working since 2001-02. In order to accommodate local aspirations and needs and to ensure responsive planning and delivery of services, the Government has taken up schemes for asset creation, infrastructure development and employment generation for the benefit of the poor and weaker sections, whose planning and execution can be done at the Legislator's Constituency Level. During the 14<sup>th</sup> Assembly period (2013-14 to 2015-16) Rs 1800.01 crore were allocated up to December 2015, Rs 1481.53 crore were released.

A special grant of Rs.50 crore each has been provided for taking-up developmental works in the recently formed Yadgir and Chikkaballapur districts. Of this amount, Rs 48.85 crore has been released so far to Yadgir

district and Rs.24.25 crore to Chikkaballapur.

A grant of Rs.4 crore each was provided to 9 naxal-affected taluks for taking-up developmental works. Out of the allocated amount of Rs. 45 crore for the current year, Rs. 44.69 crore has been released so far.

The Member of Parliament Local Area Development Scheme (MPLADS) was started in 1993 by Central Government. Under this scheme, Central assistance is provided to States for expenditure to be incurred for the creation of community assets based on recommendations of the Hon'ble Members of Parliament. Under the scheme, a sum of Rs. 5 crore per annum per Member of Parliament is released by GOI directly to the Deputy Commissioners of the Nodal Districts for execution of the works of development nature based on the locally felt needs recommended by the Member of Parliament concerned.

### 1.14.2 Special Development Plan

The State has been conscious of the need to ensure balanced socio-economic development across all its taluks. A High Powered Committee for Redressal of Regional Imbalances (HPCRRI), also known as Dr. Nanjundappa Committee, submitted its report in June 2002. The Committee used 35 indicators to estimate a Comprehensive Composite Development Index (CCDI) with appropriate weightage and identified 114 taluks in the state as backward taluks. These taluks were further classified into most backward, more backward and backward based on the value of CCDI.

An eight-year Special Development Plan (SDP) has been recommended for implementation by investing Rs. 31000 crore which includes Rs. 15000 crore from regular budgetary allocations of the implementing departments and Rs. 16000 crore as additionality in the form of a Special Development Plan. The SDP also stated that the amount allocated every year should be escalated by a factor to include rise in prices. The Special Development Plan is being implemented from 2007-08. The amount provided for various programmes

under SDP has been increasing. To begin with, an amount of Rs. 1571.50 crore was provided in the financial year 2007-08 across various sectors of development. For the year 2015-16, an allocation of Rs.2300 crore has been made under SDP and an amount of Rs. 997.35 crore has been spent up to December 2015.

A Special Cell has been established in the Planning Department to coordinate and monitor the implementation process. A state level monitoring committee has been constituted, chaired by the Additional Chief Secretary and Development Commissioner in December 2014. In January 2015, the Government appointed Shri V.Y. Ghorpade to chair the High Power Committee on Redressal of Regional Imbalances.

### **1.14.3 Article 371J – Special Status for Hyderabad-Karnataka Region**

The Hyderabad-Karnataka region located in the north-eastern part of the State comprises of Bidar, Yadgir, Raichur, Koppala, Ballary and Kalaburagi districts. The Hyderabad-Karnataka region is the second largest arid region in India. The salient features of the socio-economic development of this region are:

- HK region account for 23% of state geographical area.
- Uncultivated area of the region is 23% of state uncultivated area.
- Decadal population growth of the region is 17.73% whereas state growth is 15.60%.
- HK region is having 18% of the State population.
- 24% of State SC population is residing in the region.
- 34% of State ST population is residing in the region.
- Literacy rate of the region is 64.45% whereas State literacy is 75.36%.
- Dropout rate in the region is 5.77 whereas the State Dropout rate is 2.96.
- Child Mortality Rate of the region is 59 whereas State Child Mortality rate is 41.
- Infant Mortality Rate of the region is 51 whereas State Infant Mortality Rate is 35.

- The per capita net District domestic product of the region is Rs. 72284 whereas the State average is Rs. 116238.

All the vital socio-economic indicators relating to human development of the region point to the gaps in the indices of the region vis-à-vis the State. Intensive efforts are required to bridge the development gap and focus on education, health, nutrition and skill development, along with development of farm and non-farm activities. Formulation and effective implementation of development programmes tailored to the needs of the region are required to meet the challenges of this region. Article 371J granted special status to six backward districts of Hyderabad-Karnataka region to:

1. Establish a separate Development Board
2. The Board ensures sufficient funds are allocated for Development of the region.
3. Local reservation in education and Government-jobs (Domicile requirement)

Some of the important orders issued by the State in pursuance to the implementation of Article 371J are as follows:

- a) The Hyderabad-Karnataka Region Development Board (HKRDB) Order, 2013.
- b) The Karnataka Public Employment (Reservation in Appointment for Hyderabad- Karnataka Region) Order, 2013.
- c) The Karnataka Private Un-aided Educational Institutions (Regulations of Admission in the Hyderabad-Karnataka Region) Order, 2013.
- d) The Karnataka Educational Institutions (Regulations of Admission in the Hyderabad – Karnataka Region) Order.

In order to speed up the development in the HK region, allocations have been provided to the HKRDB amounting to Rs.150 crore, Rs.600 crore and Rs.1000 crore respectively during 2013-14, 2014-15 and 2015-16. 70% of allocation is earmarked for bridging infrastructure gaps whereas 30% is for institutional gaps. 4% of institutional

allocation is reserved for administrative charges. Since inception, 6520 works are approved, of which 863 works are completed, 1907 works are under progress and 3750 works are at the different stages of implementation. Till January 2016 HKRDB has incurred an expenditure of Rs. 414.48 crore.

Action is being taken to fill in all the vacant posts in the Government offices located in the Hyderabad-Karnataka region consequent to the granting of special status to the Hyderabad-Karnataka region providing for reservation in Public Employment and admissions to various courses in the educational institutions, ample opportunities are made available to the local persons in the Public Employment and Educational sectors. In this direction recruitment has been made for about 9450 posts in different departments through direct recruitment and for about 12000 posts recruitment is under process. With regard to reservation in the educational institutions for professional courses, there has been a substantial improvement in the cut of ranking during admission in the academic year 2015-16 in respect of professional courses and many of the local persons have benefited.

### **1.15 Evaluation of Government Programmes/Schemes**

Evaluation of programmes and schemes is done by Karnataka Evaluation Authority in accordance with the State Evaluation Policy 2011. The main functions of Karnataka Evaluation Authority (KEA) are to supervise, facilitate, build capacity and handhold departments for effective Planning, Monitoring and fine tuning the policies, programmes and schemes and disseminate the findings of evaluation studies.

Five manuals related to the functioning of the Authority and conducting Evaluation studies have been published in 2015-16. KEA approved the Terms of Reference of 21 evaluation studies and completed 14 evaluations and empanelled 48 Consultant Evaluation Organizations.

To cross verify the assets created by the departments and delivery of service and utilization by the eligible beneficiaries **sample checks** on developmental programme are conducted by the Directorate of Economics Statistics (DES) for selected schemes. In 2015-16, DES took up 4 schemes for Sample check.

The Directorate of Economics & Statistics recently conducted **Rapid Assessment Surveys** of four major schemes of the Government: Anna Bhagya, Ksheera Bhagya, Krishi Bhagya, and Interest Subvention Scheme.

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# STATE INCOME AND PRICES

## 2

### Introduction

This chapter analyses Karnataka's economic growth in terms of changes in Aggregate and Per Capita State Income including stability of prices in the indices of wholesale as well as retail prices in the entire State. In addition, this chapter also provides an analysis of District Income Estimates along with related Inter-District Variations.

### 2.1 State Income

The Gross State Domestic Product (State Income) Estimates have undergone a facelift with regard to the shift in their base year from 2004-05 to 2011-12 following the method adopted by the Central Statistics Office which too has released the new series at Market Prices. GSDP, with 2004-05 as base was being compiled at "factor-cost". However, in the new series i.e. 2011-12 as base year, the GSDP estimates are being prepared at Market Prices. As such, statistical comparisons between the old and new base year cannot be drawn for GSDP from 2011-12 onwards. A brief introduction about the changes in sources and methodology to compute the GSDP in the revised new base year is presented in this chapter.

The growth of GSDP at constant (2011-12) prices (year-on-year) decreased from 7.8% in 2014-15 to 6.2% in 2015-16, chiefly attributed to the decline in the growth rate of Agriculture from 1.6% in 2014-15 to -4.7% in 2015-16. The growth rate of Industry and Services also decreased slightly from 4.7% and 10.3% in 2014-15 to 4.5% and 9.1% during 2015-16, respectively.

#### 2.1.1. Changes in the sources and methodology to compute the GSDP with 2011-12 as base year.

1. The estimates of GVA, prepared at factor cost in the earlier series, are presently being prepared at Market Prices in the new series.

2. Enterprise approach has replaced Establishment approach in the Annual Survey of Industries (ASI) from 2012-13 and post manufacturing activity has also been included in the estimation of GVA.

$$\text{GSDP (GSDP at Market Prices)} = \text{Gross State Value Added at Basic Prices} + \text{Product Taxes} - \text{Product Subsidies}$$

3. In the new series, MCA -21 (**Ministry of Corporate Affairs**) data has been evolved in the estimation of Private Corporate Sector GVA.

4. The estimates of Computer related services was based on the proportion of private corporate workforce as revealed from Employment and Unemployment Survey of NSSO in the 2004-05 series. However, in the 2011-12 series these allocations are based on the proportion of software exports made by the State.

5. Similarly, in manufacturing sector, All India Corporate estimates are allocated to the States based on State ASI ratios.

6. In the new series, the estimates of Agriculture and Livestock sector, Trade, Hotel and Restaurants sector are calculated separately. Transport sector estimates have been individualised as Road Transport, Water Transport, Air Transport and Services Incidental to Transport.

7. Further, the following results of latest surveys and census have also been incorporated

- Population Census, 2011;
- All India Livestock Census, 2012;
- NSS 68th round (2011-12) – Survey on Employment & Unemployment and Household Consumption Expenditure;

- NSS 67th round (2010-11) - Survey on Unincorporated Non-agricultural Enterprises;
- NSS 70th round (2013) - All India Debt and Investment Survey and Situation Assessment Survey.

### 2.1.2. Advance Estimates of Gross State Domestic Product (GSDP) for 2015-16

Karnataka's Gross State Domestic Product (GSDP) at Constant (2011-12) Market Prices is expected to grow at 6.2% and reach Rs.780805 crore in 2015-16. 'Railways', 'Storage', 'Trade & Repair' 'Hotel & Restaurants', 'Road transport', 'Water Transport', 'Air Transport', 'Services Incidental to Transport', 'Real Estate, Professional Services and Ownership of Dwellings', 'Communication', 'Financial Services', 'Public Administration' and 'Other Services' have contributed together, for the growth of Services sector (9.1%). The Gross State Value Added (GSVA<sup>1</sup>) of 'Manufacturing' sector is expected to grow at 5%. The expected GSVA growth rate of 'Electricity, Gas and Water Supply' is around 2.5%. The GSVA growth rate of 'Crops' is anticipated at -7.7%. This is due fall in food grain production from 122.60 lakh tonne during 2014-15 to 110 lakh metric tonne in 2015-16 primarily because of 137 taluks in the State have been declared as drought effected areas.

### 2.1.3. Comparison of GSDP and GDP

At constant (2011-12) prices, the anticipated GSDP at Market prices of Karnataka is expected to grow at 6.2% during 2015-16 as compared to 7.6% during 2014-15. At national level, the GDP estimates at constant (2011-12) prices is expected to grow at 7.6% in 2015-16 as compared to 7.2 % in 2014-15. The corresponding annual increase in All India GDP at actuals is Rs.11350962 crore. The growth rates of GSDP and GDP at constant (2011-12) prices from 2011-12 to 2015-16 are presented in **Table 2.1**.

**Table 2.1: Annual Growth Rate of GSDP and GDP at Constant (2011-12) Prices**

Year	GSDP (Rs. crore)	Growth Rate of GSDP (%)	GDP (Rs. crore)	Growth Rate of GDP (%)
2011-12	602655	-	8736039	-
2012-13	637893	5.8	9226879	5.6
2013-14	681889	6.9	9839434	6.6
2014-15	734988	7.8	10552151	7.2
2015-16	780805	6.2	11350962	7.6

Source: 1. Directorate of Economics and Statistics, Government of Karnataka.  
2. Central Statistical Office, Government of India.

The anticipated GSDP at current Market Prices in the State during 2015-16 is expected to reach Rs.1022729 crore or a growth of 12.7%. At current prices, the anticipated GDP is equal to Rs.13567192 crore in 2015-16 with a growth rate of 8.6%. The share of Karnataka's GSDP in All India GDP was around 5.5% in 2004-05 which increased in 2011-12 series to 7.0%. The growth rates of GSDP and GDP at current (2011-12) prices from 2011-12 to 2015-16 are presented in **Table 2.2**.

**Table 2.2: Annual Growth Rate of GSDP and GDP at Current Prices**

Year	GSDP (Rs. crore)	Growth Rate of GSDP (%)	GDP (Rs. crore)	Growth Rate of GDP (%)
2011-12	602655	-	8736039	-
2012-13	690015	14.5	9951344	13.9
2013-14	797750	15.6	11272764	13.3
2014-15	907839	13.8	12488205	10.8
2015-16	1022729	12.7	13567192	8.6

Source: 1. Directorate of Economics and Statistics, Government of Karnataka.  
2. Central Statistical Office, Government of India.

### 2.1.4. Comparison between Advance Estimates of 2015-16 and First Revised Estimates of 2014-15

A comparison of the estimates is presented by annual growth rates in **Table 2.3**. The GSVA growth under Agriculture and allied sector is expected to fall to -4.7% during 2015-16 as compared to the growth of 1.6% during 2014-15. This is due to the fall in production of food grains from 122.60 lakh tonne during 2014-15 to 110 lakh tonne during 2015-16 owing

<sup>1</sup> Gross State Value Added (GSVA) refers to a single sector whereas Gross State Domestic Product (GSDP) refers to the total of all sectors.

to the drought in as many as, 136 taluks in Kharif and 62 taluks in Rabi.

Industry sector (comprising Mining & Quarrying, Manufacturing, Construction and Electricity, Gas, Water Supply and Remediation Services) is estimated to decrease marginally to reach 4.5% during 2015-16, compared to a growth of 4.7% during 2014-15.

The GSVA growth rate in the Service sector too decreased from 10.3% in 2014-15 to 9.1% in 2015-16. However, Real Estate,

Professional Services & Ownership of Dwellings and Communication having grown beyond 12% each, are the key drivers of the 6.2% growth of GSDP in 2015-16 (i.e. from Rs.734988 crore in 2014-15 to Rs.780805 crore in 2015-16).

Whereas the Advance Estimates of All India Gross Domestic Product (GDP) at constant (2011-12) prices in the year 2015-16 is expected to grow at 7.6%. Nonetheless, the sectoral growth rate of Agriculture, Industry and Services are anticipated to grow at 1.1%, 7.3% and 9.2%, respectively.

**Table 2.3: Sectoral Growth Rates of GSDP at Basic Constant (2011-12) Prices (Percent)**

Sl. No	Sector	2014-15 F.R.E.	2015-16 A.E.
1	Crops	0.6	-7.7
2	Livestock	4.8	3.6
3	Forestry and Logging	-1.6	-1.4
4	Fishing	11.9	5.1
	Agriculture and Allied Sector	1.6	-4.7
5	Mining and Quarrying	3.7	2.1
6	Manufacturing	5.1	5.0
7	Electricity, Gas, Water supply and Remediation Services	6.5	2.5
8	Construction	3.2	4.0
	Industry Sector	4.7	4.5
9	Trade & Repair Services	7.6	4.8
10	Hotels and Restaurants	4.3	1.9
11	Railways	4.3	6.3
12	Road transport	8.6	7.1
13	Water transport	0.3	3.1
14	Air transport	24.7	-1.6
15	Services incidental to transport	10.2	0.6
16	Storage	7.2	4.8
17	Communication	17.6	14.0
18	Financial Services	8.8	8.8
19	Real Estate, Professional Services & Ownership of Dwellings	12.8	12.0
20	Public Administration	5.6	5.4
21	Other services	7.9	6.5
	Services Sector	10.3	9.1
	Total GSVA at Basic Prices	7.6	6.2
	Product Tax	10.8	7.9
	Product Subsidies	14.2	11.6
	Total GSDP at Market Prices	7.8	6.2

A.E.: Advance Estimates, F.R.E.: First Revised Estimates

Source: Directorate of Economics and Statistics, Government of Karnataka



### 2.1.5. Net State Domestic Product

The estimates of Net State Domestic Product (NSDP) are derived from the Gross State Domestic Product (GSDP) by deducting Consumption of Fixed Capital (CFC) or Depreciation. The estimated NSDP at constant (2011-12) prices is Rs.710215 crore in 2015-16 compared to Rs.669078 crore in 2014-15, showing a growth of 6.1% in 2015-16 against 7.8% during 2014-15. Agriculture & allied activities, industry and service sectors are expected to register a growth of -5.6%, 4.5% and 9.1% respectively

in 2015-16. The NSDP at current prices is estimated at Rs.936045 crore in 2015-16 showing a growth rate of 12.6% (**Table 2.4**). On NSDP basis too, the Agriculture & allied activities, Industry and Service sectors are expected to register a similar NSVA growth of 2.4%, 7.3% and 16.5 % respectively at current prices.

**Figure 2.1** shows the GSDP, NSDP and CFC at constant (2011-12) prices from 2011-12 to 2015-16. The difference in GSDP and NSDP indicates the extent of consumption of fixed capital or depreciation.

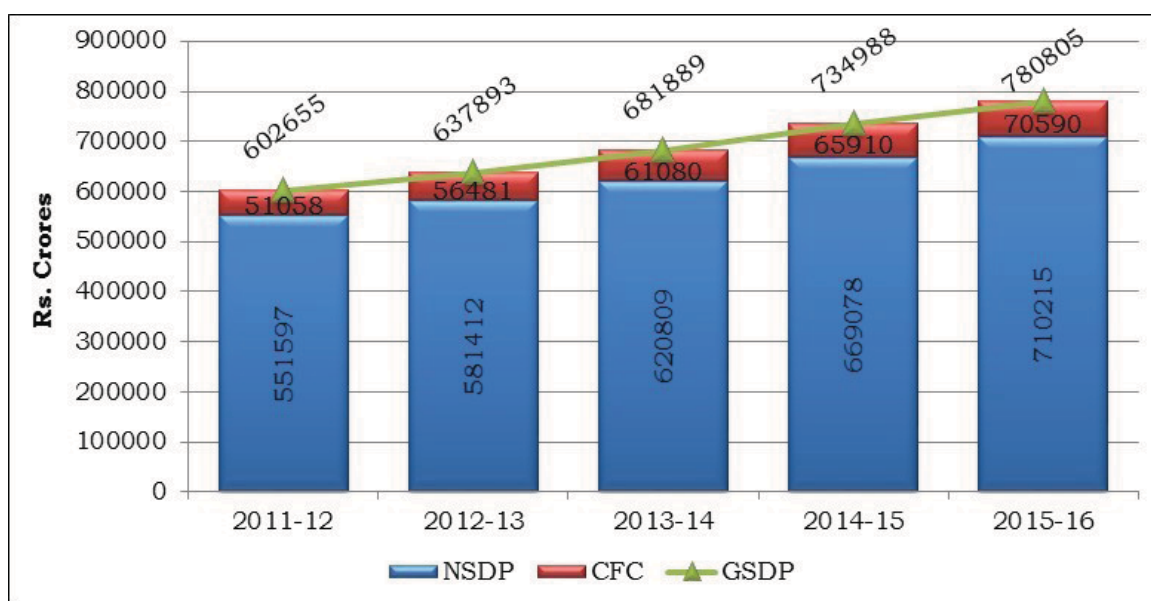
**Table 2.4: NSDP at Current and Constant (2011-12) Prices**

Sectors	NSDP at Current Prices		NSDP at Constant (2011-12) Prices	
	2014-15 F.R.E.	2015-16 A.E.	2014-15 F.R.E.	2015-16 A.E.
Agriculture	102434	104868	73525	69429
Industry	178947	192099	157441	164513
Services	473023	551219	375811	409985
NSVA at Basic Price	754404	848187	606777	643927
Product Tax	107761	124218	88447	95472
Product Subsidies	30837	36360	26147	29183
NSDP at Market Price	831328	936045	669078	710215

A.E.: Advance Estimates, F.R.E.: First Revised Estimates

Source: Directorate of Economics and Statistics, Government of Karnataka

**Figure 2.1: GSDP, NSDP and CFC at constant prices**



### 2.1.6. Sectoral Composition of Gross State Domestic Product

The composition of GSDP of Agriculture & allied activities and Industry sector (from 13.40% to 12.30% and 24.79% to 23.65%, respectively) saw a marginal decrease in 2015-16 as against 2014-15. During the last few years, Services sector has been contributing as the largest component to GSDP.

It is evident from the **Table 2.5** that Service sector saw a marginal increase from 61.82%

in 2014-15 to 64.05% in 2015-16. The composition of 'Real estate, Professional Services & Ownership of Dwellings' is highest with 32.82% in 2015-16 followed by 'Manufacturing (14.59%)', 'Trade and Repair Services (9.23%)' and 'Crops (8.66%)'.

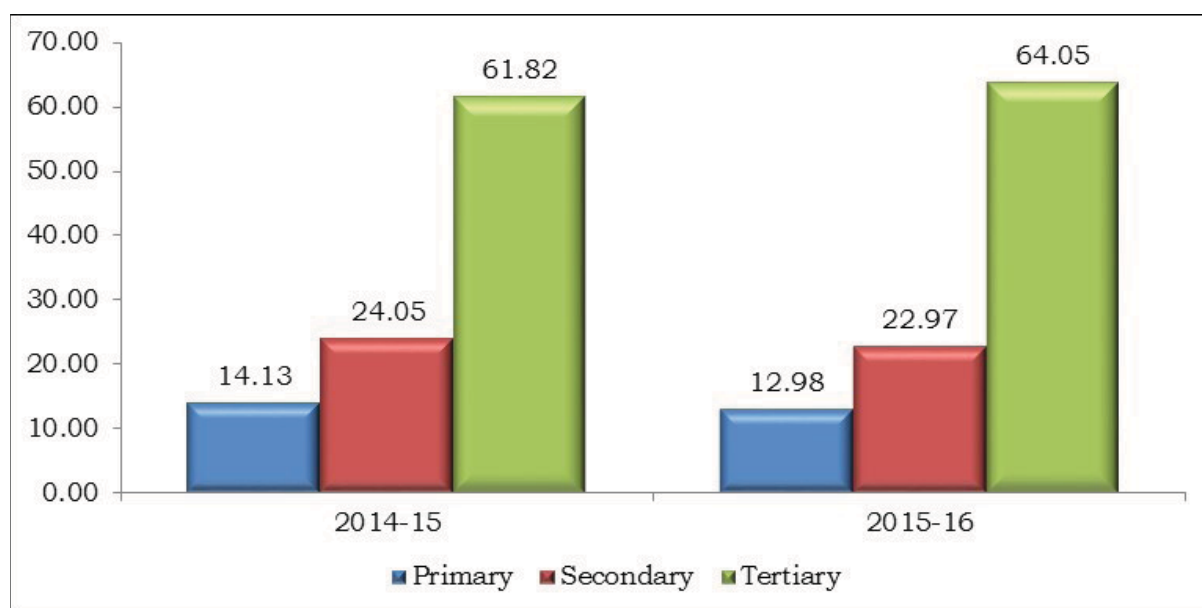
The sectoral composition of GSDP in 2014-15 and 2015-16 at current prices is given in **Table 2.5**. The sectoral composition of GSDP is shown in **Figure 2.2** by primary, secondary and tertiary sectors.

**Table 2.5: Sectoral shares of GSDP at Current Prices**

Sl. No	Sector	(Percent)	
		2014-15 F.R.E.	2015-16 A.E.
1	Crops	9.62	8.66
2	Livestock	2.35	2.31
3	Forestry and Logging	0.82	0.76
4	Fishing	0.60	0.57
	Agriculture and Allied Sector	13.40	12.30
5	Mining and Quarrying	0.73	0.68
6	Manufacturing	15.19	14.59
7	Electricity, Gas and Water supply	1.83	1.72
8	Construction	7.03	6.66
	Industry Sector	24.79	23.65
9	Trade & Repair Services	9.22	9.23
10	Hotels and Restaurants	1.70	1.66
11	Railways	0.31	0.32
12	Road Transport	4.10	4.19
13	Water Transport	0.03	0.03
14	Air Transport	0.09	0.08
15	Services Incidental to Transport	0.06	0.06
16	Storage	0.05	0.05
17	Communication	1.67	1.83
18	Financial Services	4.72	4.57
19	Real estate, Ownership of Dwellings and Professional Services	30.75	32.82
20	Public Administration	2.77	2.78
21	Other services	6.34	6.44
	Services Sector	61.82	64.05
	Total GSVa at Basic Prices	100.00	100.00

A.E.: Advance Estimates, F.R.E.: First Revised Estimates

Source: Directorate of Economics and Statistics, Government of Karnataka

**Figure 2.2: Sectoral composition of GSVA at Current Prices**

### 2.1.7. Per Capita Income

Per capita income is estimated by dividing NSDP at current prices with mid-financial year projected population (as on 1<sup>st</sup> October). Per Capita State Income (i.e. per capita NSDP) of Karnataka at current prices is estimated to increase by 11.4% to touch Rs.145799 during 2015-16, as against Rs.130897 in 2014-15.

On comparison, the level of per capita income at constant (2011-12) prices is also expected to grow from Rs.105350 during 2014-15 to Rs.110624 for the year 2015-16 to reach an increase of 5.0%.

Sector wise details of GSDP and NSDP for the years 2011-12 to 2015-16, both at current and constant (2011-12) prices are presented in **Appendices 2.1 to 2.4**.

### 2.1.8. Growth of NSDP and Per Capita Income

**Table 2.6** presents the growth of Net State Domestic Product and Per Capita Income of the state over the years are presented below. The time series data from 1960-61 to 2015-16 is presented in **Appendix 2.5**.

**Table 2.6: Growth of NSDP at Market Price and Per Capita Income**

Year	NSDP at Current Prices (Rs.Crore)	Per Capita Income (Rs.)
1960-61	692	296
1970-71	1858	641
1980-81	5587	1520
1990-91	20551	4598
2000-01	96348	18344
2010-11	368338	62251
2011-12	551597	89717
2012-13	630526	101451
2013-14 (S.R.E.)	730286	116238
2014-15 (F.R.E.)	831328	130897
2015-16 (A.E.)	936045	145799

A.E.: Advance Estimates, F.R.E.: First Revised Estimates, S.R.E.: Second Revised Estimates

Source: Directorate of Economics and Statistics, Government of Karnataka

### 2.1.9. Inter State Comparison

The comparison of GSDP or State Income and per capita income of Karnataka for 2014-15 with some important States alongside All India ranking is presented in **Table 2.7**. It can be observed that Karnataka is ranked 4<sup>th</sup> under State Income and 6<sup>th</sup> under Per Capita Income.

**Table 2.7: Comparison of State Income and Per Capita Income**

Sl. No.	State	State Income (Rs Crore)	Rank	Per capita Income (Rs)	Rank
1	Andhra Pradesh	532922	7	95689	10
2	Bihar	410862	13	34856	16
3	Gujarat	895202	5	124358	8
4	Haryana	441864	12	150260	2
5	Karnataka	907839	4	130897	6
6	Kerala	519896	9	138390	3
7	Madhya Pradesh	451348	11	51371	14
8	Maharashtra	1792122	1	134081	5
9	Odisha	309807	15	63108	13
10	Punjab	368011	14	114561	9
11	Rajasthan	612194	6	76881	12
12	Tamil Nadu	1120620	2	135806	4
13	Telangana	522001	8	129182	7
14	Uttar Pradesh	1041997	3	44197	15
15	Delhi	494460	10	252011	1
All India		12488205		86879	11

Source: 1. Karnataka: Directorate of Economics and Statistics, Government of Karnataka.

2. Rest of the States and all India: Central Statistical Office, Government of India.

### 2.1.10. District Income

The estimates of Gross and Net District Incomes at current and constant (2011-12) prices including Per Capita Net District Domestic Product at current prices for the year 2013-14 for all the 30 districts in the State are presented in **Appendices 2.6 and 2.7**.

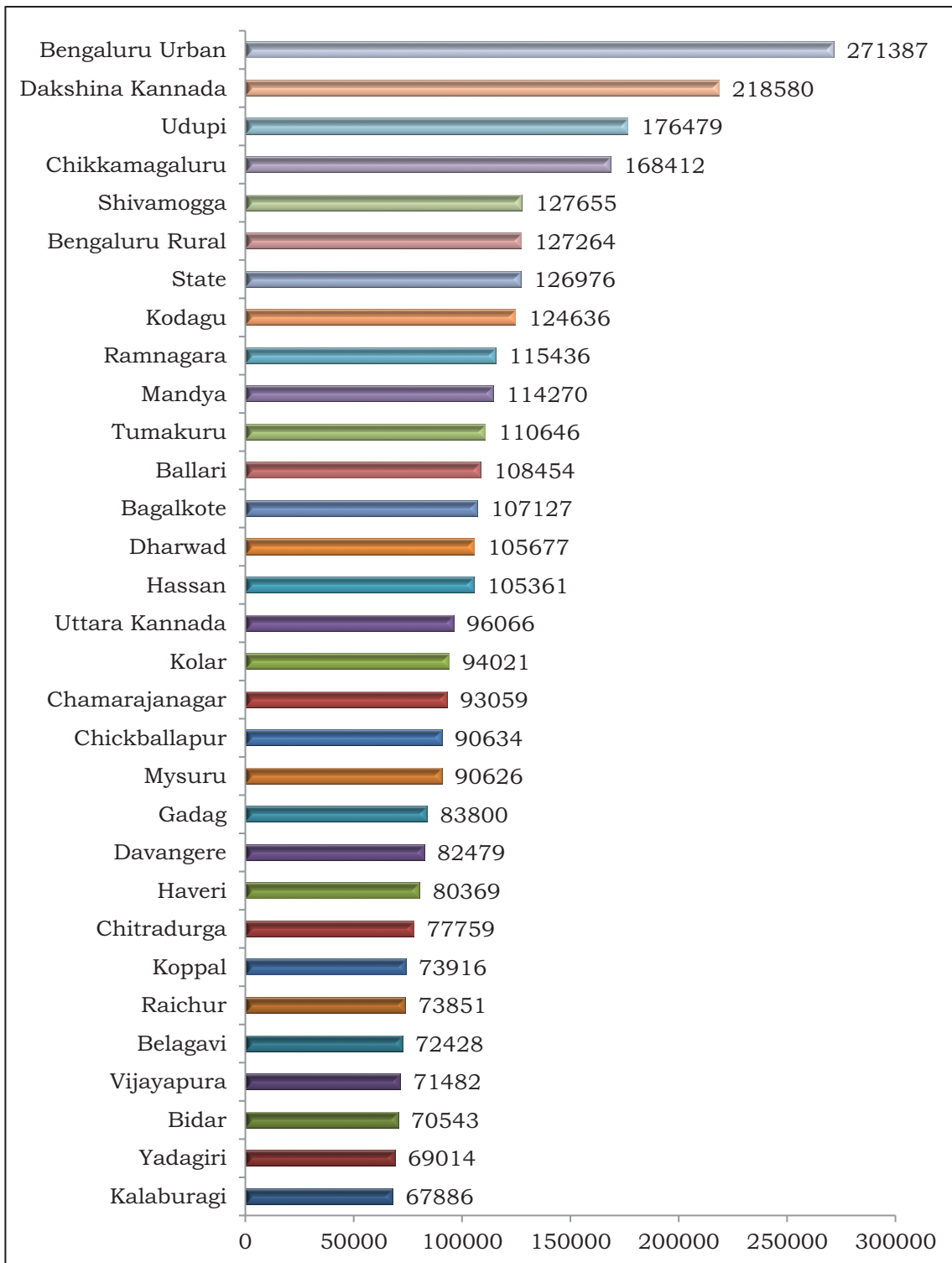
These District income estimates are prepared on a provisional basis. The database for the estimation is available for Primary sector only. In respect of Secondary and Tertiary sectors, the State level estimates are allocated to districts with appropriate available indicators and workforce under each sector as revealed during 6<sup>th</sup> Economic Census at the time of preparation of estimates. Due to addition of new data items and availability of new data sources in computation of GSDP of the State, identification of suitable physical indicators with respect to each sector to be allocated for the districts is in process. Because of data limitations, it may not be very useful to analyse sector-wise district estimates between any two given points of

time as these estimates have not yet firmed up. However, a brief description of the broader sector-wise district estimates is given in **Appendix 2.6**.

Bengaluru Urban District stood first in the total District Income as well as per capita district income for the year 2013-14. Bengaluru Urban District contributes 33.6% to GSDP at current prices followed by Dakshina Kannada (5.8%), Belagavi (4.4%). However, Yadagiri (1.04%) and Kodagu (0.89%) both standing last in the districts' contribution to the GSDP.

At constant (2011-12) prices, contribution of Belagavi district to the primary sector GSDP is highest in 2013-14, due to a higher contribution in agriculture. Bengaluru Urban District tops in secondary and tertiary sectors due to high concentration of major industries and infrastructure facilities.

The per capita income (in rupees) at current prices for all 30 districts for the year 2013-14 is presented in **Figure 2.3**.

**Figure 2.3: District wise Per Capita Income (in rupees) for the year 2013-14**

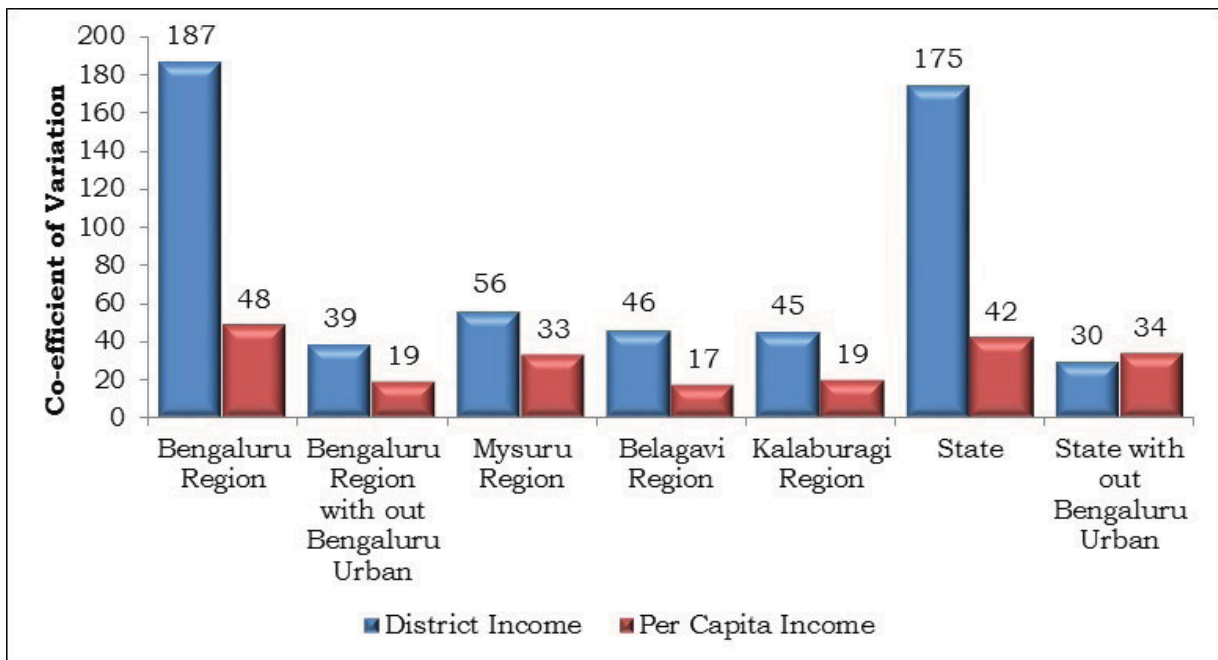
District income is also a measure of the level and growth of economic development prevailing in the district level. It is a useful policy indicator to monitor the nature and degree of inter-district variations as well as, disparities in the process of economic growth

at the State level. A simple statistical indicator of inter-district variations in the levels of district income is the coefficient of variation. **Figure 2.4** shows these computed values across the four divisions and at the State level.

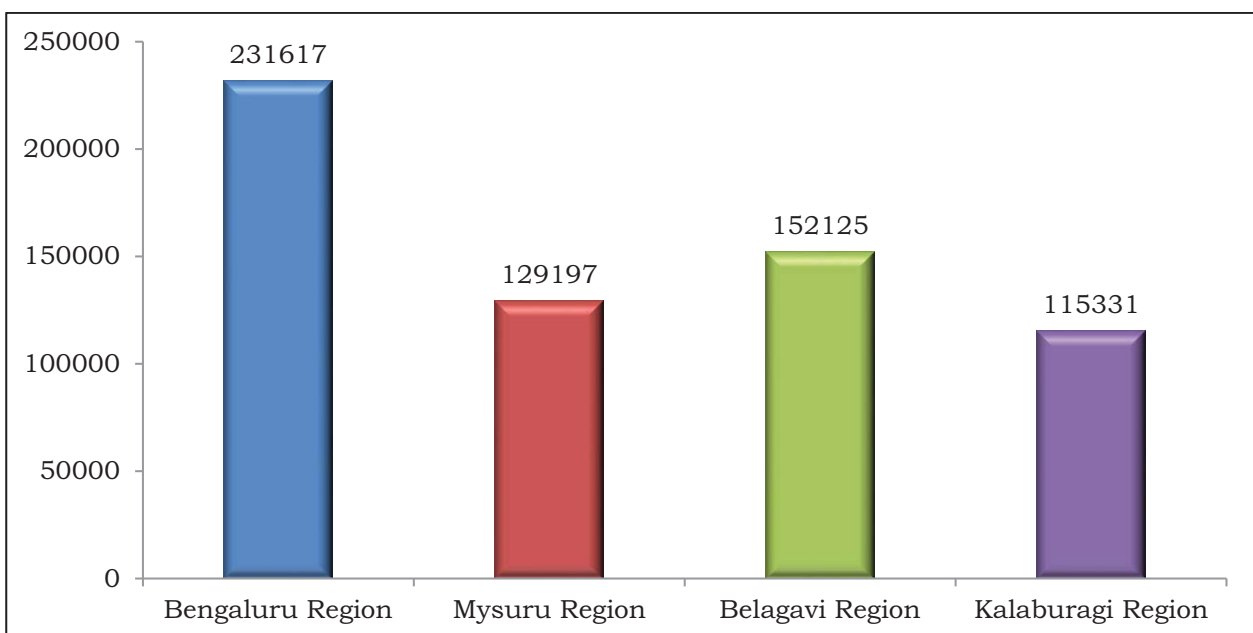
**Figure 2.4** indicates the variations in gross district and per capita district income among the revenue regions (divisions) of the State. The highest variation is evident with respect to Bengaluru division, if Bengaluru Urban District is also to be included. Excluding Bengaluru Urban, these inter-district variations in district income and per capita district income, get remarkably reduced at

the division and State levels. The growing inter-district variation is an important indicator and a source of broader inter-regional disparities in the process of State's economic development. However, a low coefficient of variation as such, does not necessarily imply either a higher or a lower district economic growth or regional disparity.

**Figure 2.4: Inter-district variations of Gross District Income and Per Capita Income by Divisions in Karnataka for 2013-14**



**Figure 2.5: Division wise Per Capita Income**



It can be observed from **Figure 2.5** that Kalaburagi the revenue region (comprising Ballari, Bidar, Kalaburagi, Koppal, Raichuru and Yadagiri districts), stood lowest in the per capita income. Kalaburagi region's per capita income is less than half of the per capita income of the Bengaluru region.

## 2.2 Prices

### 2.2.1 Introduction

Price is one of the key indicators in the economic planning process. Changes in prices have a direct bearing on all sections of the society irrespective of their level of living. Prices indicate the purchasing power of money and inflation rate at both wholesale & retail levels. To measure inflation at wholesale and retail levels, the commonly used indicators are Wholesale Price Index and Consumer Price Index.

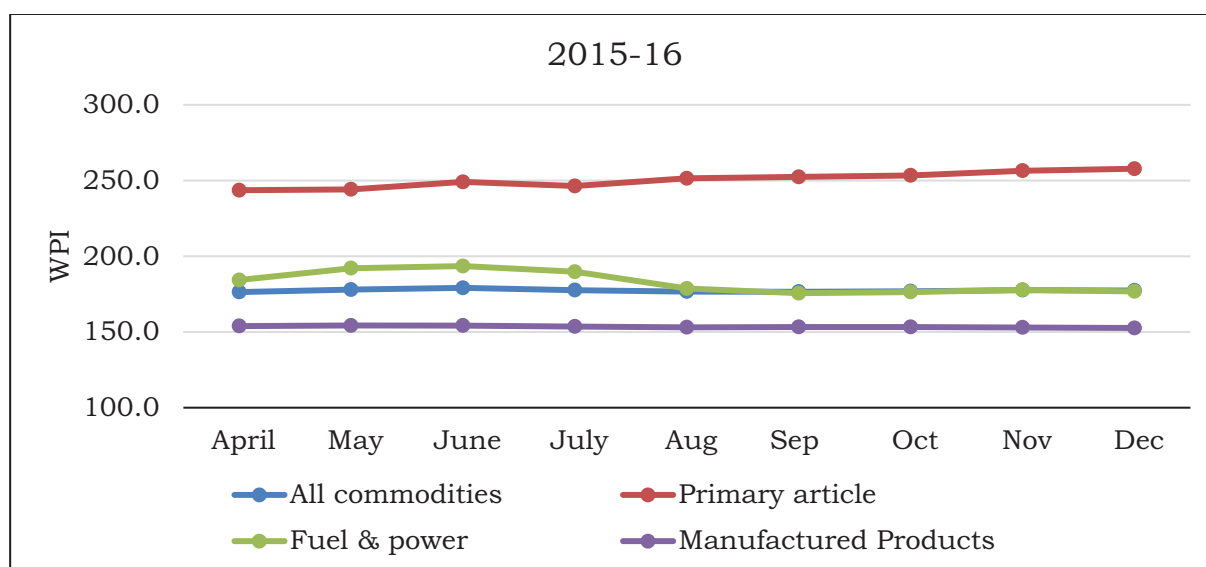
### 2.2.2 Wholesale Price Index

Wholesale Price Index (WPI) is used to measure the price situation in different sectors of the economy. This index is released every month at the National level by the Office of the Economic Adviser in the department of Industrial Policy and Promotion, Ministry of Commerce and Industry. For better representation and wider coverage, 676

commodities have been covered which includes 102 primary articles, 19 fuel & power items and 555 manufactured products.

At the all India level, the WPI, which was 178.7 in December 2014 declined to 177.4 in December 2015, showing an annual inflation rate of -0.73% and -0.50% during the corresponding month of pervious year i.e 2014-15. The WPI in December 2013 was 179.6 decreased to 178.7 in December 2014. During 2015-16, the index of all commodities increased from 176.4 in April 2015 to 177.4 in December 2015, showing a very nominal rise of 0.57% as against a decrease of 1.16% during the corresponding period in 2014-15, Where in the index of all commodities decreased from 180.8 in April 2014 to 178.7 in December 2014. Group-wise changes in WPI are shown in **Figure 2.6**. It can be seen that the 'Primary Articles' group index increased by 5.83% 'Fuel & Power' group decreased in index by 4.07%, 'Manufactured Products' group index decreased by 0.84% during April 2015 and December 2015. The details of all India wholesale price index in April and December of 2013-14, 2014-15 and 2015-16 are presented in **Appendix 2.8**. **Appendix 2.9** contains details of annual all India wholesale price index from 2000-01 to 2015-16 and monthly data for the current year (i.e, 2015-16).

**Figure 2.6: Group-wise all India WPI**



In Karnataka, the Directorate of Economics and Statistics constructs the WPI for 33 agricultural commodities with 1981-82 as the base year. In the State, WPI is useful to monitor the trends in prices at the first stage of commercial transactions of agricultural commodities. The main source of primary data for the construction of this index is 40 Agricultural Produce Marketing Committees (APMC's) of Agricultural Marketing Department situated across the State, who compile the prices of agricultural commodities and also the Sugar Directorate, Coffee Board, Tobacco Board and Spices Board.

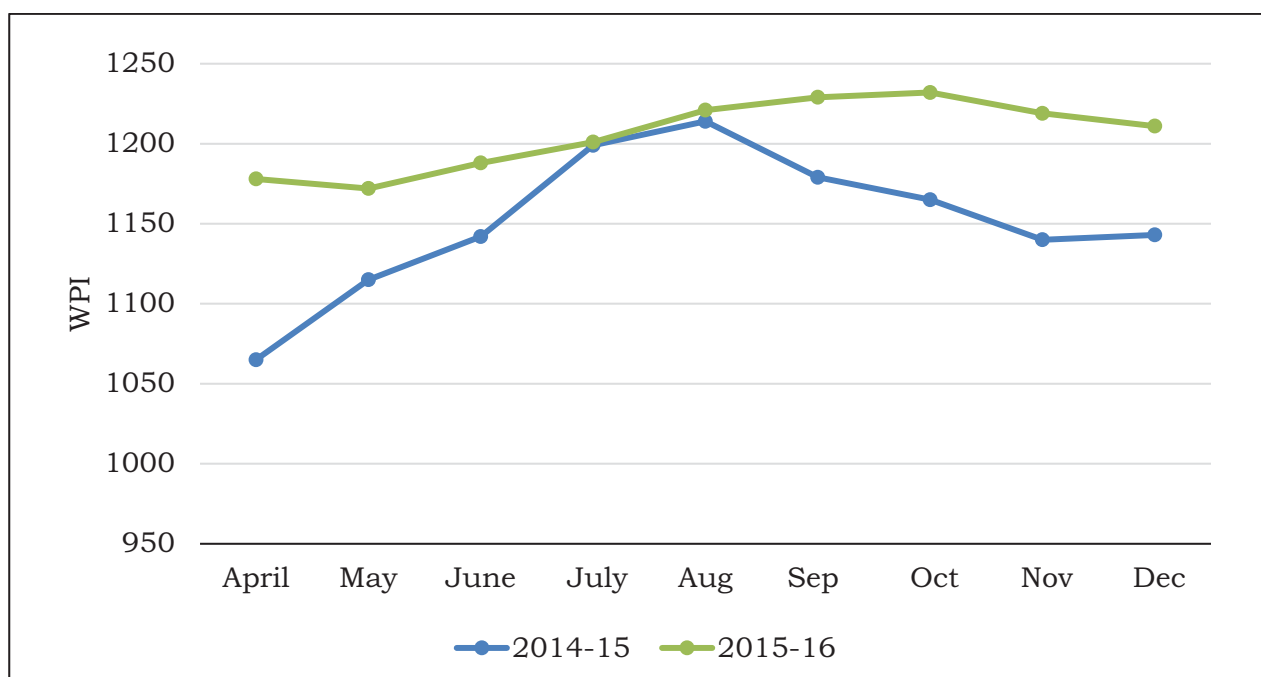
During 2015-16, the WPI of agricultural commodities constructed by the Directorate of Economics and Statistics has increased from 1178 in April 2015 to 1211 in December 2015, i.e., increase of 2.80% against an increase of 7.32% during the corresponding period in 2014-15. The 9-month average index in 2015-16 was 1206 as against the corresponding period average index of 1151 in 2014-15, showing an increase of 4.78%. The trend of WPI for 33 agricultural commodities in Karnataka for the year 2014-15 and 2015-16 are shown in **Figure. 2.7**.

During the reporting period of 2015-16, indices of pulses, condiments and spices, cereals, fiber, and oilseeds group have increased by 48.40%, 14.70%, 6.60%, 5.63%, and 4.06% respectively. Higher increase in index of pulses and condiments and spices, has resulted in the increase of the State index. On the other hand, the indices declined in respect of miscellaneous group by 9.79%, and gur & sugar group by 2.55%.

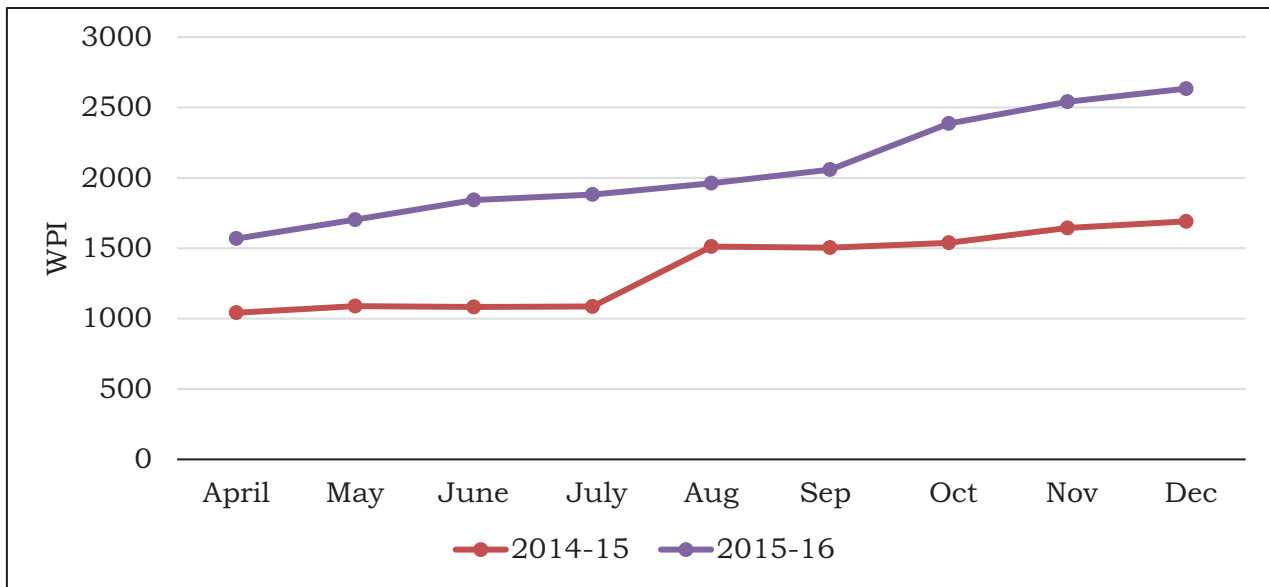
Among pulses group tur commodity shows an increase in index i.e an increase of 67.88% in December 2015 over April 2015. The average index value of tur between April to December of 2015-16 increased by 52.44% as compared to the corresponding period 2014-15. The average index of this commodity is 2064 in 2015-16, whereas it was 1354 during 2014-15. **Figure. 2.8** shows the trends of Tur in Karnataka.

WPI numbers of agricultural commodities in Karnataka since 2000-01 are given in **Appendix 2.10** and group-wise index numbers for 2013-14, 2014-15 and 2015-16 are given in **Appendix 2.11**.

**Figure 2.7: Average Trend of WPI in Karnataka**





**Figure 2.8: Trends of WPI of Tur**

### 2.2.3 Consumer Price Index

In order to study the changes in the retail prices of a basket of selected goods consumed and services utilized by a selected group of population, four different types of Consumer Price Indices are being constructed every month. They are Consumer Price Index for (a) Industrial Workers (CPI-IW) (b) Agricultural Labourers (CPI-AL) (c) Rural Labourers (CPI-RL) and (d) Rural and Urban (CPI-R& U). The first three indices are constructed and released by the Labour Bureau, Shimla and the fourth by the Central Statistical Office (CSO), New Delhi. In Karnataka, the Directorate of Economics & Statistics constructs and releases only CPI-IW for State series every month, whereas the remaining three indices are not being constructed by the State Directorate.

#### 2.2.3.1 Consumer Price Index for Industrial Workers

The target group of CPI-IW is workers of factories, mining, plantations, motor transport, docks, railways & electricity. This index is mainly used to determine the dearness allowance for the employees in both the public and private sectors. At the National level, CPI (IW) for Central series is constructed for 78 selected industrially developed centres across the country, with 5 of these centres based in Karnataka (Bengaluru, Belagavi,

Hubballi-Dharwad, Madikeri and Mysuru). The base year for CPI-IW is 2001=100.

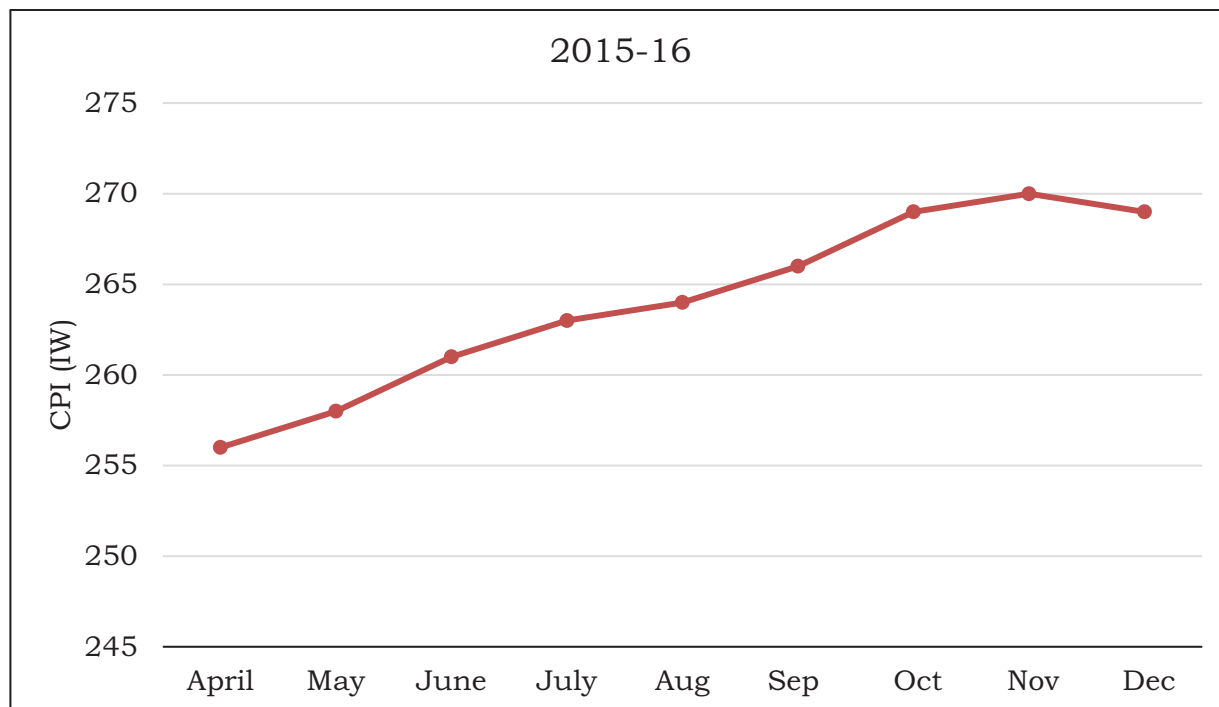
At the all India level, CPI (IW) moved to 269 points in December 2015 from 253 points in December 2014. The point-to-point rate of inflation for the month of December 2015 was 6.32%, whereas it was 5.86% in the corresponding month of the previous year. The average all India CPI-IW during 2015-16 upto December 2015 is 264 as against the corresponding period average was 250 during 2014-15, which shows an increase by about 5.60%. The trend of All India CPI-IW is shown in **Figure 2.9**.

During 2015-16, among 5 centres of central series, Belagavi and Hubballi-Dharwad centre has recorded the highest increase in index i.e. an increase of 6.59% in December over April. The general index of Belagavi centre for April 2015 and December 2015 was 258 and 275 respectively and for Hubballi-Dharwad centre, index of April 2015 was 273 and index of December 2015 was 291. The average general index of Belagavi and Hubballi-Dharwad centres was 275 and 291 respectively upto December 2015 during 2015-16 as against the corresponding period average of Belagavi (255) and Hubballi-Dharwad (269) during 2014-15, recording an increase of 5.63% for Belagavi centre and 5.63% for Hubballi-Dharwad center. For food index, the increase

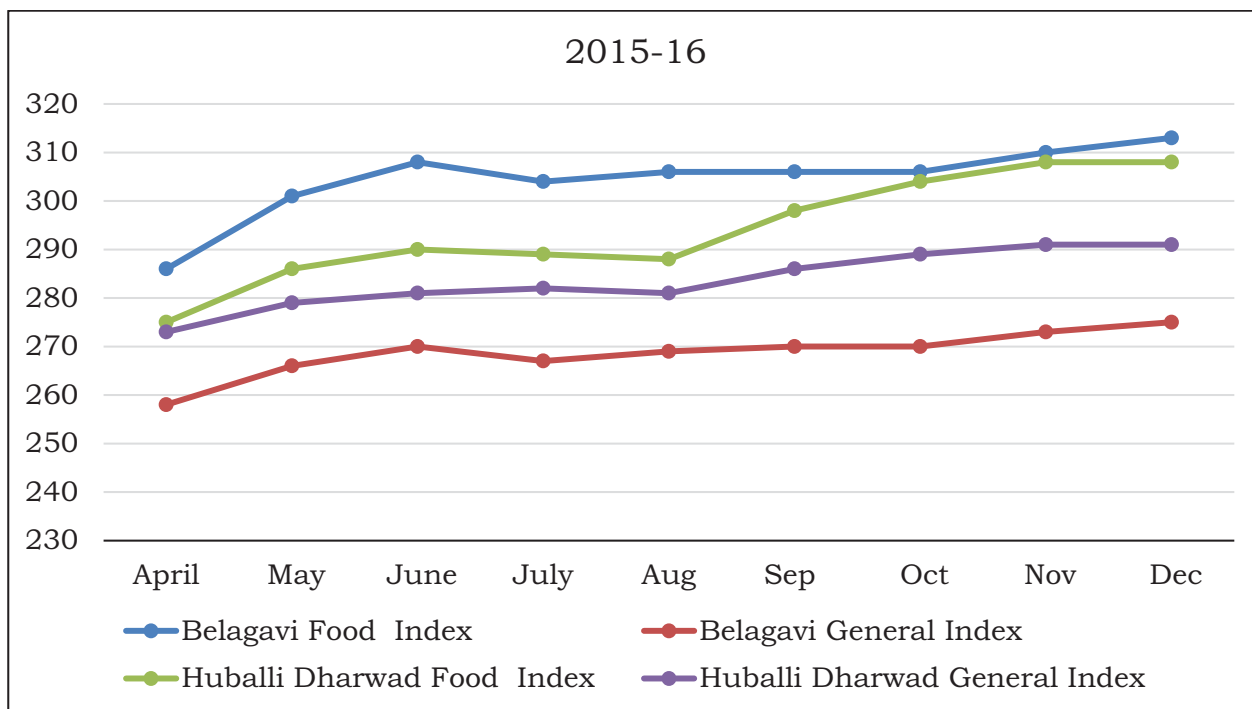
was 5.56% in Belagavi centre and 5.38% in Huballi-Dharwad centre. Food and General Index during 2015-16 till December 2015 is

illustrated in **Figure 2.10**. Details of the CPI-IW for all-India and Karnataka are presented in **Appendix 2.12**.

**Figure 2.9: Trend of All India CPI-IW**



**Figure 2.10: Food and General Index of Belagavi & Huballi Dharwad**



In Karnataka, the Directorate of Economics & Statistics constructs CPI-IW for 11 centres viz. Ballari, Bhadravathi, Davangere, Dandeli, Kalaburagi, Harihara, Hassan, Mandya, Mangalore, Raichuru and Tumkuru. The base year for these State series index is 1987-88=100.

During 2015-16, among the 11 State series centres, increase in index has ranged between 5.40% in Dandeli centre to 9.33% in Tumkuru centre. Tumkuru centre recorded the highest increase in index i.e. from 600 in April 2015 to 656 in December 2015 recording a rise of 9.33%. The average general index from April 2015 to December 2015 of

Consumer Price Index for Agricultural Labourers (CPI-AL) for 20 States, including Karnataka, is being constructed every month by the Labour Bureau, Shimla based on the information obtaining from the Field Operation Division of National Sample Survey Office. This index is used for fixation and revision of minimum wages in agriculture sector. The base year for this index is 1986-87=100.

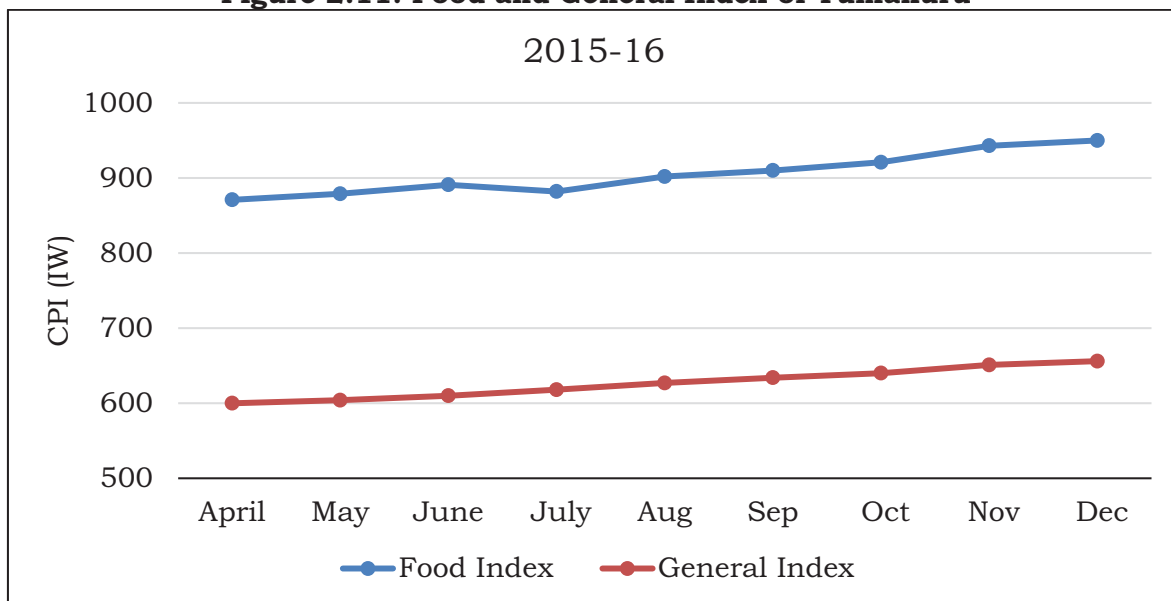
The general index in Karnataka recorded an increase of 8.26% in December 2015 over April 2015 as against 5.96% at all India level, whereas the food index in Karnataka showed an increase of 11.95% as against 7.38% at all India level.

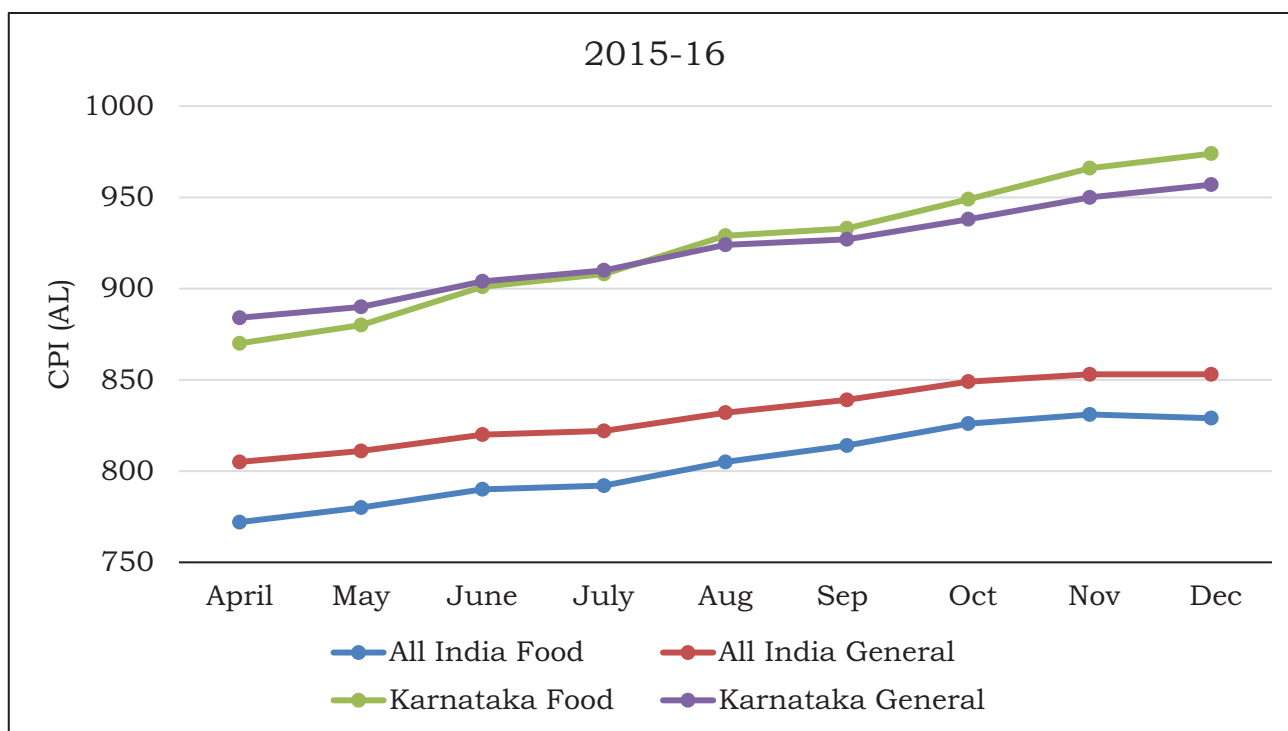
Tumkuru centre (627) has increased by 7.55%, while that of food group index increased by 6.35% as compared to the corresponding period of the previous year. The details of food and general index during 2015-16 till December 2015 is depicted in **Figure 2.11**. CPI-IW in April & December for the years 2013-14, 2014-15 and 2015-16 in Karnataka are presented in **Appendix 2.13**. Details of CPI-IW in Karnataka for the selected Central series centres are given in **Appendix 2.14** and for State series centres in **Appendix 2.15**.

### 2.2.3.2. Consumer Price Index for Agricultural Labourers

During 2015-16 (upto December 2015), in Karnataka, the average general index moved to 920 from 857 during same period of 2014-15, thus showing an increase of 7.35%. At the all India level, this increase was 4.26%. The average food index in the State stood at 923 and at all India level it was 804, indicating an increase of 7.95% and 3.21% respectively over the previous year. Food and General Index during 2015-16 is illustrated in **Figure 2.12**. CPI-AL in April & December for the years 2013-14, 2014-15 and 2015-16 are presented in Appendix -2.16 and CPI-AL at all India and Karnataka from 2000-01 are given in Appendix 2.17.

**Figure 2.11: Food and General Index of Tumakuru**



**Figure 2.12: Food and General Index of Agricultural Labourers**

#### 2.2.4 Price Situation in Rural and Urban Karnataka

Directorate of Economics & Statistics, Government of Karnataka, collects retail prices of a basket of essential commodities from selected centres in rural and urban areas in order to assess the price situation in the State. Rural retail prices are collected every month and urban retail prices are collected every week for the construction of monthly Rural Retail Price Index Numbers and Urban Retail Price Index Numbers. For both these index numbers, the base year is 1970=100. These index numbers are based on un-weighted diagram and focuses on broad price trends in rural and urban areas, to guide policy decisions.

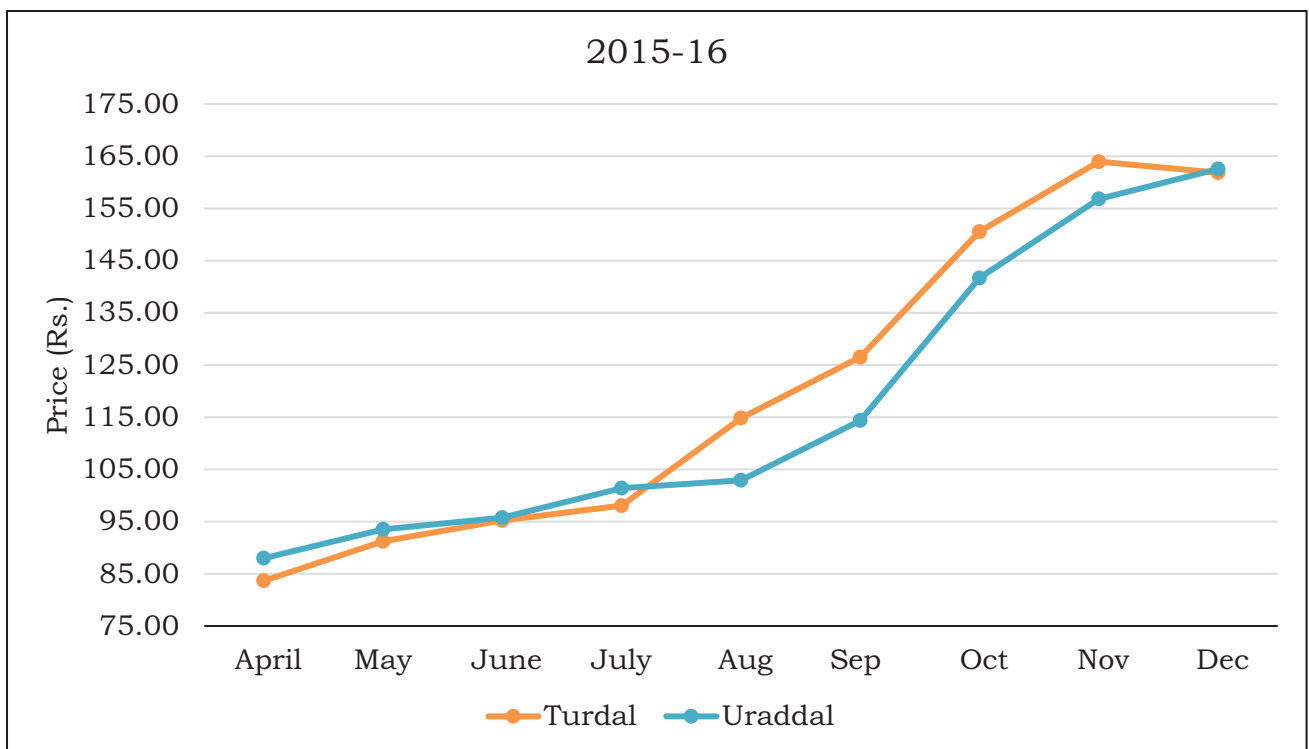
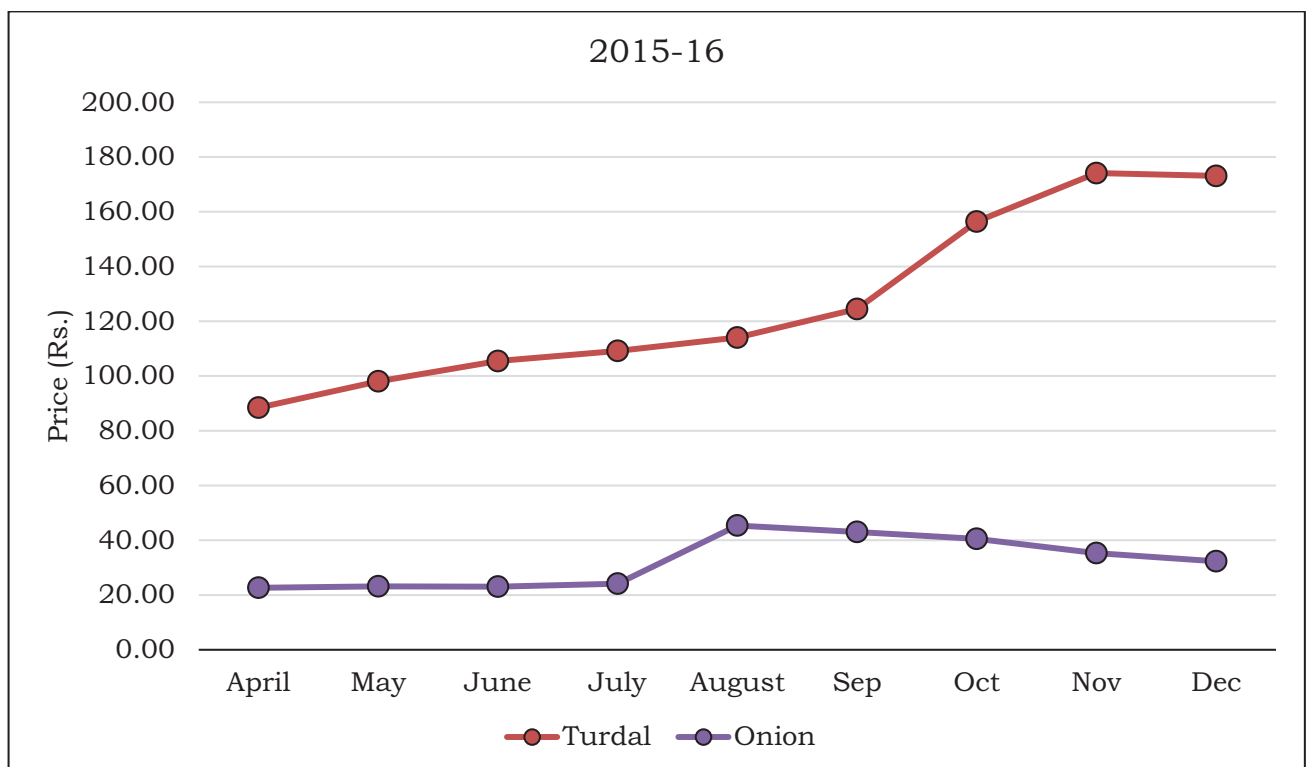
##### (a) Price Situation in Rural Areas

In the State, for construction of monthly Rural Retail Price Index (RRPI), retail prices of 29 essential commodities are collected from 352 villages every month. During 2015-16, the index shows a continuous increase from 4285 in April 2015 to 4938 in December 2015, thus showing an overall increase of 15.23%. This rise was mainly due

to increase in prices of Turdal and Uraddal. Price trends of these commodities are shown in **Figure 2.13**. Upto December 2015-16, the average RRPI was 4633, recording an increase of 11.02% over the RRPI level (4173) of the corresponding period of the previous year. Rural Retail Price Index Numbers in Karnataka are given in **Appendix 2.18**.

##### (b) Price Situation in Urban Areas

Every week, retail prices of 20 important commodities are collected from 20 urban centres in the State in order to construct Urban Retail Price Index (URPI). During 2015-16, the URPI which was 3042 in April 2015 rose to 3476 in December 2015 showing an increase of 434 points or 14.27%. The rise in index is attributed to the increase in prices of Turdal & Onion. The price trends of these commodities are graphically illustrated in **Figure 2.14**. During 2015-16 (upto December 2015), the average URPI (3280) increased by 9.96% over the corresponding period of the previous year (2983). Urban Retail Price Index numbers in Karnataka are presented in **Appendix 2.19**.

**Figure. 2.13: Rural Retail Price of Turdal and Uraddal****Figure. 2.14: Urban Retail Price of Turdal & Onion**

## FISCAL DEVELOPMENT AND STATE FINANCES

# 3

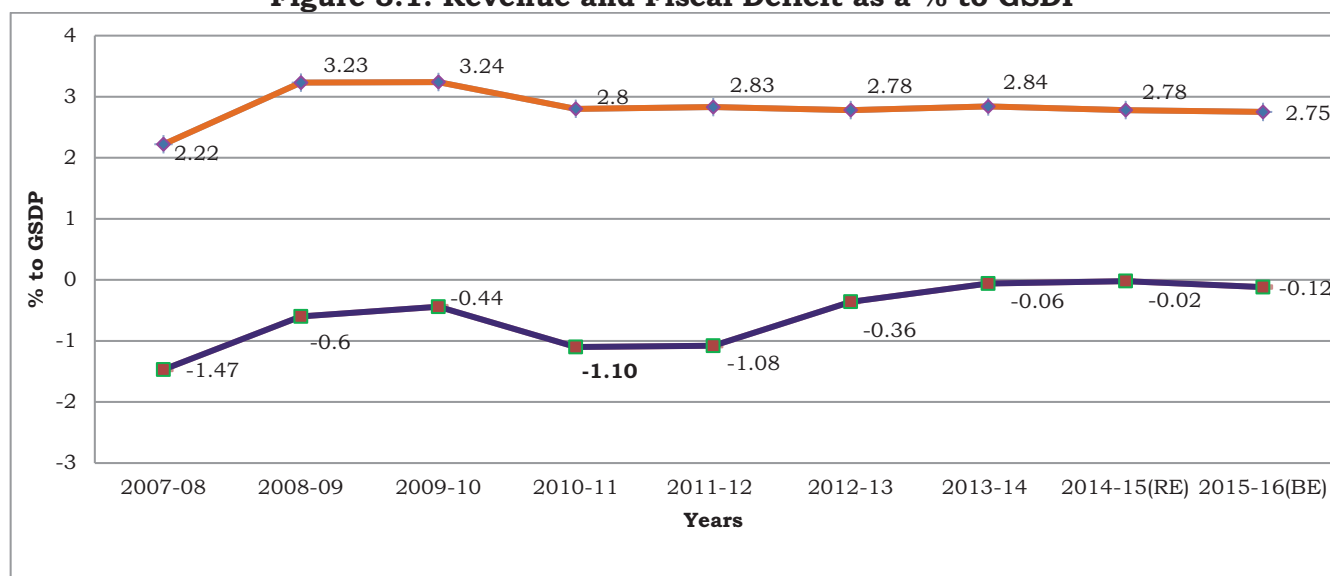
Driven by various fiscal consolidation measures, Karnataka has managed its expenditure well even while enhancing its revenues. The State's fiscal deficit has declined marginally from 2.78% in 2014-15(RE) to the level of 2.75% of GSDP in 2015-16(BE) while the capital outlay has increased marginally from 99.18 % in 2014-15 (RE) to 101.69% of Gross Fiscal Deficit in 2015-16(BE). This indicates that entire borrowings is invested for capital outlay. The State's revenue receipts have slightly increased to 15.80% of GSDP in 2015-16 from 15.51% of GSDP in 2014-15(RE). The State continues to have an overall revenue surplus, albeit at reduced levels. In 2015-16 development expenditure as a % GSDP has slightly decreased to 13.34% compared to 13.54% in 2014-15 (RE). However, nontax-revenues has slightly increased from 0.65 % of GSDP in 2014-15 (RE) to 0.71% of GSDP in 2015-16 (BE). Education, Water resources, Agriculture and Allied Services are significant components to the State's development expenditure.

### 3.1 FISCAL CONSOLIDATION

The State's fiscal consolidation efforts have continued to be effective with all the fiscal indicators contained within the stipulated limits of the Karnataka Fiscal Responsibility Act, 2002 (KFRA). The State has chosen on its own violation to bring in fiscal discipline in the management of its finances. The Government has been maintaining revenue surplus since 2004-05, as mandated by the KFRA. Over the last few years, the fiscal deficit could also be maintained within 3% of GSDP as mandated by the KFRA, except in 2008-09 and 2009-10 when it went up to 3.2%, as a result of additional expenditure for economic stimulation prompted by the Government of India.

Time trends in fiscal and revenue deficits for the period 2007-08 to 2015-16 B.E are presented in **Figure 3.1**

**Figure 3.1: Revenue and Fiscal Deficit as a % to GSDP**



### 3.2 KARNATAKA VIS-A-VIS-OTHER STATES

Over the years, the State's major fiscal indicators continue to compare well with the 'all states' average. This is reflected in the information on various fiscal indicators presented in Table 3.1. The State has achieved revenue surplus consistently. Further, the State has capital outlay of 99.86 % in the GFD as compared to 113.97 % of all States average in 2014-15(BE). The fact that the entire fiscal deficit is devoted to capital expenditure is welcome as it helps in promoting income generating investments

and help promote rapid economic growth. However, the State has a challenging task of restoring the larger revenue surpluses achieved in the recent past to enable higher infrastructure investments. Other important expenditure indicators such as proportion of State tax revenue in the revenue expenditure and non-development expenditure in aggregate disbursements place Karnataka in a better position.

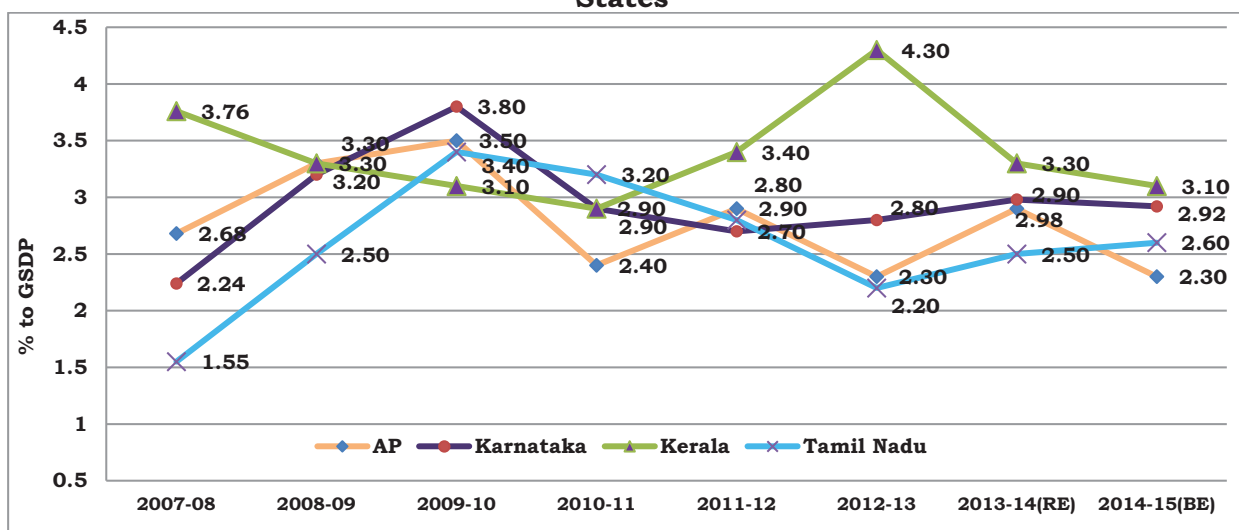
A comparative perspective of Karnataka's fiscal deficit with other Southern states is presented in **Figure 3.2**.

**Table 3.1: Major Fiscal Indicators of Karnataka**

Fiscal Indicators	2009-10 (Accounts)		2010-11 (Accounts)		2011-12 (Accounts)		2012-13 (Accounts)		2013-14 (RE)		2014-15(BE)	
	KAR	All States	KAR	All States	KAR	All States	KAR	All States	KAR	All States	KAR	All States
RD/GFD	-14.90	16.40	-39.00	-1.90	-38.13	-14.23	12.98	10.40	-0.36	-1.04	-1.40	-18.36
Capital Outlay/ GFD	111.60	79.00	125.00	94.10	126.10	101.72	106.69	98.83	99.02	93.57	99.86	113.97
Non-devpt. Expenditure/ Aggregate disbursement	21.10	30.30	20.20	30.80	20.00	29.70	21.50	28.80	21.20	28.10	22.40	27.00
STR/RE*	64.3	45.40	71.20	49.40	88.38	75.66	87.03	76.81	80.15	72.53	78.04	68.00

RD = Revenue Deficit; GFD = Gross Fiscal Deficit; STR = State Tax, Revenue RE\*=Revenue Expenditure Source: RBI-Study of budget 2014-15, Statement-1,4, Appendix-1 and 2

**Figure 3.2: Karnataka's Fiscal Deficit (as a % of GSDP) compared with the Southern States**



Source: Economic Survey 2014-15, Planning Department, GoK and RBI report on a Study of Budgets, 2014-15

**Table 3.2: Receipts and expenditure of Karnataka, (Rs. crore)**

Items/ Years	2008-09 (A/C)	2009-10 (A/C)	2010-11 (A/C)	2011-12 (A/C)	2012-13 (A/C)	2013-14 (A/C)	2014-15 (RE)	2015-16 (BE)
Revenue receipts	43290.68	49155.70	58206.23	69806.27	78176.22	89542.53	108907.74	116360.32
Revenue expenditure	41659.29	47536.92	54033.84	65115.07	76293.26	89189.57	108747.63	115449.68
Capital receipts	9285.18	12942.68	12143.83	15228.35	16845.47	19445.49	21614.70	22434.88
Capital Disbursements	11364.92	14310.68	16865.67	19259.41	18663.49	19868.12	21679.51	23811.29
Capital outlay(out side the revenue account)	9689.15	12066.89	13283.36	15416.47	15445.43	16946.86	18880.05	20563.62
<b>% to GSDP</b>								
Revenue receipts	14.07	14.26	15.28	16.07	14.96	14.57	15.51	15.80
Revenue expenditure	13.54	13.79	14.19	14.99	14.60	14.51	15.49	15.68
Capital receipts	3.02	3.76	3.19	3.51	3.22	3.16	3.08	3.05
Capital disbursements	3.15	3.50	4.43	3.55	2.96	3.23	3.09	3.23
Capital outlay (out side the revenue account)	3.69	4.15	3.49	4.43	3.57	2.76	2.69	2.79

Source:(i)Economic Survey2014-15, Planning Department, GoK (ii)Annual Financial Statement 2015-16(iii) Medium Term Fiscal Plan, Finance Department, GoK 2015-19



### 3.3 STATE FINANCES

The State's fiscal consolidation efforts have been largely revenue led owing to the tax reforms and toning up of tax administration that have yielded buoyant revenue since the enactment of the KFRA. The State's revenue receipts as a percent of GSDP has increased marginally from 14.07% in 2008-09 to 15.80% in 2015-16 B.E. **(Table 3.2)**. The global economic meltdown has had a considerable negative impact on the State's tax revenues during 2008-09 and 2009-10, bringing down the share of revenue receipts to GSDP to 14.07% and 14.26% respectively. However, the State's revenue resources are showing signs of recovery from 2010-11(15.28%).

On the expenditure front, capital outlay (outside the revenue account) as percent of GSDP has decreased from 3.69% in 2008-09 to 2.79% in 2015-16. This poses a great challenge and it is a matter of concern for Karnataka due to the infrastructure inadequacies prevailing in the State. In this context, the Expenditure Reforms Commission (ERC) constituted by the Government of Karnataka has recommended that capital outlay needs to be insulated from revenue adversities.

#### Revenue receipts and Composition:

The composition of revenue receipts during the 2008-09 to 2015-16 accounts for the State's remarkable performance in its own tax

collections (Table 3.3). The State's own tax revenue constitutes the largest share. The State's own tax revenues have increased from 8.99% of GSDP in 2008-09 to 10.38% of GSDP in 2015-16. There is also increase in the share of central taxes from 2.33% of GSDP in 2008-09 to 3.37% of GSDP in 2015-16. Share of grants from the central Government has decreased from 1.73% of GSDP to 1.35% of GSDP during the same reference period. This decrease is because of reduction of central grants for many CSS Schemes. The marked changes both in the share of central taxes and grants, the former representing an increase and the latter a decrease are on account of the recommendations of the Fourteenth Finance Commission (FFC) that have enhanced the share of taxes in the divisible from 32 percent to 42 percent. With reference to grants eight schemes have been delinked from central support and twenty four schemes will have modified pattern of funding. Non-tax revenue has revealed a decline and warrants attention.

#### Liabilities

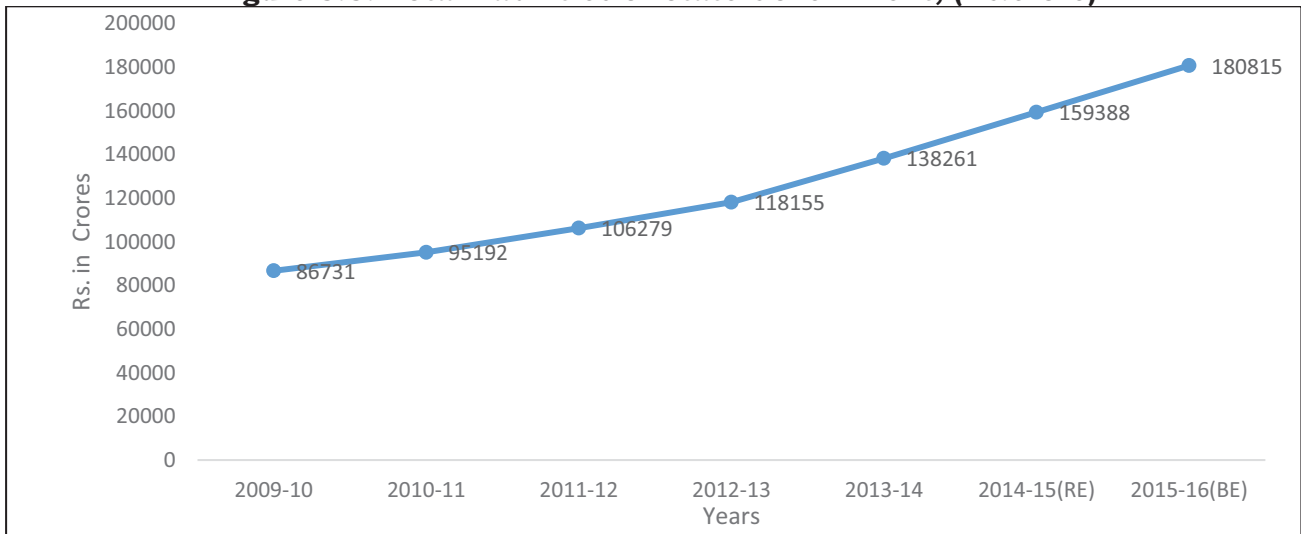
The total liabilities of the State Government increased from Rs.86731 crore in 2009-10 to Rs.180815 crore in 2015-16 growing at a CAGR of 13.03%. The total liabilities are however, within the limit of 25% of GSDP (prescribed by the 13<sup>th</sup> Finance Commission) except for 2009-10, where it was 25.83% of GSDP because of the global economic slowdown in 2009-10. **(Figures 3.3 & 3.4)**.

**Table 3.3: Composition of revenue receipts, (% of GSDP)**

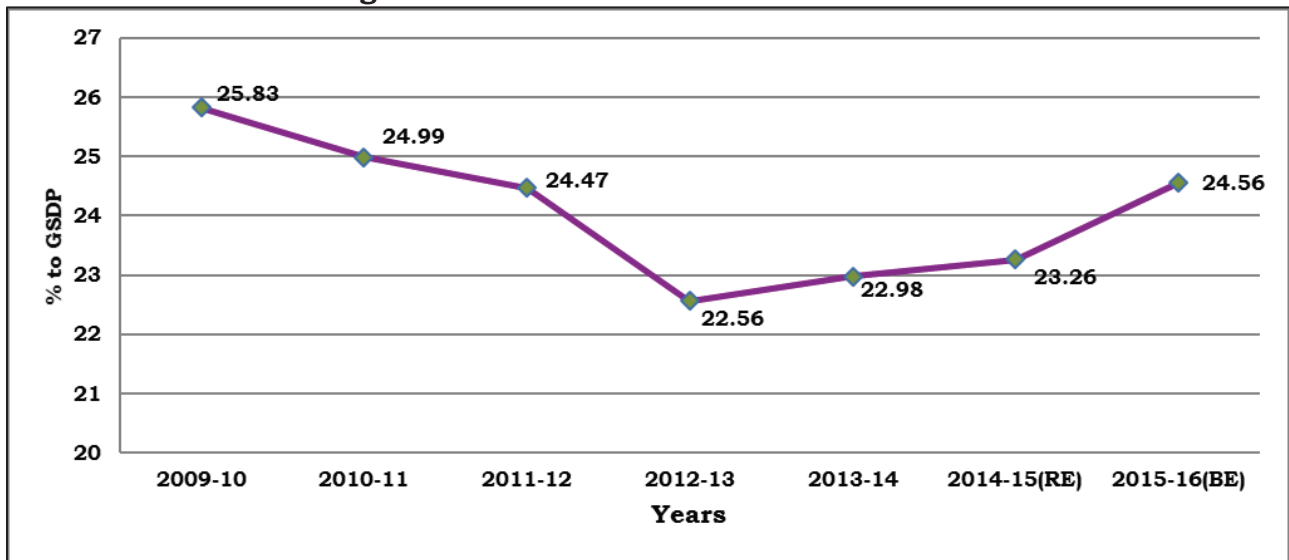
Year	2008-09 (A/C)	2009-10 (A/C)	2010-11 (A/C)	2011-12 (A/C)	2012-13 (A/C)	2013-14 (A/C)	2014-15 (R.E)	2015-16 (B.E)
State taxes	8.99	8.87	10.10	10.70	10.28	10.19	9.76	10.38
Share of central taxes	2.33	2.14	2.50	2.55	2.42	2.25	2.19	3.37
Grants from centre	1.73	2.29	1.80	1.88	1.49	1.48	2.92	1.35
Non-Tax Revenue	1.03	0.97	0.88	0.94	0.76	0.66	0.64	0.71

Source: (i) Economic Survey 2014-15, Planning Department, GoK (ii) Medium Term Fiscal Plan(2015-19), Finance Department, GoK

**Figure 3.3: Total liabilities of State Government, (Rs.crore)**



**Figure 3.4: Total liabilities as a % to GSDP**



**3.4 BUDGETARY DEVELOPMENTS IN 2015-16**

**3.4.1 Highlights**

Owing to a recovery in the macroeconomic situation, the State has been in a position to enhance revenue collection. In 2015-16(BE), Receipts are expected to be Rs.138870.20 crore comprising Rs.116360.32 crore (83.79%) of revenue receipts and Rs.22509.88 crore (16.21%) of capital receipts. As compared to 2014-15(RE), revenue receipts are expected to increase by 6.84% and capital receipts are expected to

increase by 3.78%, resulting in an overall anticipated increase of 6.33 %.The State budget for 2015-16 envisages an expenditure of Rs.139260.97 crore comprising Rs. 115449.68 crore (82.90%) of revenue expenditure and Rs.23811.29crore (17.10%) of capital expenditure. Expenditure during the year 2015-16 is expected to grow by 6.77% over the previous year, with capital expenditure growing at a higher rate than that of revenue expenditure. In addition, the State has managed to maintain a revenue surplus, however, a reduced magnitude. The overall budgetary position of the State is reflected in **Table 3.4.**

**Table 3.4: Overall Budgetary Position, (Rs. crore)**

	Receipts and Disbursements	2013-14 (A/C)	2014-15 (R.E.)	2015- 16(B.E.)	%variation(20 15-16 over 2014-15)
<b>A.</b>	<b>Receipts</b>				
<b>1</b>	Revenue Receipts	89542.53	108907.74	116360.32	6.84
<b>2</b>	Capital Receipts	19533.42	21689.71	22509.88	3.78
	<b>Total A: (1+2)</b>	109075.95	130597.45	138870.20	6.33
<b>B.</b>	<b>Disbursement</b>				
<b>1</b>	Revenue Expenditure	89189.57	108747.63	115449.68	6.16
<b>2</b>	Capital Disbursements	19868.12	21679.51	23811.29	9.83
	<b>Total B :(1+2)</b>	109057.69	130427.14	139260.97	6.77

A/C: Accounts, R.E.: Revised Estimates, B.E.: Budget Estimates

Note: Ways and means advances from RBI have not been included in the Capital receipts and Disbursements. Capital receipts include Contingency Fund(net) and Public Account(net).

Important budgetary indicators for the 2015-16 budget are presented in Table 3.5. The per capita State's own tax revenue has increased from Rs. 13153 in 2014-15(RE) to Rs. 15629 in 2015-16(BE). Revenue from Sales tax/VAT is expected to increase from Rs.36924.80 crore in 2014-15 to Rs.41329.00 crore in 2015-16, indicating a growth rate of 11.93%.

On the expenditure front, it is interesting to

note that development expenditure and some key development sectors such as social security and welfare have an increase in per capita terms implying an enhanced per-head financial outlay that has accrued to the citizens of Karnataka in these areas. Development expenditure budgeted for 2015-16 is of the order of Rs.98200.56 crore against Rs.92761.87 crore in 2014-15(RE), an increase of 5.86%.

**Table 3.5 Important Budgetary Indicators: Karnataka**

	Indicator	Unit	2014-15 (R.E)	2015-16 (B.E)
1.	Aggregate Receipts (Revenue + Capital)	Rs. crore	130597.45	138870.20
2.	Revenue Receipts	Rs. crore	108907.74	116360.32
3.	State's Own Tax Revenue	Rs. crore	83964.09	101235.18
4.	Per Capita State's Own Tax Revenue	Rupees	13153.00	15629.00
5.	Sales Tax / VAT Collection	Rs. crore	36924.80	41329.00
6.	Share of Sales Tax /VAT in the State's Own Tax Revenue	%	43.98	40.82
7.	Non-Tax Revenue including Grants from the Centre	Rs. crore	24943.65	15125.14
8.	Share of Non-Tax Revenue in Revenue Receipts	%	22.90	13.00
9.	Debt Receipts	Rs. crore	22229.53	22949.93
10.	Share of Debts Receipts in Aggregate Receipts	%	17.02	16.53
11.	Per Capita Receipts	Rupees	17061.00	17964.00
12.	Aggregate Expenditure (Revenue + Capital)	Rs. crore	114618.00	133600.00
13.	Developmental Expenditure	Rs. crore	92761.87	98200.56
14.	Per Capita Development Expenditure	Rupees	14531.00	15160.00
15.	Share of Developmental Expenditure in Total Expenditure	%	80.93	73.50
16.	Per Capita Expenditure - Social Security & Welfare	Rupees	1742.50	1978.00
17.	Per Capita Expenditure on Health, Family Welfare, Water Supply and Sanitation	Rupees	1390.40	1379.40
18.	Per capita Expenditure on Education, Sports, Art and Culture	Rupees	3200.70	3043.80

R.E.: Revised Estimates, B.E.: Budget Estimate

Per capita are calculated on projected population of 2014 and 2015 which is based on 2001&2011 population census, Source: Annual Financial Statement 2015-16

**3.4.2 Receipts**

Aggregate receipts are likely to increase considerably by about Rs.8272.74 crore (6.33%) in 2015-16 over 2014-15. Revenue receipts are expected to increase by Rs.116360.32crore and capital receipts are expected to increase by Rs. 22509.88crore. Revenue receipts account for 83.79% of total receipts. Details of revenue and capital receipts are presented in **Table 3.6**.

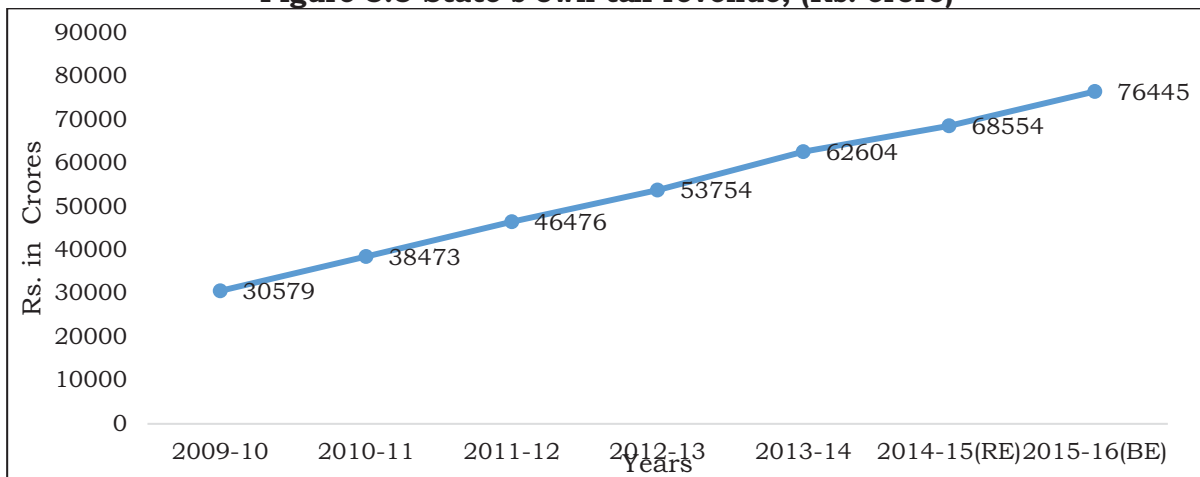
**3.4.2.1 Revenue Receipts**

Revenue receipts comprise of four major components viz. own tax revenue, nontax revenue, devolution from GOI and GIA & contributions. The State’s own tax revenue in 2015-16is anticipated to increase by 11.51% and non tax revenue by 16.59%. The share of

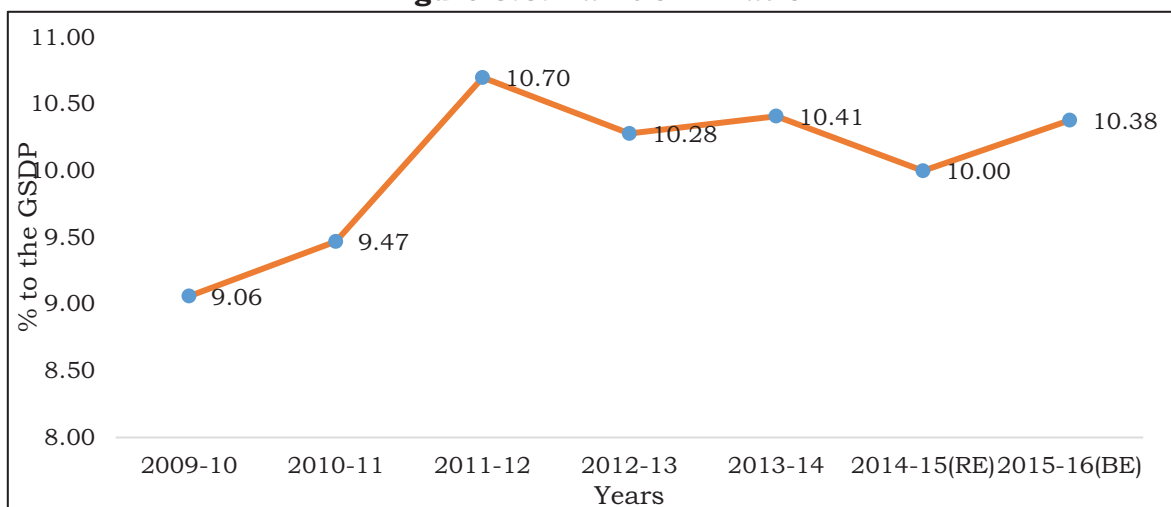
tax revenue in the total revenue receipts is of the order 87.00% in 2015-16BE.

**a) Tax Revenues:** Karnataka’s Tax to GSDP ratio (tax effort), has been good and compares well with other Indian States. The State's own tax revenues (SOTR) increased from Rs. 30579 crore in 2009-10 to Rs.76445 crore during 2015-16 growing at a CAGR of16.50% (**Figure 3.5**). The tax effort declined in2009-10 largely due to adverse impact of the economic slowdown. The tax effort has since improved to 10.38% in 2015-16(BE) contributed by improvements in the tax administration, tax rate enhancement and high inflation (**Figure 3.6**).

**Figure 3.5 State’s own tax revenue, (Rs. crore)**



**Figure 3.6: Tax-GSDP Ratio**



Composition of the revenue receipts, as described earlier, reveals that the State's own tax revenue has performed very well during the period under reference. Tax revenue mainly includes taxes on income & expenditure, entry tax, property and capital transactions, VAT, sale of goods, commodities & services, State excise, motor vehicle taxes and the State's share in central taxes. The budgeted tax revenue is anticipated to be Rs.101235.18 crore in 2015-16 BE as against Rs.83964.10 crore in 2014-15 RE. Sales tax/VAT is the main source of tax revenue comprising about 54.06% of own tax revenue in 2015-16, revealing a growth rate of 11.93%. Revenue from State excise is expected to increase by 10.54%. Taxes on income and expenditure will be growing at 14.03%.

b) **The State's share in central taxes** is anticipated to increase by Rs.9379.78 crore i.e. by 60.87%. As observed earlier, the sharp increase is on account of enhanced state share in the divisible pool.

c) **Non - tax Revenues:** Non-tax revenue includes receipts from social, economic and general services, interest and dividends. The budget for 2015-16 which has revenue from the above three services is Rs.5206.17 crore as against Rs.4465.33 crore in 2014-15(RE) (indicating an increase of 16.59%). The small and declining non tax revenue has been an important fiscal challenge faced by the State which warrants necessary measures to recover user charges at optimal levels. The ratio of non-tax revenue to total receipts has been continuously declining over the years. Further, the State has one of the lowest non-tax revenues to the GSDP ratios in the country. It has been around 1% mark for the last five to six years. This is due to low recovery of costs. In many departments, the revision of user charges, fees & fines and other such non-tax receipts have not taken place for many years. Even with revision of rates and better collection mechanisms, the increase in revenues from this avenue may not be large due to existing low base. Expenditure Reform Commission has made a

number of recommendations to enhance revenues from user charges.

d) **Grants from Government of India** are expected to decrease from Rs.20478.32 crore in 2014-15(RE) to Rs.9918.97 crore in 2015-16(BE) (a reduction of about 51.56%). This is because of reduction of central grants for CSS Schemes. Finding resources for the schemes that are delinked from central support and with modified funding pattern are the emerging challenges for state finances.

#### 3.4.2.2 Capital Receipts

Capital receipts include loans from Government of India, internal debt - ways & means, open market loans (net), public account, recoveries of loans & advances and contingency funds (net). Capital receipts of Rs.22509.88 crore in 2015-16(BE) account for an increase of 3.78% over 2014-15(RE) level. Loans from the Government of India account for Rs. 1724.93 crore i.e. 7.66% of the capital receipts and are expected to increase by 28.96% as compared to the previous year. There is a decrease in internal debt-open market loans (Net) by 2.88% in 2015-16 as compared to the previous year whereas recovery of loans and advances has increased by 50.89%.

#### 3.4.3 Expenditure

Expenditure indicators (Table 3.8) reveal that the State's total expenditure under Consolidated Fund as a proportion of the GSDP has marginally increased from 18.75% in 2009-10 to 19.36% in 2015-16 B.E. The share of expenditure on social services has increased from 5.69% of GSDP in 2009-10 to 6.87% in 2015-16 while the share of capital outlay (outside the revenue account) decreased from 3.61% of GSDP to 2.79% of GSDP during the same period and such a decline in an already infrastructure deficient state is a matter of concern. The share of development expenditure in GSDP has marginally decreased from 13.38% to 13.34%, similarly the share of interest payments in GSDP has declined from 1.55% to 1.45% for the same reference period.

**Table 3.6: Revenue and Capital Receipts, Karnataka 2013-14 to 2015-16 (Rs.crore)**

Category of Receipts	2013-14 (A\C)	2014-15 (RE)	2015-16 (B.E)	% Variation 2015-16 over2014- 15	2013-14 (A\C)	2014-15 (RE)	2015-16 (B.E)	
<b>I. Revenue Receipts</b>					<b>% to total Revenue Receipts</b>			
A. State's Tax Revenue	76411.81	83964.10	101235.18	20.57	85.34	77.10	87.00	
(i) Taxes on Income and Expenditure	814.30	884.88	1009.00	14.03	0.91	0.81	0.87	
(ii) Taxes on Property & Capital Transactions of which	61789.24	67669.21	75436.39	11.48	69.01	62.13	64.83	
(a) Sales Tax / VAT	33719.35	36924.80	41329.00	11.93	37.66	33.90	35.52	
(b) Taxes on vehicles	3911.50	4350.00	4800.00	10.34	4.37	3.99	4.13	
(c) State Excise	12828.36	13750.79	15200.00	10.54	14.33	12.63	13.06	
(d) Taxes on Goods & Passengers	2625.66	3028.87	3101.00	2.38	2.93	2.78	2.66	
(e) Others	8704.37	9614.75	11006.39	14.47	9.72	8.83	9.46	
State's Own Tax Revenue(i+ii)	62603.54	68554.09	76445.39	11.51	69.91	62.95	65.70	
(iii) Tax Devolution from Centre	13808.27	15410.01	24789.79	60.87	15.42	14.15	21.30	
B. Non-tax Revenues	4031.89	4465.33	5206.17	16.59	4.50	4.10	4.47	
C. Grants - in - aid from Central Government	9098.82	20478.32	9918.97	-51.56	10.16	18.80	8.52	
Total I: Revenue Receipts (A+B+C)	89542.52	108907.75	116360.32	6.84	100	100	100	
<b>II. Capital Receipts</b>								
(i) Loans from Govt. of India	1154.56	1337.53	1724.93	28.96	5.91	6.17	7.66	
(ii) Internal Debt (Net of W & M&MB)	14541.24	18483.71	17951.54	-2.88	74.44	85.22	79.75	
(iii) Public A/c (Net)	3640.40	1733.02	2667.20	53.90	18.64	7.99	11.85	
(iv) Recovery of Loans & Advances	109.28	60.45	91.21	50.89	0.56	0.28	0.41	
(v) Contingency Fund (Net)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
(vi) Misc. Capital Receipts	87.94	75.00	75.00	0.00	0.45	0.35	0.33	
Total II: Capital Receipts(i) to (vi)	19533.42	21689.71	22509.88	3.78	100	100	100	
AGGREGATE RECEIPTS: I+II	109075.94	130597.46	138870.20	6.33				
CONSOLIDATED FUND OF RECEIPTS	107026.56	131272.71	139476.46	6.25				
Total Tax Revenue as per cent of Total Receipts	70.1	64.3	72.9					

A/C: Accounts, RE: Revised Estimates.BE: Budget Estimates, W & M = Ways & Means, MB =Market Borrowings  
Source: Annual Financial Statement 2015-16, Finance Department, GoK

**Table 3.7: Expenditure Indicators in Karnataka, (Rs. crore)**

Particulars	2009-10 (A/C)	2010-11 (A/C)	2011-12 (A/C)	2012-13 (A/C)	2013-14 (A/C)	2014-15 (R.E)	2015-16 (B.E)
Revenue Receipts	49155.70	58206.23	69806.27	78176.22	89542.53	108907.7	116360.3
Revenue Expenditure	47536.92	54033.83	65115.07	76293.26	89189.57	108747.6	115449.7
Development Expenditure	32300.57	51626.38	60929.69	68067.53	76328.45	92761.87	98200.56
Social Services	19118.86	22107.82	29413.15	34151.07	36102.76	48173.12	50556.27
Economic Services	13181.71	14892.44	31516.54	33916.47	40225.69	44588.75	47644.29
General Services	12762.34	14055.09	17070.97	20770.32	30475.59	35296.51	38378.38
Interest Payments	5213.00	5641.00	6061.85	6833.00	7837.33	9313.87	10667.67
Wage Bill	10296.00	11086.00	11543.00	15700.00	17808.00	22014.00	22586.00
Pensions	3408.00	4070.00	5436.00	7227.00	9152.00	9700.00	10714.00
Capital Expenditure	12136.68	13355.16	15505.65	15478.47	16946.86	18880.00	20563.62
Total Expenditure (RE+CE)	59673.60	67388.99	80620.72	91771.73	106136.43	127635.63	136013.30
Consolidated Debt	83482.00	91943.00	103030.00	116767.00	135318.00	154523.00	173853.00
Total Consolidated Fund	62963.51	71934.07	85756.15	96601.16	110648.70	132835.45	142534.43

Source: Annual Financial Statements, 2015-16, Finance Department, GoK

**Table: 3.8: Expenditure Indicators in Karnataka, (%of GSDP)**

Particulars	2009-10 (A/C)	2010-11 (A/C)	2011-12 (A/C)	2012-13 (A/C)	2013-14 (A/C)	2014-15 (R.E)	2015-16 (B.E)
Revenue Receipts	14.64	15.28	16.07	14.96	14.57	15.51	15.80
Revenue Expenditure	14.16	14.19	14.99	14.60	14.51	15.49	15.68
Development Expenditure	13.38	13.55	14.03	13.02	12.42	13.21	13.34
Social Services	5.69	5.80	6.77	6.53	5.87	6.86	6.87
Economic Services	6.62	6.25	7.26	6.49	6.54	6.35	6.47
General Services	3.80	3.69	3.93	3.97	4.96	5.03	5.21
Interest Payments	1.55	1.48	1.40	1.31	1.28	1.33	1.45
Wage Bill	3.07	2.91	2.66	3.00	2.90	3.14	3.07
Pensions	1.02	1.07	1.25	1.38	1.49	1.38	1.46
Capital Expenditure	3.61	3.51	3.57	2.96	2.76	2.69	2.79
Total Expenditure (RE+CE)	17.78	17.69	18.56	17.56	17.27	18.18	18.47
Consolidated Debt	24.86	24.14	23.72	22.34	22.02	22.01	23.61
Total Consolidated Fund	18.75	18.89	19.75	18.48	18.00	18.92	19.36

Note: GSPD figures are as provided in medium term fiscal plans of the respective years

### 3.4.3.1 Functional Categories of Expenditure

Services provided by the Government are categorized broadly under three functional categories-General, Social and Community

and Economic services and reflect the priorities of the Government by its various functions performed. The trends and composition of the functional categories of expenditure from 2009-10 reveal that the

focus on social services covering the sectors such as education, health, housing, water supply etc., has significantly increased as reflected in the share of expenditure from 5.69% of GSDP in 2009-10 to 6.87% of GSDP in 2015-16. The share of expenditure on economic services has decreased from 6.62% of GSDP to 6.47% of GSDP, similarly the general services has increased from 3.80% of GSDP to 5.21% of GSDP during the reference period. The increase in economic, social and general services is a welcome development given the human development and infrastructure concerns of the State.

### 3.4.3.2 Development Expenditure: An Inter-State Comparison

The State has a larger size of per capita development expenditure as compared to the National average and that of many other States. Development expenditure comprises of spending incurred by the Government on programs relating to the social and economic services which, in turn, contribute to the social and economic development of the State. The per capita development expenditure in Karnataka during 2012-13, 2013-14(RE) and 2014-15(BE) was Rs.10979, Rs.12949 and Rs.14747 respectively as compared to all State's average of Rs.7905, Rs.9716 and Rs.11761. Karnataka has the highest level of per capita development expenditure during the last three years compared to major States and All States Average, as can be seen in **Table 3.9**.

### 3.4.3.3 Expenditure Highlights: 2015-16

Sector wise break-up of development and non-development expenditures is presented in **Table 3.10** and the corresponding revenue, capital and loan accounts are given in **Appendix 3.3**. The broad trends in

development and non-development expenditure are depicted in **Figure 3.7**.

The expenditure on social services is anticipated to increase by 4.95% with a net increase of Rs.2383.15 crore, from Rs.48173.12 crore in 2014-15(RE) to Rs.50556.27 crore in 2015-16(BE). Expenditure on economic services is expected to increase by 6.85% from Rs.44588.74 crore in 2014-15(RE) to Rs.47644.29 crore in 2015-16(BE). Development expenditure on social security & social welfare in 2015-16 is anticipated to go up by 15.24%, housing & urban development has increased by 46.52% for the same reference period. Water & power development followed by agriculture and allied services have large share in the Economic Services, while in social services, Education sector followed by Social security & welfare gets the largest share.

Non-development expenditure is expected to increase to Rs.41060.61 crore in 2015-16(BE) from Rs.37665.29 crore in 2014-15(RE), accounting for 9.01% increase, Repayment of loans to Government of India and discharge of internal debt account has increased to Rs.2514.44 crore in 2015-16 (BE) compared to Rs. 2349.30 crore in 2014-15 (RE). Interest payments in the current year have increased to Rs.11202.67 crore compared to Rs.9563.87 crore in 2014-15(RE). Expenditure on administrative services is anticipated to increase by 15.24%, while on pension and miscellaneous general services, an increase of 10.80% is seen as compared to 2014-15(RE). Expenditure on the organs of the State has decreased by 18.17% over the previous year.

**Table 3.9: Per- Capita Development Expenditure in selected states, (Rs.)**

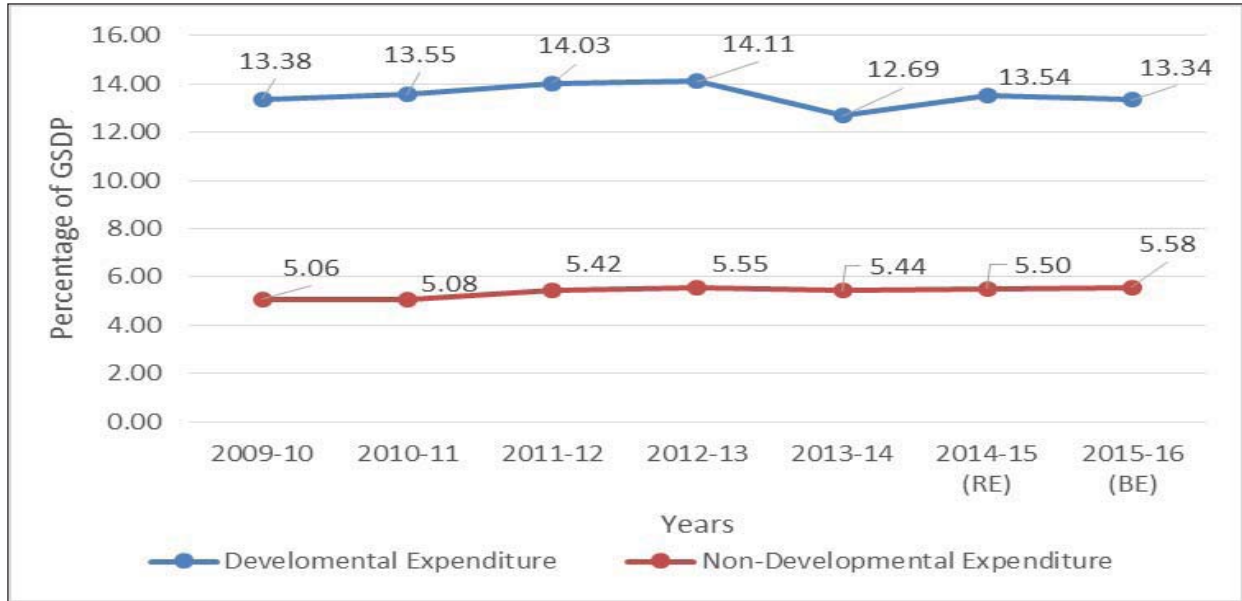
State	2012-13(A/C)	2013-14 (R.E)	2014-15 (B.E)
Andhra Pradesh	10325	12908	8625
Assam	5973	11182	11987
Bihar	4405	6611	7464
Gujarat	10873	11899	14265
<b>Karnataka</b>	<b>10979</b>	<b>12949</b>	<b>14747</b>
Kerala	9646	11027	12736
Madhya Pradesh	7846	8875	11417
Maharashtra	9429	10953	12453



State	2012-13(A/C)	2013-14 (R.E)	2014-15 (B.E)
Orissa	7218	9560	13130
Punjab	7928	9922	11246
Rajasthan	7942	10011	13578
Tamilnadu	10257	12061	12759
<b>Total: All States</b>	7905	9716	11761

Note: Per- capita development expenditure is calculated using the projected population of 2012, 2013 and 2014  
Source: RBI-A Study of Budget 2014-15, Statement-11

**Figure 3.7: Development and Non Development Expenditure as a % GSDP**



**Table 3.10: Trends in Key Expenditure Components, (Rs. crore)**

Category of Expenditure	2013-14 (Accts)	%*	2014-15(R.E)	%*	2015-16(B.E)	%*	Percent Variation(2015-16 over 2014-15)	
<b>I</b>	<b>Developmental Expenditure</b>							
A	Economic Services of which	40225.69	52.70	44588.74	48.07	47644.29	48.52	6.85
1	Agriculture & Allied Services	13563.34	17.77	12401.42	13.37	12228.21	12.45	-1.40
2	Rural Development	2282.83	2.99	5619.29	6.06	4766.31	4.85	-15.18
3	General Economic Services	1633.63	2.14	2120.29	2.29	2115.44	2.15	-0.23
4	Water & Power Development	13498.47	17.68	14957.77	16.12	18870.97	19.22	26.16
5	Industry and Minerals	1175.61	1.54	1612.83	1.74	1450.10	1.48	-10.09
6	Transport and Communication	7858.57	10.30	7491.48	8.08	7425.72	7.56	-0.88
7	Others	213.24	0.28	385.66	0.42	787.54	0.80	104.21
B	Social Services of which	36102.76	47.30	48173.12	51.93	50556.27	51.48	4.95
8	Education, Sports, Art and Culture	16553.65	21.69	21030.08	22.67	20302.13	20.67	-3.46
9	Medical & Public Health, Family	6228.17	8.16	9134.99	9.85	9200.70	9.37	0.72

**Table 3.10: Trends in Key Expenditure Components, (Rs. crore)**

Category of Expenditure		2013-14 (Accts)	%*	2014- 15(R.E)	%*	2015- 16(B.E)	%*	Percent Variation(2015- 16 over 2014- 15)
	Welfare, Water supply & Sanitation							
10	Social Security & Welfare Including SC & ST Welfare	8721.87	11.43	11448.49	12.34	13193.07	13.43	15.24
11	Housing and Urban Development	2580.97	3.38	3573.03	3.85	5235.07	5.33	46.52
12	Information and Publicity	77.23	0.10	92.36	0.10	93.06	0.09	0.76
13	Others	1940.87	2.54	2894.17	3.12	2532.24	2.58	-12.51
	Total Development Expd. (A+B)	76328.45	100.00	92761.86	100.00	98200.56	100.00	5.86
<b>II Non-Developmental Expenditure</b>								
(a)	Revenue Expenditure under General services	29974.85	91.58	34558.04	91.75	37545.96	91.44	8.65
(i)	Organs of the State	1010.40	3.09	1189.76	3.16	973.64	2.37	-18.17
(ii)	Fiscal Services	1859.64	5.68	1144.29	3.04	1053.74	2.57	-7.91
(iii)	Interest payment & servicing of debts	7837.33	23.95	9563.87	25.39	11202.67	27.28	17.14
(iv)	Administrative Services	5030.44	15.37	6064.06	16.10	6988.04	17.02	15.24
(v)	Pension & Miscellaneous General Services	9216.60	28.16	9728.38	25.83	10778.95	26.25	10.80
(b)	Compensation & Assignment to Local Bodies and PRIs	5020.44	15.34	6867.68	18.23	6548.92	15.95	-4.64
(c)	Capital Expenditure	2754.40	8.42	3107.25	8.25	3514.45	8.56	13.10
(i)	General Services	500.74	1.53	738.47	1.96	832.42	2.03	12.72
(ii)	Discharge of Internal Debt (Net)	1531.57	4.68	1625.96	4.32	1738.32	4.23	6.91
(iii)	Repayment of Loans to G.O.I.	694.27	2.12	723.34	1.92	776.12	1.89	7.30
(iv)	Loans & Advances to Govt. Servants	27.82	0.09	19.48	0.05	167.59	0.41	760.32
	<b>Total non-development Expenditure</b>	<b>32729.25</b>	<b>100.00</b>	<b>37665.29</b>	<b>100.00</b>	<b>41060.41</b>	<b>100.00</b>	<b>9.01</b>
	<b>Aggregate Expenditure I + II</b>	<b>109057.70</b>		<b>130427.15</b>		<b>139260.97</b>		<b>6.77</b>
	Developmental Exp as % of total Exp	69.99		71.12		70.52		-0.85
	Per Capita Development Expenditure(Rs)	12134.89		14539.48		15131.06		4.07

**Table 3.10: Trends in Key Expenditure Components, (Rs. crore)**

Category of Expenditure	2013-14 (Accts)	%*	2014-15(R.E)	%*	2015-16(B.E)	%*	Percent Variation(2015-16 over 2014-15)
III. Ways & Means & Market Borrowings	1591.00		2408.29		3273.46		35.92
Consolidated Fund	110648.70		132835.44		142534.43		7.30

R.E: Revised Estimates, B.E.: Budget Estimates

Note: Per capita is based on the projected population of 2012, 2013 and 2014

\* Figures under developmental expenditure are percentages to the total developmental expenditure and figures under non-developmental expenditure are percentages to the total non-developmental expenditure

Source: Appendix 3.3 based on Budget Documents: 2015-16

**Table No. 3.11: Plan and Non-plan Expenditure, Karnataka, (Rs. crore)**

Sl.No.	Items	2013-14 (Accts)	2014-15 (RE)	2015-16 (BE)
I.	Plan			
1	State Plan	48038.88 (91.90)	65903.50 (97.77)	72596.81 (98.92)
2	Central Plan	4234.16 (8.10)	1501.36 (2.23)	795.65 (1.08)
	Total Plan Outlay(1+2)	52273.04	67404.86	73392.46
II.	Non-Plan Expenditure	62572.22	71191.53	75840.30

Note: values in the bracket indicate percentage to grand total. R.E: Revised Estimates, B.E: Budget Estimates

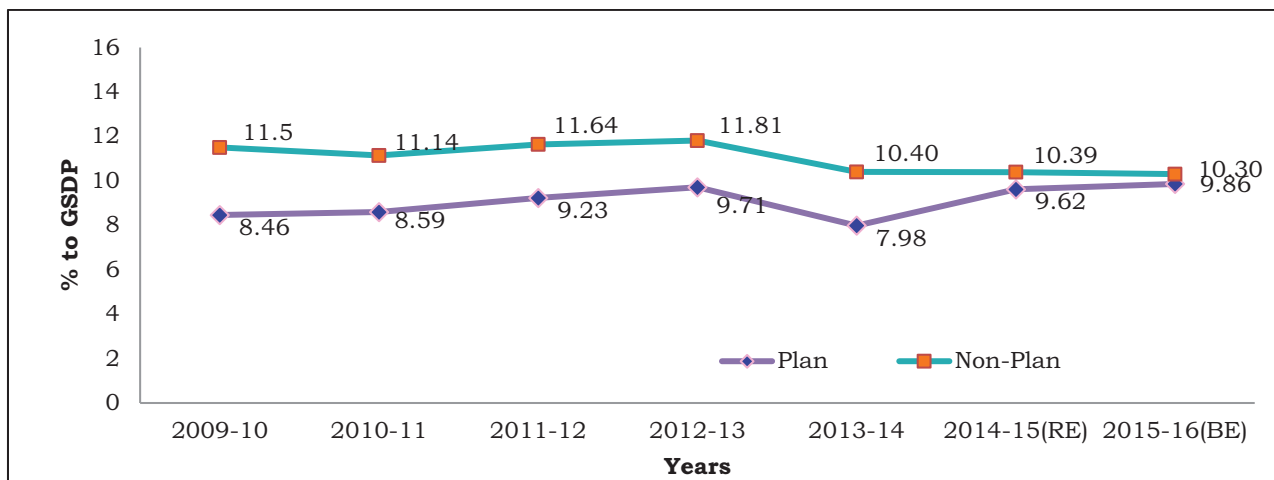
#### 3.4.3.4 Plan and Non-Plan Expenditure

Plan and non-plan expenditure details are presented in **Table 3.11**. Of the aggregate expenditure of Rs.142534.43 crore budgeted for 2015-16, plan outlay amounts to Rs.73392.46 crore ( 51.13%). There has been a significant increase in the State plan outlay by Rs.6693.31 crore (9.93%) from Rs.65903.50 crore in 2014-15(RE) to Rs.72596.81 crore in 2015-16(B.E). The central Plan component has decreased by Rs. 705.71 crore (47.00%) from Rs.1501.36 crore in 2014-15(RE) to Rs.795.65 crore during the current year. This is because all central assistance to CSS/CPS schemes got transferred to State Plan under Central Assistance to State Plan. Non-Plan expenditure is expected to increase by 6.53% from Rs.71191.53 crore in 2014-15(RE) to Rs.75840.30 crore in 2015-16(BE). While the relevance of Plan and Nonplan

categorization is being increasingly questioned, the composition in the current context helps to understand the distribution of expenditure between fresh programmes and past commitments.

Trends in the share of plan and non-plan expenditure in the GSDP during 2009-10 to 2015-16 are represented in **Figure 3.8**. It can be seen that there has been a gradual increase in the plan expenditure of the State. Restricting the non-plan expenditure has been possible due to the austerity measures adopted by the Government from time to time such as restrictions on fresh recruitment, vehicle purchases, foreign tours and training, holding Government functions in star hotels and total ban on travel in business class in flights. However, the State government still has a fairly large amount of expenditure locked up under “committed expenditure” category discussed below.

**Figure 3.8: Plan and Non Plan Expenditure as a Percent of GSDP**

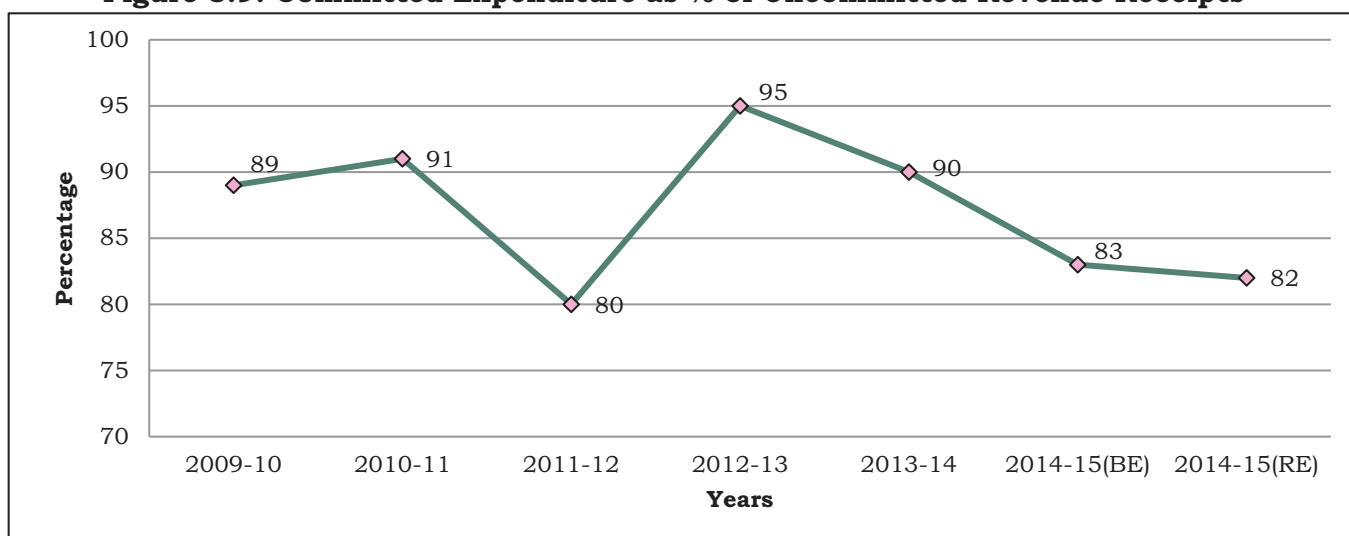


**3.4.3.5 Committed Expenditure**

Committed expenditure on salaries, pensions, interest, subsidies, administrative expenditure, devolution to PRIs and ULBs, etc constitute about 82 percent of the total uncommitted revenue receipts i.e. total revenue receipts less tied grants from Government of India, during the year 2014-15(RE) (**Figure 3.9**).The graph below traces the trends in the share of committed

expenditure to the uncommitted receipts. As is evident from the graph, approximately 82% of uncommitted revenue receipts in 2014-15(RE) are committed. Hence, only 18% of uncommitted revenue receipts are available for new initiatives and existing capital expenditure commitment of the Government. With such limited fiscal space available for manoeuvre ability, containing the committed expenditure which is largely revenue in nature would be one of the key challenges currently faced by the state.

**Figure 3.9: Committed Expenditure as % of Uncommitted Revenue Receipts**



### 3.4.3.6 Economic Classification of Expenditure

Under the guidelines from the Central Statistical Organization, the Directorate of Economics and Statistics classifies Government expenditure by economic categories in the annual budget. This is useful for analyzing the economic significance of the budgetary transactions of the State Government. It throws light on the extent of capital formation out of budgetary resources, savings of the Government, drawals of the Government on various resources of the State's economy and contribution of the Government to State income.

A summary of the total expenditure by economic classification for 2015-16 in

comparison with the preceding two years is presented in **Table 3.12**. In 2015-16, in the final outlays, the Government's consumption is anticipated to increase by 1.71% over 2014-15. The capital formation has increased by 2.31%. Consumption expenditure forms 27.80% of the total expenditure during the current year. Transfer payments to the rest of the economy are anticipated to go down by 7.52% during the current year. The share of transfer payments to the rest of the economy in total expenditure is 44.57%. Within transfer payments, current transfers, which include interest and subsidies, are a major component (94.78%). Financial investments and loans to the rest of the economy that amounted to Rs.6544.88 crore in 2014-15 have increased to 9295.95 crore in 2015-16.

**Table 3.12: Economic Classification of Expenditure of Karnataka State Budget for 2015-16, (Rs.crore)**

Sl. No.	Description	2013-14 (Accts)	2014-15(R.E)	2015-16(B.E)	Percent Variation(2015-16 over 2014-15)
<b>1</b>	Final Outlays	38491.50 <b>(41.77)</b>	51972.58 <b>(46.12)</b>	52991.74 <b>(47.15)</b>	1.96
(a)	Government consumption Expenditure	22942.50 (24.9)	30726.62 (27.27)	31252.36 (27.81)	1.71
(b)	Gross Capital Formation	15629.56 (16.96)	21314.78 (18.92)	21806.67 (19.4)	2.31
(c)	Acquisition of Fixed Assets	-80.56 (-0.09)	-68.82 (-0.06)	-67.29 (-0.06)	-2.22
<b>2</b>	Transfer Payments to the Rest of the Economy	<b>46987.74</b> <b>(51.00)</b>	<b>54163.01</b> <b>(48.07)</b>	<b>50092.53</b> <b>(44.57)</b>	-7.52
(a)	Current Transfers *	46131.35 (50.07)	52903.99 (46.95)	47477.57 (42.25)	-10.26
	Capital Transfers	856.39 (0.93)	1259.02 (1.12)	2614.96 (2.33)	107.70
<b>3</b>	Financial Investments and Loans to the rest of the Economy	6662.55 (7.23)	6544.88 (5.81)	9295.95 (2.33)	42.03
<b>Total Expenditure (1+2+3)</b>		<b>92141.79</b> <b>(100)</b>	<b>112680.47</b> <b>(100)</b>	<b>112380.22</b> <b>(100)</b>	<b>-0.27</b>

\* Includes interest and subsidy also R.E.: Revised Estimates, B.E.: Budget Estimates

Source: An Economic-cum-Purpose Classification of the Karnataka Government Budget 2015-16, Directorate of Economics and Statistics, Government of Karnataka.

Percentages in the brackets represent percentage to total expenditure

### 3.5 CAPITAL FORMATION BY GOVERNMENT

Details of capital formation by the Government are presented in **Table 3.13**. Gross capital formation by the Government is expected to increase by 2.31% in 2015-16. The value of assets anticipated to be created in 2015-16 is Rs.21806.66 crore of which Rs.4012.48crore will be created by departmental commercial undertakings and Rs.17794.18crore by the Government.

### 3.6 INVESTMENT UNDER PLAN: STATE BUDGETARY SUPPORT (SBS) FOR PLAN

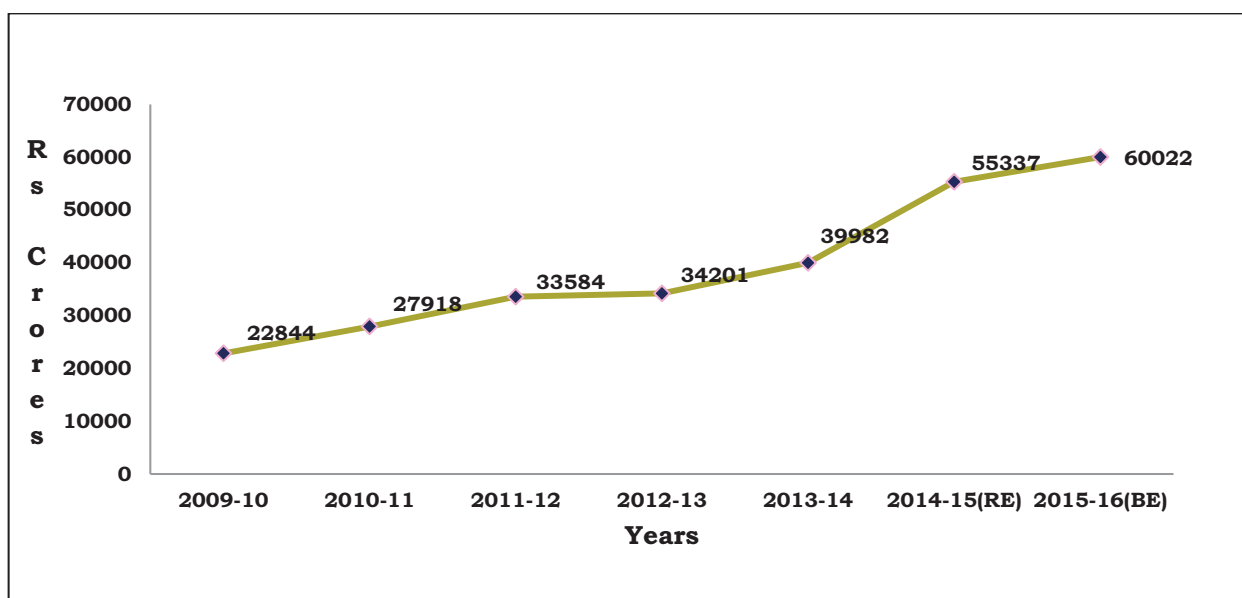
Karnataka's plan SBS has increased from Rs22844crore to Rs.60022crore during the period (2009-10 and 2015-16) growing at a CAGR of 17.47% (**Figure3.10**).The SBS for Plan as a percentage of the budget increased from 36.30% to 42.11%during the same period (**Figure3.11**). Relative to the GSDP, the SBS for as a % GSDP increased from 6.80% to 8.15% during the period (**Figure 3.12**).

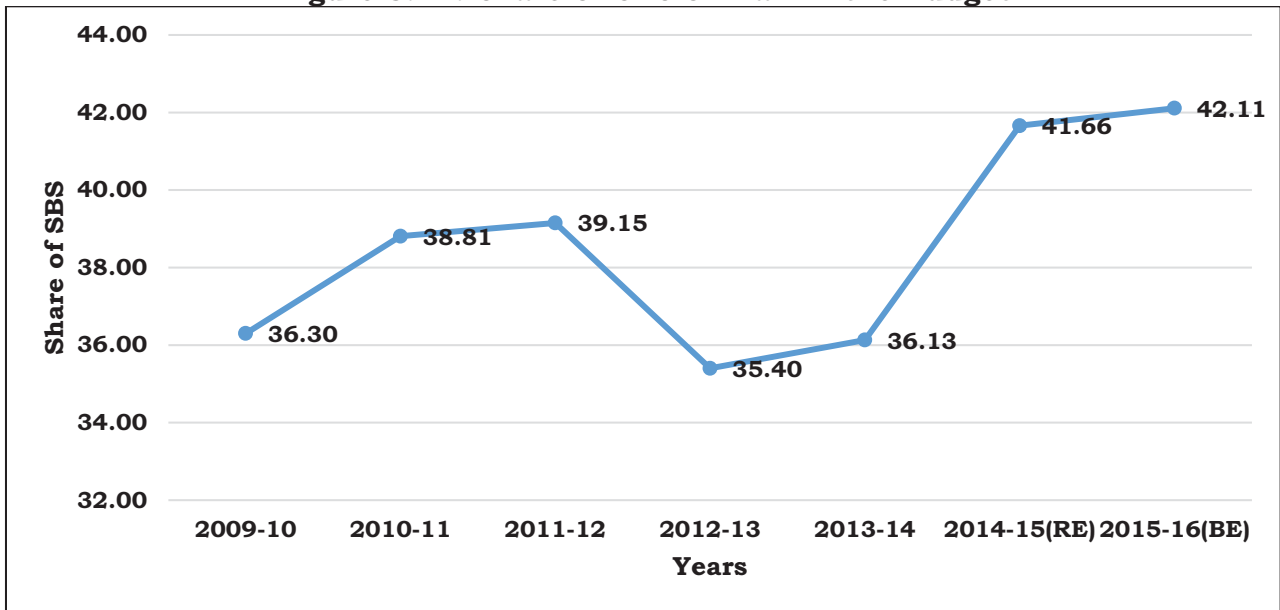
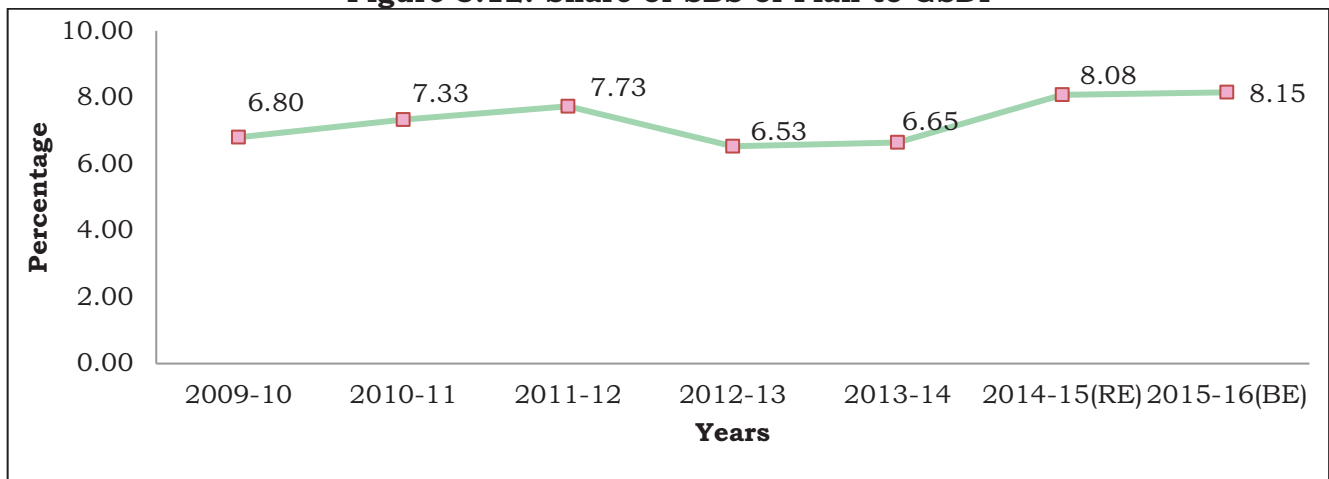
**Table 3.13: Capital Formation by the Government of Karnataka: 2015-16, (Rs. crore)**

Sl.No.	Description	2013-14(Accts)	2014-15(R.E)	2015-16(B.E)	Percent Variation(2015-16 over 2014-15)
1	Value of Assets Created	15629.73	21343.40	21806.66	2.17
(a)	By Departmental Commercial Undertakings	2723.03	3325.94	4012.48	20.64
(b)	By Government Administration	12906.70	18017.46	17794.18	-1.24
2	Change in Stock in (a) & (b) above	-0.17	-28.62	0.01	-100.03
	Total: Gross Capital Formation	15629.56	21314.78	21806.67	2.31

Source: An Economic-cum-Purpose Classification of the Karnataka Government Budget 2015-16, Directorate of Economics and Statistics, Government of Karnataka

**Figure 3.10: State Budgetary Support for Plan, (Rs. crore)**



**Figure 3.11: Share of SBS of Plan in the Budget****Figure 3.12: Share of SBS of Plan to GSDP**

**a) Resources of Twelfth Five Year Plan (2012-17):** The State's plan spending has been growing significantly. The out lay for the 12<sup>th</sup> Five Year Plan is at Rs. 255250.00 crore. Out of this around 40% is from Borrowings (net), 36% is from own resources, 13% from IEBR and remaining 11 % is from central assistance to State Plan. The anticipated expenditure in the first four years of the 12<sup>th</sup> Five Year Plan is at Rs.226303.00 crore (88.66%). In respect of % utilization of resources, it is high in State's Own Resources at 114.01%, Central Assistance at 95.53%, IEBR at 85.96% and State Borrowings (net) at 64.69% (**Table 3.14**).

**b) Inter-sectoral Outlays of Twelfth Five Year Plan:** The core sectors which are performing well in the first 4 years of the 12<sup>th</sup> Plan are: Education (109.28%), Agriculture and Allied (108.58%), Welfare of SCs, STs, OBCs and Minorities (107.05%) followed by, Medical & Public Health (106.74%), Women & Child Development (105.96%) Rural Development (104.65%). The core sectors which are not performing well in the first four years of the 12<sup>th</sup> Plan are: Transport (76.92%) followed by Water Supply & Sanitation (71.61%), Industry & Minerals (69.51%), Energy (66.81%) The plan performance by the major sectors during the first four years of the 12<sup>th</sup> is presented in **Table 3.15**.

**Table No. 3.14: Financial Resources of Twelfth Plan, Karnataka, (Rs.crore)**

Sl.No	Items	Twelfth Plan Target (at Current prices)	Anticipated Achievement in 2012-13 to 2015-16	% Utilisation
1	State Borrowings(net)	101654.00 (39.83)	65760 (29.06)	64.69
2	State Own Resources	92095.00 (36.08)	104997 (46.40)	114.01
3	IEBR	33486.00 (13.12)	28784 (12.72)	85.96
4	Central Assistance	28015.00 (10.97)	26762 (11.83)	95.53
	Total	255250.00	226303.00	88.66

Source: Finance Department, GoK Figures in bracket indicate % to total

**Table 3.15: Outlay & Expenditure in the 12<sup>th</sup> Five Year Plan, (Rs.crore)**

Sl.No	Sectors	12 <sup>th</sup> Five Year Plan (2012-17) Projected Outlay	Anticipated Expenditure in the first four years(2012-16) of the 12 <sup>th</sup> Five year Plan	% of anticipated expenditure to the 12 <sup>th</sup> Five year Plan Outlay
A.	Economic Services			
1	Agriculture & Allied Activities	20939.11	22734.90	108.58
2	Rural Development	8396.35	8786.99	104.65
3	Special Area Programme	4086.11	4505.56	110.27
4	Irrigation and Flood Control	41157.22	33765.68	82.04
5	Energy	26779.38	17892.38	66.81
6	Industry & Minerals	4777.25	3320.45	69.51
7	Transport	33224.38	25557.31	76.92
8	Science, Technology Forestry, Ecology & Environments	2945.97	2264.81	76.80
9	General Economic Services	6739.46	4331.37	64.27
	Total - A : Economic Services	149045.24	123159.45	82.63
10	B:Social Services			
(i)	Education (incl.Sports & Kannada & Culture)	21348.66	23328.78	109.28
(ii)	Medical & Public Health	8983.05	9588.64	106.74
(iii)	Water Supply & Sanitation	13009.69	9315.81	71.61
(iv)	Housing	9102.57	8574.05	94.19
(v)	Urban Development	20964.36	18065.76	86.17
(vi)	Information & Publicity	206.00	136.86	66.44
(vii)	Welfare of SCs,STs , OBCs and Minorities	12893.75	17671.42	107.05
(viii)	Labour & Employment	1540.74	1338.50	86.87
(ix)	Social Security &	5875.03	4775.76	81.29



**Table 3.15: Outlay & Expenditure in the 12<sup>th</sup> Five Year Plan, (Rs.crore)**

Sl.No	Sectors	12 <sup>th</sup> Five Year Plan (2012-17) Projected Outlay	Anticipated Expenditure in the first four years(2012-16) of the 12 <sup>th</sup> Five year Plan	% of anticipated expenditure to the 12 <sup>th</sup> Five year Plan Outlay
	Welfare			
(x)	Women & Child Development	6564.86	6956.37	105.96
	Total B: Social Services	100488.71	99751.95	99.27
	C: General Services	5716.04	3391.33	59.33
	Grand Total(A+B+C)	255250.00	226302.73	88.66

Source: Economic Survey 2014-15, Government of Karnataka and Annual Plan 2015-16 Documents, Planning Department, Government of Karnataka.

Sectoral breakup of plan outlays by major sectors for the last two years is presented in **Table 3.16**.

**Table 3.16: Developmental Outlays by Major Sectors. (Rs. crore)**

Sl. No.	Sectors	Annual Plan2014-15 (RE)	Annual Plan2015-16 (BE)	% change in 2015-16 (BE) over 2014-15 (RE)
<b>A.</b>	<b>Economic Services</b>			
1	Agriculture & Allied Activities	5683.10	6320.15	11.20
2	Rural Development	3229.53	3075.10	-4.78
3	Special Area Programme	1363.02	1803.49	32.31
4	Irrigation and Flood Control	9297.30	11706.67	25.91
5	Energy	4380.32	4816.46	9.95
6	Industry & Minerals	1051.39	958.78	-8.80
7	Transport	6094.55	7002.61	14.89
8	Science, Technology, Forestry, Ecology & Environments	830.62	519.33	-37.47
9	General Economic Services	1084.71	1688.01	55.62
	<b>Total - A : Economic Services</b>	<b>33014.55</b>	<b>37890.60</b>	<b>14.77</b>
10	<b>B:Social Services</b>			
(i)	Education (incl.Sports & Kannada & Culture)	8266.15	7407.61	-10.39
(ii)	Medical & Public Health	3470.23	3239.03	-6.66
(iii)	Water Supply & Sanitation	2563.26	3186.78	24.32
(iv)	Housing	2362.82	3876.09	64.05
(v)	Urban Development	6195.82	5684.91	-8.25
(vi)	Information & Publicity	35.71	38.70	8.30
(vii)	Welfare of SCs, STs , OBCs and Minorities	5298.81	6115.40	15.41
(viii)	Labour & Employment	468.24	470.60	0.50
(ix)	Social Security & Welfare	1104.00	1318.11	19.39
(x)	Women & Child Development	2010.44	2514.60	25.08
	<b>Total: Social Services</b>	<b>31775.48</b>	<b>33851.83</b>	<b>6.53</b>
	<b>C: General Services</b>	<b>1113.47</b>	<b>854.38</b>	<b>-23.26</b>
	<b>Grand Total</b>	<b>65903.50</b>	<b>72596.81</b>	<b>10.15</b>

BE-Budget Estimates, RE-Revised Estimates

Source: Annual Plan Documents of Karnataka, 2015-16, Planning Department, GoK

**Table 3.17: Department wise New Plan Scheme for the year 2015-16**

Agriculture	2
Animal Husbandry	4
Fisheries	3
Forest, Environment and Ecology	6
Sericulture	6
Co-operation	6
Social welfare	9
Backward Classes	8
Minorities Welfare	7
Major Irrigation	2
Commerce & Industries	18
Higher Education	10
Primary Education	3
Health & Family Welfare	2
Medical Education	2
Revenue	2
Kannada and Culture	21
Labour	2
Law	2
Urban Development Department	2
Women and Child	3
E-Governance	1
Home	4
Sports & Youth Services	3
Tourism	7
Transport	1
<b>Total</b>	<b>136</b>

Source: PMI Division, Planning Department, GoK

### 3.7: NEW SCHEMES IN 2015-16 BUDGET

In all, 136 new schemes were announced in the 2015-16 budget. The Kannada, Culture & Information sector has twenty one schemes, followed by Commerce & Industries has eighteen new schemes, Higher Education has ten new schemes, Social welfare has nine new schemes, Backward Classes has eight new schemes. Distribution of other new schemes across the departments is presented in **Table 3.17**.

#### 3.7.1: Description of Major New Schemes for the year 2015-16

**Krishi Abhiyaana:** The objective of the scheme is to interact with farmers and resolve issues pertaining to their cropping plans for the season, at the onset of monsoon and

kharif seasons, during which all the staff of the Agriculture and allied departments, will go to the hoblis, along with the agriculture university scientists on pre-specified days. Rs. 3.00 crore is provided under this scheme.

**Pashu Bhagya:** Under this scheme, Backend subsidy of 33% to farmers belonging to Schedule Caste and Schedule Tribes and 25% to other small and marginal farmers will be provided to establish cattle, sheep, goat, pig, poultry units in availing maximum loan of Rs.1.20 lakh from commercial banks. An amount of Rs.53.15 crore is provided to implement the scheme.

**Swavalambane scheme:** This scheme is started with the objective to encourage the entrepreneurship, skill development and IPR awareness among the students. In order to

encourage entrepreneurship, Government will reimburse the interest on bank loans upto 10 lakhs per annum for 3 years, obtained by 1% of selected and interested students setting up new industries. Rs.10 crores is provided for this purpose.

**E-hospital Software:** This scheme is implemented in all hospitals of the State with a view to document and utilize the health information of every patient visiting Government hospitals in the State. Funds

provided under National Health Mission are being used to implement the scheme.

**Swachchata Mission:** It is implemented in all the 219 Cities/Towns including BBMP in the State under Swach Bharat Mission. An amount of Rs.80 crore is provided.

**Karnataka's First Internet Encyclopaedia (KANAJA):** It is proposed to constitute a committee for the development of Kannada's First Internet Encyclopaedia. Rs.2.00 crore is provided to implement the scheme.

### **Major Policy Announcements in the 2015-16 budget**

**Micro Irrigation Policy:** To use water efficiently and preserve micro nutrients, this policy is formulated.

**Transgender Policy:** To enable sex minorities to lead a respectable life by taking up income generating activities, this policy is formulated.

**Girl Child Policy:** To deal with issues such as prevention of exploitation of girl children, child marriage, eradication of malnutrition etc this policy is formulated.

**Slum Development Policy:** To provide better facilities in slum areas of Karnataka, this policy is formulated.

**New Labour Policy:** To revise the labour laws, New Labour Policy is formulated.

**New Bio-Technology Policy:** A new Bio Technology including Bio-venture Fund will be evolved.

**Table 3.18: District Plan Outlay for the year 2015-16, (Rs. lakh)**

District	State	%	Central	%	Total	%
Bangalore Urban	29892.83	2.64	2440.35	0.22	32333.18	2.85
Bangalore Rural	12420.45	1.10	1125.60	0.10	13546.05	1.20
Bagalkote	30136.35	2.66	1290.85	0.11	31427.20	2.77
Belgaum	63760.26	5.63	6027.14	0.53	69787.40	6.16
Bellary	32892.46	2.90	1582.54	0.14	34475.00	3.04
Bidar	23671.98	2.09	1778.02	0.16	25450.00	2.25
Bijapur	33105.74	2.92	1804.01	0.16	34909.75	3.08
Chamarajanagar	14123.41	1.25	1305.19	0.12	15428.60	1.36
Chikkaballapur	16836.79	1.49	778.21	0.07	17615.00	1.56
Chickmagalore	18051.31	1.59	2027.54	0.18	20078.85	1.77
Chitradurga	24279.19	2.14	1925.81	0.17	26205.00	2.31
Dakshina Kannada	20408.95	1.80	2115.43	0.19	22524.38	1.99
Davangere	23834.15	2.10	2393.30	0.21	26227.45	2.32
Dharwad	21048.90	1.86	1478.37	0.13	22527.27	1.99
Gadag	14741.45	1.30	1069.25	0.09	15810.70	1.40
Gulbarga	40037.41	3.53	1655.59	0.15	41693.00	3.68
Hassan	23086.03	2.04	3059.97	0.27	26146.00	2.31
Haveri	21888.19	1.93	1293.31	0.11	23181.50	2.05
Kodagu	7664.89	0.68	1169.60	0.10	8834.49	0.78
Kolar	17664.21	1.56	919.28	0.08	18583.49	1.64
Koppal	22146.84	1.96	980.43	0.09	23127.27	2.04
Mandya	22466.14	1.98	1945.55	0.17	24411.69	2.16
Mysore	32015.09	2.83	2871.91	0.25	34887.00	3.08
Raichur	31840.89	2.81	1510.74	0.13	33351.63	2.94
Ramanagar	13862.22	1.22	1331.27	0.12	15193.49	1.34
Shimoga	25672.88	2.27	1657.62	0.15	27330.50	2.41
Tumkur	34212.12	3.02	2882.88	0.25	37095.00	3.27
Udupi	10673.52	0.94	1691.48	0.15	12365.00	1.09
Uttar Kannada	23471.77	2.07	2178.23	0.19	25650.00	2.26
Yadgir	16122.47	1.42	749.53	0.07	16872.00	1.49
Lump sum – ZP	355532.11	31.39	171.00	0.02	355703.11	31.40
<b>Grand Total</b>	<b>1077561.00</b>	<b>95.13</b>	<b>55210.00</b>	<b>4.87</b>	<b>1132771.00</b>	<b>100.00</b>

Source: Budget Documents of Zilla Panchayaths, (link documents) 2015-16

### 3.8 DISTRICT SECTOR PLAN OUTLAYS FOR THE YEAR 2015-16

District sector plan outlays from 1991-92 to 2015-16 is given in **Appendix 3.1**. The total outlay of the district sector plan programmes for the year 2015-16 is Rs.11327.71crore, of which Rs.10775.61crore is the State's share (this constitutes around 15% of the total State's plan size) and Rs.552.10 crore is the share of the Government of India., in the district sector outlay, the corresponding share of the State and the centre being 95% and 5% respectively. District wise break-up of the plan outlay is presented in **Table 3.18**.

### 3.9 EXTERNALLY AIDED PROJECTS

There are sixteen external aided projects under implementation with assistance from the World Bank and other external agencies during the year 2015-16. Of these, six are in Urban Development, three in Public Works Department, two in Rural Development & Panchayat Raj department, two in Water Resources and one each in Health & Family Welfare and Energy. Another project, namely, Sujala III is being implemented by both Agriculture and Horticulture departments. Project wise details are presented in **Table 3.19**

**Table 3.19: Externally Aided Projects under implementation -2015-16, (Rs.crore)**

Name of the project & Department	Name of the aiding Agency	Project cost	Year of Commencement/ Closing	Expenditure Since Inception up to end of 31-12-2015	Outlay for 2015-16
Dam Rehabilitation & Improvement	World Bank	276.75	2014-18	0.12	36.50
Karnataka Integrated & Sustainable Water Resource Management	ADB	1125.00	2015-18	1.90	66.38
Agriculture & Horticulture Sujala- III	World Bank	514.40	2013-18	58.39	129.70
Health and Family Welfare Karnataka Health Systems Development & Reforms(including additional finance)	World Bank	1455.70	2007-16	1339.01	291.01
Urban Development Cauvery Water Supply Scheme- Stage IV – Phase II	JICA	3383.00	2005-17	4310.81	347.00
Karnataka Municipal Reforms*	World Bank	1364.00	2006-15	1244.78	50.00
North Karnataka Urban Sector Investment Programme	ADB	1980.00	2008-16	1284.18	362.00
Karnataka Integrated Urban Water Management Investment Programme	ADB	1462.50	2014-24	41.34	75.00
Karnataka Urban Water Supply Modernization Project	World Bank	1809.00	Project yet to be signed	5.67	30.00
Bus Rapid Transit System-Hubli-Dharwad	World Bank	705.00	2013-15	276.92	150.00
Public Works i. Karnataka State Highways Improvement Phase-II	World Bank	4522.50	2011-16	1043.39	467.00
ii. Karnataka State Highways Improvement Phase-II	ADB	2150.40	2011-16	1023.70	334.00
Sustainable Coastal Protection & Management	ADB	911.00	2011-19	112.28	87.34
Rural Development and Panchayat Raj Rapid response to Food Price & Malnutrition(Multi-Sectoral Nutrition Pilot Project)	World Bank	27.30	2014-17	0.91	7.00
Karnataka Panchayat Strengthening- Gram Swaraj**	World Bank	674.14	2006-14	671.22	2.00
Energy Bangalore Distribution Upgradation	JICA	563.70	2007-17	372.45	73.00
Total				11787.07	2507.93

\*Project has been completed during 2014-15 and amount allocated for 2015-16 is for committed Expenditure

\*\* Project has been completed during 2013-14 and amount allocated for 2015-16 is for committed Expenditure

Source: Project Monitoring Unit, Finance Department, GoK

### 3.10. CURRENT FISCAL CHALLENGES AND WAY FORWARD

The State has to balance the requirement of providing adequate funds to critical sectors of the economy while adhering to fiscal prudence norms. The following are some key challenges identified, which the State has to tackle in the ensuing years.

**1. Tax effort plateau:** Having already achieved the highest tax to GSDP ratio, any further increase in the tax effort is fairly challenging. Similarly, achieving a higher level of tax buoyancy is difficult as the marginal increase in the taxes from a high base is likely to be lower. As a result, until the economy as a whole grows at an accelerated rate, the tax collections will not see a quantum jump like in the past.

**2. Rising commitments on the Revenue expenditure front:** Expenditure on the revenue front has increased multifold primarily on account of increasing subsidy burden on the State. Also the committed expenditure in terms of salary, pension and interest payments are primarily in the revenue account. The narrowing down of the revenue surplus gap is a clear indicator of the strain on the revenue budget.

The high percentage of committed revenue expenditure to revenue receipts reveals that the State has limited flexibility in allocation of its resources for new schemes. Revenue surplus of only Rs.160 crore in RE14-15 leaves limited maneuverability on the revenue expenditure side. Hence the need of the hour is expenditure rationalization/ re-calibration. By weeding out non-essential schemes, imposing sunset clauses in schemes running for more than five years with no significant benefit, limiting non-development revenue expenditure and streamlining revenue collections, the State would have to target to build up adequate revenue surplus for use in capital formation and productive expenditure. The major challenge before the State will be to continuously focus on improving the outcomes of the expenditure so that the impact is visible in improvement of Human Development Indicators (HDI) for the State and overall socio-economic growth.

**3. Unfunded or partially funded liabilities:** At the macro level, Government of Karnataka has maintained the fiscal discipline mandated by the Legislature through Karnataka Fiscal Responsibility Act. However, in these years, the State has also taken up several commitments which has the potential of creating fiscal stress. Therefore, it is important to build a midterm perspective on expenditure to keep it sustainable.

**4. Review of Public Resources:** The State's revenue expenditure growth is characterized by a large portion of it being committed expenditure thereby leaving little room for manoeuvrability for furthering other capital investments to meet the growing needs of social and economic infrastructure. The State has been increasingly relying on Public Private Partnerships (PPPs) to fill these investment gaps. However, these infrastructure challenges remain large and require public investment to encourage private investment to supplement. There is also increasing demand on the public resources in the light of statutory legislations like Right to Education, Food Security Act and Employment Guarantee measures. These emerging concerns necessitate a review of the public resources as a whole to assess their allocative and technical efficiency.

**5. Reduction in Plan grants given by the Central Government:** Government of India has reduced grants for Centrally Sponsored Schemes. Many of these Schemes have ongoing commitments and hence they cannot be stopped all of a sudden. As a result, additional burden has been put on the State to compensate for this reduction. Finding adequate resources to fund these schemes is a serious challenge for state finances.

**6. Low non-tax revenue:** While the State has one of the highest own taxes to GSDP ratio, the ratio of non-tax revenue to total receipts has not been increasing over the years on anticipated lines. Apart from enforcement and monitoring of own tax efforts, special emphasis needs to be given for mobilizing non tax revenues during the coming years. Government is committed to rationalizing user charges and reviewing the same regularly.

**7. Non-Plan Expenditure:** A large part of non-plan expenditure of State consists of Developmental expenditure, which is primarily spent on Social and Economic Services. The Government strategy is to effectively control non-essential non developmental expenditure so as to ensure adequate resource allocation for development activities in various sectors.

**The following New initiatives have been taken by the State:**

**a. Comprehensive Decision Support System:** The State is implementing a Comprehensive Integrated Decision Support System in a time bound manner for the transparent resource allocation, better decentralized monitoring and improved implementation of all the plan schemes and programmes. This system would capture information on the progress of the State Government's Schemes directly from the implementation points and enable the Government to formulate comprehensive District and Block Plans. The system will ensure need based equitable distribution of resources to every Block and District and their better utilization through decentralized participatory monitoring.

**b. Result Framework Document:** Result Frame Work Document (RFD) is designed for the departments in the State to set out its Vision, Mission and Objectives wherein it requires to define and disclose quantifiable indicators for measuring the success of the stated activities. Since 2011-12 RFD is being implemented in the State. During 2015-16, 32 Administrative Departments have uploaded their RFD in the website. With a view to enable the departments for rationalization or merger of schemes/programmes related to outcomes leading to better implementation, resource allocations to outcomes, RFD guidelines have been revised and communicated to all the departments.

**c. Centrally Sponsored Schemes:** Government of India has restructured major Centrally Sponsored Schemes into 66 schemes. From 2014-15 onwards, Central Assistance for these schemes will be through the State Plan. As a result, these resources

will also be a part of the State Plan in future. An amount of Rs. 7051.27 crore is budgeted in the annual Plan 2015-16 as Central Assistance to state Plan as against Rs.14045.60 crore of Central Assistance to State Plan in 2014-15 (RE).

**d. SCP/TSP ACT:** The State is implementing SCP/TSP Act since 2014-15. As per the Act, the allocations made under SCP/TSP are non-divertible and non-lapsable. The allocations will be made on the basis of SC/ST population as per 2011 census every year i.e., 17.15% and 6.95% of the outlay will be reserved for SC and ST category respectively in every department. During the year 2015-16, an allocation of Rs.11773.54 crore is provided under SCP and Rs.4582.72 crore is provided under TSP.

**e. Gender Budget:** The State is one of the pioneers in Gender Budget initiatives and preparing Gender Budget documents since 2007-08. The Gender Budget document indicates the quantum of allocations made through schemes intended for welfare and empowerment of women. All government programmes/Schemes wherein women beneficiaries are at least thirty percent have been classified into categories A and B. Category A covers schemes which benefit women 100 percent. There are 64 schemes under this category in 2015-16. Category B covers schemes, where in women beneficiaries are 30-99 percent. There are 863 schemes under this category in 2015-16.

**f. Khajane II:** An Integrated Financial Management System, will be implemented to provide a single electronic platform to Government officials, banks and public, to carry out all financial transactions pertaining to the State Government.

**g. Article 371(J):** In the Year 2014-15 under Article 371(j), the Hyderabad Karnataka Region Development Board has been established. The jurisdiction of the Board is spread over 42 assembly constituencies of Bidar, Bellary, Kalburgi, Koppal, Raichur and Yadagir districts. In this regard, action has been taken for providing reservation to the people of this area in employment and education. An amount of Rs.1000 crores has

been provided during 2015-16. 70% of the allocation will be used for meeting the infrastructure gaps and 30% for meeting the institutional gaps.

**h. Delegation of Fund release powers to Administrative Departments:** With a view to improve the pace of implementation of schemes and thereby improve plan expenditure, Finance Department has delegated powers of release of funds to concerned Administrative Secretaries for the first three quarters of the Financial Year upto 75 per cent of the budget provision. It is expected that this delegation would improve the pace of plan expenditure incurred by Departments.

**i. Fiscal Management Review Committee:** Government has constituted Fiscal Management Review Committee under the Chief Secretary to review the fiscal and debt position of the state and advice the Finance Minister on the remedial measures to be adopted to ensure adherence to the parameters stipulated in KFRA. The Committee has met in March 2015. The following are some of the major recommendations made by the committee;

**Expenditure side:**

- I. Critically examine expenditure and prioritize them with a focus on capital expenditure in order to generate productive assets that will help the economy to expand in the longer run.
- II. For effective usage of available resources, departments to move over to Medium Term Planning. Departments to explore

possibility of PPP model wherever feasible.

- III. To critically assess the existing subsidies from the point of their effectiveness and to prune down non-merit subsidies in a phased manner to keep expenditure under sustainable levels.

**Receipt Side:**

**(i)** The fund transferred by the Central Government in 2015-16 as per the recommendations of the 14<sup>th</sup> Finance Commission has resulted in drastic reduction in allocation of various centrally sponsored schemes. On account of this the committee suggested to set up a review committee at suitable level to critically assess the necessity of continuation of Centrally Sponsored Schemes where central share has been reduced below 50%.

**(ii)** On account of revised methodology prescribed by the 14<sup>th</sup> Finance Commission there would be sizable contraction in the borrowing space available for the State. It is advised to explore means to maximize the revenue surplus as it will be critical for funding the capital expenditure.

**(iii)** Continuous review and monitoring of tax efforts including enforcement to reach the target set out in budget estimates

**(iv)** Follow up with departments for improving their non-tax revenues by regular revision of fees, user charges etc.

**(v)** Effective use of Extra Budgetary resources of State PSUs.

The Hon`ble Chief Minister has approved the above recommendations. Concerted efforts are needed to translate the above suggestions into action points.



**14th Finance Commission:**

The 14<sup>th</sup> Finance Commission has recommended an increase in the share of the Central devolution to the States from 32% to 42%. State Government has made continued effort and a strong pitch for an increase in the share of the States and also an increase for Karnataka within the divisible pool.

Fiscal deficit of all state will be anchored to an annual limit of 3% of GSDP. (i) The State will be eligible for flexibility of 0.25 percent over and above this for any given year for which borrowing limits are to be fixed if their debt-GSDP ratio is less than or equal to 25 percent in the preceding year. (ii) States will be further eligible for an additional borrowing limit of 0.25 percent of GSDP in a given year for which borrowing limits are to be fixed if the interest payments are less than or equal to 10 percent of the revenue receipts in the preceding year.

The above two options under these flexibility provisions can be availed of by a State either separately, if any of the above criteria is fulfilled, or simultaneously if both the above stated criteria are fulfilled. Thus, a State can have a maximum fiscal deficit- GSDP limit of 3.5 per cent in any given year.

The flexibility in availing the additional limit under either of the two options or both will be available to a State only if there is no revenue deficit in the year in which borrowing limits are to be fixed and the immediately preceding year.

If a State is not able to fully utilize its sanctioned borrowing limit of 3 per cent of GSDP in any particular year during the first four years of award period (2015-16 to 2018-19), it will have the option of availing this un-utilised borrowing amount only in the following year but within award period.

# INVESTMENT AND EXPORTS

# 4

Promotion of private investment has been high on the agenda of Government of Karnataka. The concerted efforts by the State have resulted in a large-scale inflow of investments during the past few years. The State has also developed a distinct policy framework for guiding investments and set up dedicated institutions that streamline the approval processes. Karnataka offers wide range of fiscal and financial incentives to investors even while nurturing the supporting infrastructure such as technical institutions, laboratories and research institutions. The State's information technology and biotechnology sectors have attracted significant investments and contribute to significant exports from the country in those sectors. Exports contribute about 40% of the State's GSDP with electronic, computer software and biotechnology contributing a major portion of the exports. Karnataka's economic growth can be accelerated further with a continued emphasis on promotion of private investment and enhancement of industrial competitiveness.

## 4.1. Investment in Karnataka

Karnataka is a pioneer in introducing many reform initiatives adopted in India and has been highly proactive in attracting private investment. Lucrative policies incentivizing private domestic and foreign investments are framed from time to time. These policies along with an investment friendly climate in the State have helped the State attract large-scale private investment, especially in information and communication technology (ICT) and biotechnology sectors. Karnataka Udyog Mitra, established under the Department of Industries and Commerce, by the Government of Karnataka, is specially meant for the promotion and facilitation of investments in the State.

### 4.1.1 Policy Framework for Attracting Private Investments

Foreign investment is a subject in the Central List of the Indian Constitution. All powers for the design of policies for promotion and regulation (including approvals) of foreign investment rest with the Government of India. State Governments complement the National policy efforts by initiating special measures for speedy clearances and smooth facilitation of inflow of investments. The National policy framework is aimed at maximising the inflow of private foreign investment into India. However, investors have the ultimate locational choice of their investment anywhere in India. In this context, policies and programmes of Government of Karnataka for attracting private foreign investment by making Karnataka a competitive and attractive destination for global investments assume special and utmost significance.

Karnataka is one of the industrially developed States in the Country. The State has been laying special emphasis on promotion of industries, trade and service sectors. In order to make the State more attractive and investor friendly, investment promotion policies and programmes framed on a periodical basis have offered attractive incentives and concessions and made attempts to strengthen the required infrastructure. The industrial promotion policies also aim at achieving inclusive development, given the wide regional industrial development disparities prevailing in the State. The State has been making concerted efforts to announce suitable incentives in attracting investment into the backward regions. The current industrial policy 2014-19 of the Government of Karnataka is a reflection of these broad objectives for promotion of industrial investment and development in the State.

The fiscal and financial incentives, announced by the State government include capital investment subsidy, exemption of electricity duty on captive power generation, exemption of stamp duty & reduction of registration charges, waiver of conversion fee (on lands converted for industrial use), acquisition and allotment of land through Karnataka Industrial Areas Development Board (KIADB), subsidy for setting up of Effluent Treatment Plants (ETPs), entry tax & special entry tax concessions, technology upgradation and, industrial infrastructure development/common infrastructure/facilities in notified industrial clusters. Agricultural produce processing industries are exempted from payment of APMC cess. Incentives such as interest free loan on VAT for large and mega projects, anchor unit subsidy, special incentives for enterprises coming up in low human development index (HDI) districts (only for large and mega projects), interest subsidy for micro-manufacturing enterprises, exemption from electricity duty for micro and small manufacturing enterprises and refund of cost incurred for preparation project reports for micro and small manufacturing enterprises are also provided.

Karnataka Udyog Mitra (KUM) is a single contact point for all investors who are looking at setting up enterprises/business in Karnataka. As the nodal agency, its role is to facilitate investments and execute initiatives to enable a smooth transition from the stage of receiving investment proposals to the eventual implementation of the project. It acts as a secretariat for State High Level Clearance Committee (SHLCC) chaired by Hon'ble Chief Minister for projects above Rs.500 crore and State Level Single Window Clearance Committee (SLSWCC) chaired by Hon'ble Minister for Large and Medium Industries and Tourism, for projects between Rs.15 crore to Rs.500 crore.

#### **4.1.2 Karnataka's Investment Climate**

Karnataka's vast and diversified resource base has emerged as a reputed investment destination for investors worldwide. The State

was the first to enact the Industrial Facilitation Act to help investors. Karnataka has a single window which acts as a one-stop-shop for investments in the State. The specific advantages for Karnataka include i) Good law and order situation prevailing in Karnataka which is conducive to foreign direct investments ii) Abundant availability of highly skilled manpower iii) Karnataka ranks among the top 5 industrially developed States in India iv) The State provides excellent logistic support and connectivity to the investors and v) The State provides one of the biggest and fast expanding markets in the Country.

Karnataka's investor-friendly and responsive administration has worked towards easing administrative procedures and implementing policy measures for faster and smoother industrial growth. Some of the significant measures are as follows:

- (a) An investor-friendly responsive administration
- (b) The State-level single window clearance committee and the State high level clearance committee facilitate clearance of proposals in a speedy manner.
- (c) Sector-specific industrial zones and SEZs that match the natural resources and capabilities of a region with the industry requirements.
- (d) Creation of World-class, ready-to-use infrastructure through investments in power, roads, water, warehouse and logistic facilities, connectivity through rails and ports etc.
- (e) The State Government's packages of incentives and concessions for new industrial investments announced from time to time
- (f) Special focus on skill development to enhance generation of technical manpower
- (g) Excellent telecommunication network and optical fibre connectivity throughout the State
- (h) Exemption from State taxes for all purchases from domestic tariff area

### 4.1.3 Investment flows into Karnataka

Details of projects approved by the State Level Single Window Clearance Committee (SLSWCC) are provided in Table 4.1. The State had attracted maximum investment during the year 2006-07 with an investment of Rs 11511.44 crore. In terms of approved number of units and employment too, 2006-07 had the largest during the time period under study. Good flow of investment continued in 2007-08. The global recessionary trends have not spared Karnataka as one can observe a reduced size of investment in the later years.

Projects with an investment of Rs 500 crore and above are cleared by the State High Level Clearance Committee (SHLCC). The number of projects cleared by SHLCC during 2006-07 till 2015-16 are presented in Table 4.2.

Karnataka accounts for a significant share in the total FDI that flows into India. The statistics provided in Table 4.3 reveal that the State had 11.13% share in the total FDI taking place in India in 2014-15. Karnataka attracted FDI of US \$18319 million during the period of April 2000 to Sep. 2015, constituting 6.91% of the all-India FDI.

**Table 4.1: Projects approved by State Level Single Window Clearance Committee: 2006-07 to 2015-16**

Year	Approved Projects	Investments (Rs. In crore)	Employment (In Nos.)
2006-07	871	11511.44	612620
2007-08	727	10266.92	349015
2008-09	310	5181.62	135623
2009-10	359	7749.88	115932
2010-11	439	6879.64	110505
2011-12	410	5328.50	65549
2012-13	675	9350.79	141821
2013-14	209	3558.21	43759
2014-15 (Up to Sep 2015)	72	1996.33	24248
2015-16 (Up to Feb. 2016)	262	15246.00	115827

Source: Karnataka Udyog Mitra

**Table 4.2: Projects approved by State High Level Clearance Committee: 2006-07 to 2015-16**

Year	Approved Projects	Investments (Rs. In crore)	Employment (In Nos.)
2006-07	66	92055.84	781966
2007-08	108	160522.82	1996504
2008-09	50	105266.20	410842
2009-10	110	288548.57	284934
2010-11	186	187185.70	580161
2011-12	60	34088.80	165010
2012-13	100	133109.77	1158001
2013-14	46	38733.00	127692
2014-15	36	52148.05	31819
2015-16 (Up to Feb 2016)	29	90831.00	172074

Source: Karnataka Udyog Mitra

**Table 4.3: Foreign Direct Investment Inflow to Karnataka, (US \$ Million)**

Year	Karnataka	All India	Percentage
2007 – 08	1581	23901	6.61
2008 – 09	2026	27331	7.41
2009 – 10	1029	25834	3.98
2010 – 11	1332	19427	6.86
2011-12	1533	35121	4.36
Total (2007-12)	7501	131614	5.70
2012 – 13	1023	22424	4.56
2013 – 14	1892	24299	7.78
2014-15	3444	30931	11.13
2015-16	2199	16631	13.22
April 2000 to Sep 2015	18319	265265	6.91

Source: Department of Industrial Policy & Promotion, GOI

#### 4.1.4 Investment in Information Technology:

The IT Revolution in Karnataka began with the establishment of the multinational company viz., Texas Instruments in 1984. Bengaluru was the first city in India to set up a satellite earth station for high speed communication services to facilitate software exports in 1992. The State made a giant leap in the IT sector by establishing the Country's first extended facility of the International gateway and network operations centre at the Software Technology Park of India (STPI) in the Electronic city. This catalyzed the positive growth in sector. Today, Karnataka is home to over 3500 IT companies, contributing to over Rs. 2.00 lakh crore of exports, The industry contributes to over 25% of the State's GSDP. The share of Karnataka in IT exports is nearly 38% of the country's exports.

Karnataka continues to be the most preferred destination for all global IT & BT giants due to numerous favorable factors such as:

- Pro-active Government
- Industry friendly Labour Laws
- Salubrious Climate
- Excellent Law & Order situation
- Absence of Natural Calamities
- Talent pool of highly trained professionals
- Cosmopolitan social life in the cities particularly at Bengaluru
- Investor friendly opportunities

The IT Industry in the State has emerged as one of the largest job providing sector. The Industry provides direct employment to over a million and indirect employment to over 3 million persons

The information technology (IT) sector in Karnataka has become one of the main growth drivers of Karnataka's economy. IT activity in Karnataka is largely concentrated in Bengaluru. Lately, other parts of Karnataka have also seen a growth in IT-related activities.

Bengaluru, is the 4<sup>th</sup> Best Technology Hub in the world, after Silicon Valley, Boston and London (as per UNDP Report), has become a global brand in the IT space. Almost all the Fortune 500 companies have one or the other of their operations outsourced in Bengaluru. As per the Global Start-up Ecosystem Ranking Report 2015, Bengaluru, is the only Indian city to be ranked within the best 20 Start-up ecosystems across the world. Many global brands such as GE, Texas Instruments, Intel, AMD, SAP, CISCO, Microsoft, Motorola, Nokia Mercedes Benz, Huawei etc., have their R & D activity based in Bengaluru.

##### 4.1.4.1. Karnataka I<sup>4</sup> Policy (IT, ITES, Innovation, Incentives Policy)

The State Government has been encouraging IT units to set their operation in the State. Under the State's IT policy, several infrastructure facilities are proposed in Mysuru, Hubballi, Manipal & Mangaluru

apart from Bengaluru to help the development of IT industry. The setting up of IT industries under this policy is with an objective of earning valuable foreign exchange through software exports.

The Government has brought out new IT Policy i.e., Karnataka I<sup>4</sup> Policy (IT, ITeS, Innovation Incentives Policy) where in several incentives are being offered to new IT / ITES and other knowledge based sectors to set up their facility in Tier 2/3 Cities across Karnataka.

The Dept. of IT, BT and S&T acts as Single Window Agency for clearance of IT / ITES / Start-ups / other Knowledge based industries.

#### 4.1.4.2. Karnataka's Electronics Systems Design and Manufacturing Policy 2013:

Electronic Systems Design and Manufacturing (ESDM) is the fastest growing segment of the Information and Communications Technology (ICT) sector. As per the National Electronics Policy – 2012 (NEP-2012), ESDM is expected to grow to USD \$400 Billion by the year 2020 and will generate a total employment of over 28 million. The objective of the Karnataka ESDM Policy is to facilitate, promote and develop the “ESDM” sector in the State of Karnataka and make Karnataka a preferred destination for investment in Telecommunications, Defense, Medical, Industrial, Automotive, Consumer Products, applications and components, parts, and accessories required for the aforesaid products and applications.

#### Highlights of the I<sup>4</sup> policy

- ❖ Employment Linked Incentivization of Land Allotment(**E-LILA**) outside Bengaluru Urban and Rural districts' Limits
- ❖ Land allotment for IT / ITES, Animation Computer Graphic imagery (CGI) / Knowledge based industries at concessional rates.
- ❖ Allotment linked to employment generation for investments outside Bengaluru Urban and Rural Districts.
- ❖ Thrust to promote Tier 2/3 cities.
- ❖ Incentives available only for direct end users.
- ❖ Land will be allotted at the rate of 1 acre for every 1000 jobs created.
- ❖ Start-up companies to be provided plug and play space with internet at concessional rates of Rs.5-15 per square feet depending on location
- ❖ Dept. of IT, BT and S&T to act as Single Window Agency for clearance of IT / ITES / Start-ups / other Knowledge based industries.
- ❖ Exemption of Karnataka Industrial Employment (Standing Orders) Rules, 1964 to IT / ITES / Start-ups / other Knowledge based industries for a period of 5 years.
- ❖ IT / ITES / Start-ups / Animation / KPO / Knowledge based industries to be treated at par with Public Utilities.
- ❖ Reimbursement of PF/ESI of Rs.2000 Per month per employee for 2 years for all new employment created in Tier 2/3 Cities.
- ❖ Industrial Power tariff will be applicable to all IT / ITES / BPO / Telecom / KPO / Start-ups / Animation / KPO / Knowledge based industries
- ❖ Stamp Duty Exemption of 75% in Mysuru and Mangaluru for IT / ITES / Start-ups / other Knowledge based industries in addition to other locations.
- ❖ Skill development programme for training unemployed youth in basic IT/BPO/ESDM/Telecom etc.

The following targets are set for Karnataka ESDM Policy:

1. Emerge as the leading contributor to India's ESDM sector by accounting for at least 10% of the USD \$400 billion by 2020,
2. Generate over 20% of the country's total ESDM exports target of USD \$80 billion by 2020,
3. Develop core competencies in specific ESDM verticals such as telecom, defense electronics, avionics and energy.
4. Make Karnataka the country's preferred destination for investments in ESDM, and
5. Generate at least 240,000 new jobs, 25% of India's PhDs and 5000 patent filings in ESDM sector in Karnataka by 2020.
6. Increase the value-addition that is done in Karnataka.

Department of Electronics and IT, Government of India has approved setting up of Brownfield ESDM Clusters-one in Electronics City, Bangalore and another in Mysore. The ESDM Clusters will be set up on PPP mode, stake holders being Government of India, State Government and Industry bodies.

#### **4.1.4.3. Penetration of ITBT into regions other than Bengaluru:**

The thrust of the ICT Policy and ESDM Policy is on development of IT and ESDM Companies in the Tier – 2 / 3 Cities of Hubballi – Dharwad, Mysuru, Mangaluru, Kalaburgi and Belagavi. While IT Parks have been developed in Hubballi-Dharwad, Shivamogga and Kalaburgi, the Department would conduct feasibility study for IT Parks in Mysuru, Mangaluru, Belagavi and Bagalkote. Skill Development programs have been started in Tier – 2 and Tier-3 cities, especially for the Karnataka ESDM companies. The Department of IT, BT and S & T, Government of Karnataka has approved two ESDM common facility centers in collaboration with the Department of Electronics & Information Technology, Government of India. One greenfield ESDM cluster is proposed to be setup in Vasanthanarasapura, Tumkur dist.

The State Government pursued and obtained approval of G.O.I. for

establishment of Indian Institute of Information Technology (IIIT) in Dharwad. The new IIIT will be set up on PPP mode, with Government of India funding 50% of the project cost. State Government has committed to provide 35% of the project cost and 50-100 acres of land in Dharwad, free of cost. Balance of 15% of the project cost would come from Industry Partners. Government land of 61 acres has been identified in Dharwad for this project and work will start soon after the land is handed over to the Revenue Department. Meanwhile, the Institute has started functioning in a temporary campus in Hubballi IT Park and begun the academic session from the year 2015-2016.

#### **4.1.4.4 Karnataka Start up policy 2015-2020.**

1. Karnataka is the first state to roll out multi sector start up policy in the country aiming towards a globally competitive start up eco system.
2. The objective is to set-up 20,000 technology Start-ups by 2020.
3. Department of IT, BT and S & T, in partnership with NASSCOM set up the first start up warehouse in the country, in 10,000 sq.ft. of space.
4. New Age Incubation Network (NAIN) academic institution will be assisted to establish an incubation facility and for

funding of entrepreneurship Projects in colleges.

5. Start up Cell will facilitate handholding of new ventures started by young people.
6. Release of funds for early stage startup ventures

Government of Karnataka in partnership with NASSCOM has set up the first start up warehouse at Diamond District, Old Airport Road, Bengaluru. This is one of the recommendations of the KIG 2020 Report. The first startup warehouse has been running successfully and it has incubated 64 Start-ups. All the start ups incubated in the warehouse are reported to be in Bengaluru only and are expected to grow their operations locally.

Bengaluru is now also known as the Startup Capital of India and it is reported that nearly 30% of the startups are from Bengaluru. Encouraged by the success of the first warehouse, Government of Karnataka has set-up a second start up ware house in the city in 36,000 sq.ft. which is expected to accommodate around 500 work stations along with other infrastructure.

**New Age Incubation Centres:** Nine Incubation Centres have been sanctioned for engineering colleges, one each in Shivamoga, Kalaburagi, Dharwad, Tumakuru, Vijayapura, Bagalkot, Nitte (Udupi District), Mysuru and Belagavi. These Incubation centres will give first preference to students, research scholars and alumni of the chosen colleges to solve the local problems and find solutions to local needs rather than global problems and needs. State will provide funding assistance of up to Rs. 40 lakh per college per year for 3 years.

#### **4.1.4.5. Karnataka Semiconductor Venture Capital Fund (KARSEMVEN Fund)**

Traditionally, Karnataka has been the favoured destination for the technology sector-in software, semiconductors and biotechnology. Bengaluru has been a preferred hub of the GoI defence labs. This coupled with the talent pool, access to engineering colleges and attractiveness as an

investment destination for private sector companies, has created an ecosystem giving Karnataka a national edge.

Bengaluru is the largest hub of semiconductor design companies, outside the Bay Area in California. Nearly 70% of the country's chip designers work here and around 80% of the sector's revenues in design are from this city alone.

Government of Karnataka focus is on four key activities.

- a. Promote Karnataka as a semiconductor design hub.
- b. Attract investments in high-tech semiconductor manufacturing.
- c. Promote generation and use of green energy – specifically solar energy.
- d. Focus on manpower development.

GoK / KBITS has set up Karnataka Semiconductor Venture Capital Fund (KARSEMVEN Fund) for assisting Companies in the Semiconductor sector. The total fund size is Rs.96.15 crore. The fund has achieved the initial closing of Rs.50 crore on 9/5/2014. The fund has become operational and the Investment Committee has been set up. Two companies namely Graphene Semiconductor Services (P) Limited and Prodigy Technovations (P) Limited, have been funded so far. This is a major achievement in taking the investments in Semiconductor industry forward.

#### **4.1.4.6. Karnataka Animation Visual Gaming & Comic Policy (KAVGC)**

As per the KAVGC Policy the following projects are being implemented.

##### **a) Digital Art Centers**

As per the KAVGC policy Digital Training Centres (DTC's) being set up in 7 Art Colleges/Schools across Karnataka in association with ABAI providing education in traditional arts are proposed to be equipped with Digital Lab and Technologies so that the digital component can be included in the curriculum and offerings by the State's



educational institutes. The Project is known as Digitalization of Art Colleges (DAC)

Following colleges have been identified for the 1st Phase of the project:

1. Chitrakala Parishath, Bengaluru
2. JSS Halbhavi School of Arts, Dharwad.
3. Vijaya College of Fine Arts, Gadag.
4. M.M.K College of Visual Arts, Kalaburagi
5. University College of Visual Arts, Davangere.
6. Centre for Fine Arts, Animation and Design, Tumakuru
7. Shri Vijaya Mahantesh Lalitakala Mahavidyalaya, Hubballi

Procurement of Hardware/Software for colleges at a cost of **Rs. 35 lakh** is completed in the 1st phase for First year. Funds have been released for procurement of Hardware and Software for the second year.

#### **b) Commencement of Train the Trainer Programme (TTT)**

Train the Trainer is a first of its kind project initiated by KBITS in partnership with ABAI and the Government of Karnataka through its KAVGC policy 1.0, aimed at improving the educational infrastructure of the AVGC (Animation, Visual Effects, Gaming and Comics) industry. In order to improve the quality of the trainers in the AVGC industry and thereby improving the overall quality of education imparted, TTT program aspires to bring together National & International trainers to facilitate the training in different modules of various stages of production. The TTT Centre is established at ABAI premises at HSR Layout, Bengaluru comprising administrative office, faculty chambers, conference room, 2 class rooms and a computer laboratory.

A total of **Rs 2.2 crore** have been earmarked for the TTT Project for a period of two years and already **Rs 2.07 crore** have been released till date. The facility is fully established. ABAI till date has trained **92**

trainers and will reach the target of **150** by the end of next year.

#### **c) Setting up of AVGC Lab & Digital Media City**

The State Government through KBITS, in conjunction with the Association of Bangalore Animation Industry (ABAI) has proposed to develop a Digital Media City with core digital and support infrastructure which will provide an ecosystem of solutions to media/AVGC in the Media City. The Media City is an environment which facilitates quality production of entertainment by bringing the entire value chain of a media unit under one roof bringing players connected in the media domain such as Broadcasters, Studios, Post-Production companies, Animation, VFX facilities, Equipment rental companies, etc. The core aim of the project is to create a State of the Art infrastructure facility for the Animation, Visual Effects and Gaming Industry to provide various services such as Core Media Services, Support Media Services and Ancillary Services. KBITS is in the process of selection of the Global Private Partner for executing the Project.

#### **4.1.4.7. ICT Skills Development Society**

As per the **i<sup>4</sup>** Policy of the Government ICT Skills Development Society (ICTSDS) has been registered in March 2014 with the mandate to take up Skill Development activities in consultation with the Industry for training un-employed and under-employed youth in basic ICT domains of sub-sectors like BPO, Telecom, ESDM, Manufacturing, Services, Health, Automation etc.

The ICT Skills Development Society has been selected to roll out a skilling program in ESDM Sector by the Department of Electronics and Information Technology, Government of India. Karnataka has been selected as one among six states in the country to implement this Govt. of India Scheme which is to the tune of Rs. 14.3 Crore per state and a provision to provide skilling in ESDM sector to 15,000 youth per state.

MoUs have been signed with (i) National Institute of Electronics and Information Technology, Govt. Of India (ii) Electronics Sector Skill Council of India and (iii) Telecom Sector Skill Council.

Innovative policy, in ESDM Sector for Skill Development Society has been selected for the roll out purpose among another six states. The policy envisions to skill youth 90,000 youth in the area of the Electronics and Telecom by 2019. The programs are designed for 8th standard pass onwards till graduation (non-engineering) from any stream, i.e. science, commerce, arts or any other. Scheme provides a career opportunity to the youth in the promising area of electronics and telecommunication. The skills are imparted by GoI recognized private training providers by means of three comments (i) Theory (ii) Lab session (iii) Field training. Trained youth are evaluated and industry recognized and accepted certificates are issued by Project Monitoring Units such as TSSC (Telecom Sector Skill Council), ESSCI (Electronics Sector Skill Council of India) and NIELIT (National Institute of Electronics and Information Technology) GoI. These trainings come free of cost to the youth belonging to SC, ST and Economically Weaker Sections. Total of 47 approved courses have been proposed.

To encourage Entrepreneurship and Innovation, it is proposed to establish incubation centers in ICT sector in association with the selected Engineering Colleges at District Headquarters. Government of Karnataka had constituted the Karnataka ICT Group (KIG) Committee under the Chairmanship of Sri. Mohandas Pai to examine the global changes being driven by a knowledge economy and to realign Karnataka's ICT policies to meet the challenges of the future and sustain its growth. Based on the World Bank's Tequip-II report 9 Engineering Colleges in the State has

been selected for setting up of incubation centers in Karnataka.

**4.1.4.8 Karnataka GIS :** A State wide GIS is being established at an estimated cost of Rs. 150 crore which will be available to all Departments as an important and innovative governance tool in their day-to-day planning and monitoring of schemes. The Karnataka GIS Portal will be first of its kind in the country. A regional centre of KRSRAC was established in Bagalkot in May 2015.

#### **4.1.5. Investment in Biotechnology**

Karnataka State is a leader in Biotechnology sector also. Karnataka contributed more than 30% of the Indian biotech revenues of \$4 billion in 2014-15. Of this, 50 % comes from exports. There are over 300 Biotech Companies in the State.

Karnataka has put in place a strong policy framework to provide all requisite resources for enhancing this industry's research and development capabilities. Being the pioneer of the biotechnology industry, the State has built up considerable resources and talent pool that are well suited for the needs of the industry. Karnataka was one of first Indian States to frame an industry-oriented biotechnology policy. The millennium biotech policy was formulated by Karnataka Government in 2001 to give a thrust to the biotechnology industry in the State. Keeping in tune with rapid changes in the industry, the policy was revised in 2009 which is being further revised to release version 3.0 of the policy to integrate adoption of new technologies as well as innovation to meet challenges that continue to persist in the society. Karnataka is highest in R&D expenditure in South India. To give Biotechnology a further boost, an annual event, namely, **Bangalore India Bio** is organized every year.

**Table 4.4 Performance of Information, Communication and Technology Sector**

Sl. No.	Particulars	Unit	2014-15	2015-16 (up to Dec. 2015)
1	IT Units	No.	2560	3500
2	IT Exports	Rs. crore	1,98,000	1,13,000
3	No. of Employees	Lakh No.	9.5	10

Source: Karnataka Biotechnology & Information Technology Services, Bengaluru.

#### Highlights of Progress in Alignment with Biotech Policy II:

1. Bengaluru Bio Innovation Center (BBC) has been launched in Feb 2015 in Bengaluru Helix Park, Electronics City
2. BBC with capacity to house over 20 SMEs with access to high tech instrumentation facility will be an integral part of the Biotech Ecosystem to provide impetus for innovation.
3. IBAB and CHG well established in Bengaluru Helix Park are being strengthened with hostel and training facilities.
4. MOA signed with CSIR-CFTRI to establish Phase I (Incubation Suites cum Common Instrumentation Facility) in the campus of CFTRI - Mysuru with focus on Nutraceuticals and Phyto-Pharmaceuticals. A grant of Rs.5 Crore has been sanctioned, of which Rs.2 crore has been released.
5. MOA finalized with UAS- Dharwad to establish Phase I (Incubation Suites cum Common Instrumentation Facility) in Dharwad with focus on Agriculture and Biotechnology. A grant of Rs. 6.5 crore has been sanctioned and the first installment of Rs.2.5 crore released.
6. Biotechnology Finishing School (BTFS) program strengthened with 255 students in 5<sup>th</sup> batch enrolled across 12 colleges Student fellowship increased by Government of India to Rs. 10,000/- from Rs. 5,000/- per month.
7. Over 90% of job placements of BTFS III students & 70% of job placement of 4<sup>th</sup> Batch Students.
8. Expert Group on Agriculture Biotechnology (EGAB) constituted as a sub group of VGBT (Vision Group on Biotechnology) has developed a comprehensive Agriculture Biotechnology Policy Document – circulated to all the relevant departments.
9. Funded University of Horticultural Sciences, Bagalkot to the extent of Rs.8.5 crore over 3 years to carry out R&D on Tomato, Banana, Pomegranate and Garcinia, to develop resistance to diseases and establishment of germplasm / gene banks.
10. Proposal sent to DBT-GOI to establish Center for Biomolecular Engineering in Bengaluru – potentially Rs. 700 crore Project.

#### 4.2. Exports of Karnataka

Karnataka has a long tradition of overseas trade. Historically, Karnataka has been a major exporter of commodities like coffee, spices, silk, cashewnuts, handicrafts and

agarbathies. In the last two decades, the State has emerged as a major player in the export of electronic and computer software, engineering goods, readymade garments, petrochemicals, gems and jewellery, agro and

food processing products, chemicals, minerals and ores, marine products, etc. Karnataka has carved out a niche for itself in the global market place as the knowledge and technology capital of the Country. The State has made rapid and spectacular strides in the new economy. Information technology, biotechnology and research and development institutions have enhanced Karnataka's achievements at national and global levels. Karnataka accounts for more than one third of electronics and computer software exports from the country. It is also a leader in exports of readymade garments, gems and jewellery, petrochemicals and engineering commodities from Southern Region.

#### 4.2.1 Export performance of Karnataka

Karnataka ranks 1st in software / service exports and stands 4<sup>th</sup> in merchandise exports in the national export basket. Karnataka is in the processes of establishing a continuous database on exports among the states in India. Visvesvaraya Trade Promotion Centre (VTPC) under the aegis of Department of Industries and Commerce of the Government of Karnataka is the official institution for compilation and publication of the export data by 19 commodities from Director General of Commercial Intelligence and Statistics, Kolkata, Export Promotion Councils (EPCs), Commodities Boards and other State agencies. Trade & industry bodies have also supported for the creation of database.

Karnataka has shown a highest growth rate of exports of over 8% in the year 2014-15 compared to previous year and also when compared to other States. Karnataka's exports in terms of value in 2012-13, 2013-14, 2014-15 and 2015-16 (April-September) are shown in Table 4.5. Appendix 4.1 provides data on the State's exports since 2003-04 to 2014-15.

Karnataka's exports amounted to about Rs. 313570 crore in 2014-15 which constituted about 13.01% of the Country's exports in that year. The share of merchandise exports in the National exports constitutes around 6.21%

and software / service exports around 40% for the year 2014-15.

Karnataka's exports as a percentage of GSDP has a fairly large share and has also increased significantly over the period. The share of exports in GSDP which was 7.36% in 1993-94, has grown to 33.2% in 2014-15

Exports of electronics and computer software constitute the largest share in the State's exports. Its share was of the order of 61.8% in 2014-15. The other commodities which have substantial share in Karnataka's exports in 2014-15 are petroleum and petroleum products (13.03%) and gems & jewellery (7%). These three commodities account for about 82% of Karnataka's exports. Other commodities with significant share in State exports are engineering goods (6.68%) and Readymade garments (3.13%).

Karnataka enjoys a unique position in India in exports of electronics and computer software. In 2014-15, the exports of electronics and computer software from the State accounted for as much as 40% of India's total exports.

Exports of electronics and computer software, cashew & cashew kernels, readymade garments, petroleum & petroleum products, engineering products, marine products, coffee products, spices, agro and processed food products, handicrafts & leather products have increased significantly in 2014-15 as compared to their exports in 2013-14. The exports of silk products, basic chemicals, pharmaceuticals & cosmetics, gems and jewellery and plastic goods have revealed a marginal decline in 2014-15 as compared to 2013-14.

Karnataka's exports were Rs.128535 crore during the period of April-Sept.2015. Export of electronics and software constitutes the largest share in the State's exports. Its share is 53% in 2015-16 (up to September 2015). The other commodities with significant share in exports in 2014-15 (up to September 2015) are gems & jewellery (11.12%) and engineering goods (13.42%).

**Table 4.5-Export Performance of Karnataka, (Value in Rs. crore)**

Sl. No	Commodity	2012-13	2013-14	2014-15	2015-16*
1	Electronics, Computer Software & BT	156000	178000	194020	67980
2	Readymade Garments	7670	8900	9821	5747
3	Petroleum & Petroleum Products	33915	35392	40882	6613
4	Engineering Products	12568	17978	20958	17245
5	Iron Ore & Minerals (incl Granite)	1735	739	749	6958
6	Silk Products	654	650	554	213
7	Coffee Products	3534	3598	4973	1677
8	Basic Chemicals , Pharmaceuticals & Cosmetics	7233	8300	5896	3410
9	Agriculture & Processed Food Products	1149	1300	1383	2703
10	Gem and Jewellery	24483	24175	21998	14289
11	Cashew and Cashew Kernals	847	1200	1505	286
12	Handicrafts	374	516	548	90
13	Leather Products	452	450	543	140
14	Chemicals and Allied Products	491	562	955	715
15	Marine Products	632	1067	1313	150
16	Plastic Goods	788	700	376	56
17	Spices	905	1150	1126	133
18	Wool & Woolen Products	151	176	191	4
19	Miscellaneous and Other	4789	5565	5777	126
	<b>Total</b>	<b>258370</b>	<b>290418</b>	<b>313570</b>	<b>128535</b>

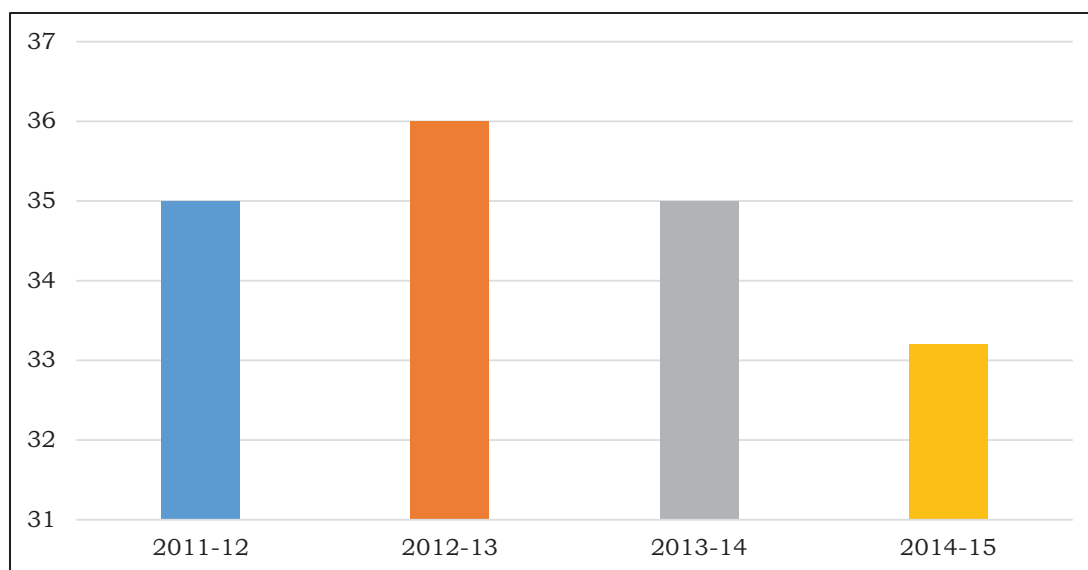
Karn \*up to September 2015.

Source: Visvesvaraya Trade Promotion Centre, Government of Karnataka

Karnataka's contribution to India's exports has varied between 11% and 15% during the Eleventh Period. Further, Karnataka's share in India's total exports of information and communication technology products has remained higher than 25% since 2005-06.

The Share of Karnataka's exports in the State's GSDP from 2011-12 to 2014-15 is depicted in Fig. 4.1. Higher export performance is an important determinant of increasing degree of openness to export trade.

Degree of openness is measured by the ratio of value of exports to GDP at National level and by the ratio of value of exports to GSDP at the State level. Karnataka's degree of openness to export trade has varied between 33.2 % and 36.0% during the period from 2011-12 and 2014-15. This is remarkably higher than that of all India (at about 23%). Increasing degree of openness to trade is an indicator of economic globalization. From this viewpoint, the levels of Karnataka's economic globalisation have been higher than at all India level.

**Figure 4.1: Exports as percent to GSDP**

#### 4.2.2 Policy support for exports

Foreign trade is in the Central List of the Indian Constitution. The Government of India is empowered to formulate all rules and regulations for foreign trade applicable for the country as a whole. The role of the State Government is complementary by way of providing supportive and special promotional measures for promoting foreign trade, especially in regard to exports of goods and services.

The Government of Karnataka has taken explicit measures for export promotion through various policies as under:

- Industrial Policy 2014-19.
- Karnataka State Mineral Policy 2008.
- Grape Processing & Wine Policy 2007.
- Karnataka Renewable Energy Policy 2009.
- Karnataka SEZ Policy 2009.
- Karnataka Tourism Policy 2009
- Karnataka Semi Conductor Policy 2010.
- Karnataka Solar Policy 2011.
- Karnataka Integrated Agribusiness Development Policy 2011.
- Karnataka Animation Visual Effects & Comic Policy 2012.
- Karnataka Pharmaceutical Policy 2013.

- Karnataka New Infrastructure Policy 2013
- Electronic System Devices & Manufacturing Policy 2013.
- Karnataka Textile Policy 2013
- Karnataka Aerospace Policy 2013.
- Karnataka i4 Policy 2013.

The State is providing various incentives & concessions to the MSME sector for technology upgradation / technology transfer to enhance their competitiveness and capabilities to compete in the international market. The State Government has contemplated various initiatives along with incentives and concessions for the promotion of exports in the New Industrial Policy 2014-19, which are as follow:

#### A. Export Promotion Measures

- Creation of export infrastructure
- Thrust to SEZs in the State.
- Encouragement for the development of ICD/CFS on PPP mode.
- EOUs are to be declared as Public Utility Services (PUS) to create conducive environment for exports.
- Exporters with good track record will be issued Green Card to enable smooth movement of goods.
- Banks to issue Gold Cards for exporters with proven transaction record.
- Development of infrastructure for specific sectors :

- Agro & Food Processing
- Textile & Readymade garments
- Chemical industry
- Pharmaceutical
- Engineering (Automobile, Aerospace & Precision tools)
- Electronics
- Electricals
- Gems & Jewellery
- Plastics
- Leather Products
- Handicrafts
- Marine products

### **B. Incentives & Concessions:**

- a) Exemption from Entry Tax
- b) Refund of certification charges.
- c) Refund of cost incurred for Export Consultancy / Market Intelligence Studies.
- d) Brand Promotion and Quality Assurance.
- e) Refund of fees for individual entrepreneurs incurred on Certification Courses on Export-Import Management.
- f) Support for establishment of CFS and other export infrastructure.
- g) Support for creation of Export Facilitation facilities, R&D and testing services
- h) Market Development Assistance for Trade Promotion and overseas Trade Delegations.
- i) Reimbursement of Export Credit Guarantee Insurance.
- j) Support for development of exports in Gherkins, Rose, Onions and Floriculture

VTPC is the nodal agency for the implementation of Assistance to States for Developing Export Infrastructure and Allied Activities (ASIDE) scheme in Karnataka. The agency has extended financial support for the completion of 96 export infrastructure projects out of total of 120 projects in various parts of the State. The projects of connectivity to ports, formation and upgradation of roads in industrial area/estates, flyovers, by-pass, water supply, power supply, cold storage, training centres, warehouses, R&D centres, common facility centre, Human resource Development, pre-harvest & post harvest technological facilities etc. are implemented in the State. 24 projects are under various stages of implementation. Karnataka has been recognized as the Best Performing State in the implementation of ASIDE scheme.

In order to encourage growth and development of exports from the State, the Government of Karnataka has established a dedicated nodal agency, Visvesvaraya Trade Promotion Centre (VTPC) for promotion of International Trade. In addition to compiling of data on the State's exports, VTPC conducts various capacity building programmes and also provides services across market intelligence, export documentation, finance and other critical areas to the exporting community. VTPC also organizes several export-related programmes for both prospective and existing exporters in the State. Export awareness programmes are also conducted at district / potential places. VTPC has established Export Information Centres at Dharwad & Mysuru to facilitate exporters of the State. The promotional activities of VTPC for exports are as follow :

- Export Awareness Programmes.
- Export Training Programmes.
- Export Management Training Programmes.
- Seminars, Workshops & Conferences.
- Interaction and Open House Meetings.
- Participation in National/International Exhibitions & Trade Fairs.
- Financial Support to the all Artisans, SC, ST, Women Entrepreneurs of Micro and Small enterprises, who participate in the Trade Fair and Exhibitions.
- Conferring State Export Awards for Export Excellence.
- Market Development Assistance to industries / exporters for their Overseas Visits for business promotion.
- ASIDE Scheme.
- WTO and IPR Relay Cell.
- Incubation Centre & Facilitation Cell.
- Assistance to the traders/exporters in certification for the export/ import of commodities.
- VTPC is authorized to issue certificate of origin (non preferential)
- Conduct of Short term courses in association with IIFT, New Delhi.
- Trade Point to provide live trade enquiries, Global Directory Services & Online Trading Facility.
- Secretariat services for promotion of SEZs and EOUs in the State
- Liaison office for International Help Desk.

**Outcomes and challenges:**

Foreign Investment in India has been the direct outcome of the liberal trade policies undertaken and implemented by successive governments. The liberalization program of the government aims at rapid and substantial growth of the country's economy besides a harmonious integration with global economy. Foreign investment ensures a huge amount of domestic capital, production level and employment opportunities, which is a major step towards the economic growth of the country. India is among one of the few markets in the world that offers such high prospects of growth and earning in virtually all sectors of the economy. The huge skilled workforce is one factor that ensures that foreign investors get a good return on their investments. The expansion of FDI into and from India has been accompanied by a rapid economic growth and an increasing openness to the rest of the world. Investment in Karnataka has huge potentials. However, investors have their own share of advantages and disadvantages. Overseas and domestic investors must prepare themselves well in advance to face with adversities and deal with them properly. Some of the drawbacks that investors may have to face are bureaucratic hassles, infrastructural deficiencies, power shortages and sometimes political uncertainty. Despite these uncertainties, Karnataka presents a huge potential to global and domestic players to invest in the market. The State is taking up initiatives for the set goals of achieving IT revenues of Rs.4 lakh crore by 2020, direct employment of 20 lakh by 2020. The industry group setup by the State Government has recommended some initiatives to leverage the unique opportunities that the State offers in the IT space. The key initiatives are use of technology in education; talent development and job creation; increasing innovation for sustainable value addition; entrepreneurship development; going beyond Bengaluru by developing emerging ICT Centers; leveraging

the global ecosystem by developing relationship with other Countries; development of physical infrastructure; increased focus on Electronics Systems Design and Manufacturing; Branding etc.

The challenges for achieving the set goals are: development of physical infrastructure, development of IT infrastructure, manpower development and making available land. The various State agencies concerned with development of physical infrastructure have taken note of the potentialities of the growth of IT and BT sectors in tier 2/3 cities. Department of IT, BT and S&T, through KEONICS and STPI has developed IT infrastructure in Hubballi, Mysuru, Mangaluru, Kalaburgi & Shivamogga.

It is also expected that exports of all commodities mainly engineering commodities will continue to increase by benefiting from the incentives and encouragements provided by the Government. In addition, the export-promotion measures are expected to increase exports of both primary and manufactured products as also services. However, these expectations are subject to the presence of favourable world market demand and other conducive factors for the State's exporters.

VTPC has proposed to have trade facilitation centres at Mysuru, Mangaluru, Hubballi, Kalaburgi and Davangere to facilitate the exporters to enhance their business activities from the State. These centres would involve in conducting of capacity building programmes in their jurisdiction to encourage exports. They also liaison with DICs and trade bodies in conduct of various programmes and interaction meets with the agencies / organizations of Govt. of India Dept., and State Govt. to address the grievances of exporters.





# RURAL DEVELOPMENT

# 5

## 5.1 RURAL GOVERNANCE

Karnataka has been a pioneer State in the decentralized governance, more specifically in nurturing Panchayati Raj Institutions (PRIs). The 73<sup>rd</sup> and 74<sup>th</sup> Amendments to the Constitution in Indian Democratic Republic saw the dawn of powerful local governments all over the country. Karnataka was the first state in the country to enact the Karnataka Panchayat Raj Act, during 1993 incorporating the features of the 73<sup>rd</sup> Constitutional Amendment. Elections are being successively held to the three-tiers of PRIs. Politically, there is a broad consensus and sincere commitment in favour of decentralisation that finds a place in the ideologies of all political parties in the State. The Panchayati Raj System in the state has been stabilized with the conduct of five elections. An outstanding feature of the Panchayati Raj System in Karnataka is the determined effort to empower the voiceless section of society by providing for specific reservation not only in its membership but also to the post of Chairpersons of these Institutions. It is a matter of great pride that women have been provided with 50 per cent reservation both in membership and authority positions. More significantly, in order to promote participatory governance the Karnataka Panchayat Raj Act, 1993 has been further amended for enhancing the quality of people's participation through greater empowerment of Gram Sabhas and Ward Sabhas thereby bringing in transparency and accountability in the functioning of PRIs;

### 5.1.1 Decentralised Planning as the Strategy

Accelerating rural development and ensure benefits of development reach equitably call for the evolution of an appropriate rural development planning strategy - a strategy that strengthens various indicators of rural development as also brings a qualitative change in their reach to all sections of the

society. In order to achieve this objective, the Government of India opted for a strategy of decentralized planning and entrusted the responsibility of planning and implementing rural development programs to the decentralized government bodies like PRIs in rural areas and urban local bodies in urban areas. With the 73<sup>rd</sup> Constitutional Amendment Act, 1992 the PRIs have acquired a statutory status, become integral part of our polity and more importantly, they have been recognized as 'institutions of self-government'. They have been given the important responsibilities of preparation and implementation of Plans to ensure economic development in rural areas and to ensure social justice in the distribution of benefits of such development process (Article 243G). Consequently, decentralised governance and planning have emerged as strategies for initiating socio-economic transformation in rural areas with the prime objective of developing rural infrastructure and improving the living conditions of the rural people, especially the weaker sections.

Development of rural areas has a bearing on improving agricultural production and related economic activities, availability of natural and financial resources and their development. The rural development programmes are implemented through Rural Development and Panchayat Raj department towards promoting effective and inclusive rural development.

### 5.1.2 Role of Civil Society Organisations in Decentralised Planning Process

Civil society originally referred to social groups organised for emancipating themselves from the oppressive rule of feudal lords and tyrant rulers. But today the term connotes a wider meaning and embraces a plethora of institutions outside the State. The civil society is a voluntary organisational structure intended to promote the well-being

of its members by self-management of their own affairs with little or no interference from political regime. In recent years, civil society has come to assume a greater role in the life of people because of the following reasons: (i) In the modern day world, the needs and aspirations of people have multiplied beyond imagination such that the State alone cannot fulfill all these needs. (ii) The State by its very nature is less responsive to people's needs on account of the bureaucratic structure it has built. (ii) Interventions by the State are not cost effective as it operates with huge administrative machinery. On the other hand, civil society, being people's organisation, can be more responsive to the needs of the people and, being participative in its approach, it can also be cost effective. In view of these merits, civil society has obviously assumed a greater role today.

The series of rural development programs initiated from the sixties, especially with the adoption of the target group approach emphasising on targeting growth to weaker sections and backward sub-regions, gave primacy to decentralised planning. The latter emphasised on participation of people, their organisations and NGOs in the planning and implementation process which in turn provided some space to civil society. The latter in its new role was to play the role not only of assisting the panchayats by giving to them technical inputs on the basis of their own analysis of the prevailing socio-economic situation but also to motivate people to participate in the development process including monitoring of, and taking up development projects for, the benefit of the weaker sections and backward regions. In other words, the civil society is expected to play the role of capacity building among panchayat functionaries. The NGOs, as an important component of the modern civil society, are looked upon as change initiators in the rural society and input providers to rural governments. Because of their vast experience of working at the grass root level and the committed and trained cadres they have with them, the country reposes great

faith in their ability to build capacities among local governments.

## 5.2 Housing:

Housing is a basic and very important need for every citizen. Housing not only provides social security to human beings, but also status in the society. Housing has been evolved as a prime component over the period of time in providing employment opportunities and in development of locations. To meet the growing demand of housing, the State has been pro-active in its housing policies. Housing for the poor and down-trodden assumes greater importance both in rural and urban areas in the State. Government has attached utmost importance to the problem of housing scarcity and has increased the budgetary allocations over the years.

### **Rajiv Gandhi Rural Housing Corporation Limited (RGRHCL)**

The Corporation was established on the 20<sup>th</sup> April 2000 as a nodal agency to implement all the housing schemes sponsored by the Central and State Governments for economically and socially weaker sections of the Society, both in rural and urban areas. The main objectives of the company are:

- To provide housing to the socially and economically weaker sections
- Speedy implantation of scheme
- Transparency in implementation,
- Seam free flow of the beneficiaries
- Dissemination of cost effective technology in construction through District Nirmithi Kendras
- Strengthening of Nirmithi Kendras

From 2000-01 to 2015-16 (up to December 2015) 32.54 lakh houses have been constructed under various housing schemes and 3.05 lakh sites were distributed. The Scheme-wise houses completed and sites distributed are presented in **Table 5.1**

**Survey on Housing demand**

The survey of houseless and Siteless in the State conducted by the RGRHC during 2003 depicts that there are 12,99,789 house-less and 12,98,813 site less persons. The survey of hut-dwellers, later conducted during 2009 identified around 10.50 lakh hut-dwellers in the State. District-wise details are given at **Appendix 5.1**

**Public Expenditure on EWS Housing:**

Investments on economically weaker section housing schemes have been increased year by year during the last decade i.e. 2000-01 to 2015-16. The State has spent Rs. 14774.91 crore, of which Rs.5243.04 crore on centrally sponsored and Rs. 9531.87 crore on the state sponsored EWS housing schemes. **(Table 5.2)**

**Table 5.1 Scheme wise houses completed and sites distributed**

Year	Houses Constructed under Social Housing Schemes					House Sites		
	Rural Ashraya/ Basava Vasathi Yojane	Rural Ambedkar	Urban Ashraya/ Vajpayee Urban Scheme	IAY	Total	Rural	Urban	Total
2000-01 To 2009-10	1289690	142028	135220	406552*	1990575	80625	55286	167717
2010-11	48422	3692	685	95311	148110	22992	16983	39975
2011-12	69529	4722	4071	26769	105091	24334	16861	41195
2012-13	126439	5938	8985	108493	249855	13737	16270	30007
2013-14	207594	4101	6975	98815	317485	4279	6654	10933
2014-15	185073	3313	9678	104098	302162	8140	2929	11069
2015-16**	70716	2222	6098	61628	140664	3671	801	4472
Total	1997463	166016	171712	901666	3253942	157778	115784	305368

Figures shown from 2000-01 to 2009-10 are cumulative.

\*Figures shown are from 2004-05 onwards

\*\* Figures shown are up to December -2015

**Table 5.2 Public Expenditure incurred by RGRHCL on Social Housing Schemes in Karnataka 2000-01 to 2015-16, (Rs. crore)**

Year	Social Housing Schemes in Rural and Urban Areas				
	Rural Ashraya/ Basava Vasathi Yojane	Rural Ambedkar	Indira Awas Yojana	Urban Ashraya/ Vajpayee Urban Scheme	Total
2000-01 To 2009-10	3000.90	299.90	1285.71*	345.35	4931.89
2010-11	219.24	25.27	482.49	3.43	730.43
2011-12	494.68	33.60	302.67	103.58	934.53
2012-13	977.64	27.73	805.89	108.72	1919.68
2013-14	1372.99	22.13	477.93	98.25	1971.30
2014-15	1381.63	8.45	1112.88	111.61	2614.60
2015-16**	842.68	3.11	775.47	51.42	1672.48
Total	8289.80	420.19	5243.04	822.36	14774.91

Figures shown from 2000-01 to 2009-10 are cumulative, \*Figures shown from 2004-05 onwards

\*\* Figures are shown up to December - 2015

During 2012-13 to 2014-15, 8,69,502 houses were constructed under various housing schemes as against the target of 8,50,000. Against the target of 90,000 house sites, 52,009 sites have been distributed. During 2015-16 it is targeted to complete 3 lakh

houses. Against this, 140664 houses have been constructed up to the end of December 2015. In case of house site scheme 4,472 sites have been distributed as against the target of 20,000. **(Table 5.3 & 5.4)**

**Table 5.3 Target and Achievement under Different Housing Schemes**

Schemes		2012-13	2013-14	2014-15	2015-16*	Total	
Rural	Ashraya/ BasavaVasathi Yojane	Target	125000	180000	190000	170000	665000
		Completed	126439	207594	185073	70716	589822
	Ambedkar	Target	10000	5000	0	0	15000
		Completed	5938	4101	3313	2222	15574
	IAY	Target	100000	100000	100000	115000	415000
		Completed	108493	98815	104098	61628	373034
Urban	Ashraya/ Vajpayee Scheme	Target	15000	15000	10000	15000	55000
		Completed	8985	6975	9678	6098	31736
Total		Target	250000	300000	300000	300000	1150000
		Completed	249855	317485	302162	140664	1010166

\* Figures are shown upto December - 2015.

**Table 5.4 Progress of House site Schemes**

Financial year	Rural House Site		Urban House Site		Total	
	Target	Achievement	Target	Achievement	Target	Achievement
2012-13	30000	13737	20000	16270	50000	30007
2013-14	10000	4279	10000	6654	20000	10933
2014-15	10000	8140	10000	2929	20000	11069
2015-16*	10000	3671	10000	801	20000	4472
<b>Total</b>	<b>60000</b>	<b>29827</b>	<b>50000</b>	<b>26644</b>	<b>110000</b>	<b>56481</b>

\* Figures are shown up to December -2015

Unit cost of the house is being increased constantly over period of time. Details of unit cost are given in **Table 5.5**

**Table 5.5 Unit cost of the house provided under housing schemes,**

Series Year	Unit Cost (Rs.)				
	Rural Ashraya/ Basava Vasathi Yojane	Rural Ambedkar	IAY	Urban Ashraya/ Vajpayee Urban Scheme	
2000-01 to 2003-04	20,000	20,000	20,000	25,000	
2005-06	25,000	20,000	25,000	25,000	
2006-07	30,000	No target	25,000	No target	
2007-08	No target	30,000	35,000	No target	
2008-09	40,000	40,000	35,000	No target	
2009-10	No target	40,000	40,000	No target	
2010-11*	50,000	50,000	No target	50,000	
2011-12	No target	50,000	50,000	No target	
2012-13	75,000	No target	75,000	75,000	
2013-14	1,20,000	No target	1,20,000	1,20,000	
2014-15	1,20,000	No target	1,20,000	1,20,000	
2015-16					
General	1,20,000	Rural	1,50,000	1,20,000	1,20,000
		Urban	1,80,000		
SC/ST	1,50,000		1,50,000		1,50,000

During 2010-11 Rural Ashraya Scheme has been renamed as Basav Vasathi Yojane and Urban Ashraya Scheme has been renamed as Vajpayee Urban Housing Scheme.

### **A Rural Ashraya/Basava Vasathi Yojane**

This scheme was introduced during 1991-92 to provide housing for rural houseless poor. Annual income of the beneficiary was Rs. 32,000. Till 2004-05 the beneficiaries were selected by the Ashraya Committees headed by the local MLA. From 2005-06 onwards the beneficiaries are selected by Gram Panchayaths through Gram Sabhas as per the Panchayat Raj Amendment Act. Under this Scheme, 19.27 lakh houses have been constructed during last 15 years i.e. from 2000-01 to 2014-15. Out of the Total target 30% is earmarked for SCs, 10% for STs and 10% for minority beneficiaries and other scheme 50% of the target has been earmarked for SCs/STs. Rural Ashraya Scheme was renamed as Basava Vasathi Yojane during 2010-11. The unit cost was fixed at Rs. 1.50 lakh from 2013-14, of which Rs. 1.20 lakh is subsidy and remaining Rs. 30,000 being the beneficiary contribution or loan from the bank. Houses will be allotted to hut-dwellers on priority basis.

During the last 3 years 5,19,106 houses have been completed against the target of 4,35,000 houses. For the year 2015-16 it is targeted to complete 1.70 lakh houses including backlog. So far (up to December 2015), 70716 houses have been constructed. District wise break-up is furnished at **Appendix 5.2**

### **B Indira Awas Yojana**

This Centrally Sponsored Scheme was introduced during 1989-90 for rural houseless holds who are below the poverty line. 60% of the target is earmarked for SCs/STs, 15% for minorities and remaining 25% for general category of the people. As per the enhanced unit cost of Rs.1.20 lakh, from 2015-16, subsidy from the Centre works out to Rs. 35,000 and Rs. 85,000 is to be borne by the State. For SC's/ST's the enhancement unit cost per house is Rs. 1.50 lakh, subsidy from Centre is Rs. 35,000 and Rs. 1,15,000 from the State. During the last eleven years (from 2004-05 to 2014-15) 8,40,038 houses have been constructed under the scheme.

During last 3 years 3,11,406 houses against the target of 3,00,000 have been constructed.

During the current year 61628 houses have been completed against the target of 1,15,000, till December 2015. District wise break-up is furnished at **Appendix 5.3**

### **C Urban Ashraya/Vajpayee Housing Scheme**

This State Sponsored scheme was introduced during 1991-92 to cover urban poor whose annual income is less than Rs.32,000. The beneficiaries are selected by the Ashraya Committee, comprising of both official and non official members and is headed by the local MLA.

During 2010-11 the Urban Ashraya Scheme was rechristened as Vajpayee Urban Housing Scheme. From 2013-14 the State has fixed the unit cost of the house at Rs.2.00 lakh, of which Rs. 1.20 lakh is subsidy from the State, Rs.30,000 is beneficiary contribution to be invariably met and balance Rs. 50,000 is either the bank loan or contribution from the beneficiary.

During last 15 years i.e. 2000-01 to 2014-15, 1,65,614 houses have been constructed. During the last 3 years, 25,638 houses were constructed against the target of 40,000 houses. During 2015-16 (up to December 2015), 6098 houses have been completed against the target of 15,000. District wise break-up is furnished at **Appendix 5.4**

### **D Special Housing Scheme:**

From 2014-15 for special category i.e. Physically handicapped, leprosy cured persons, HIV Affected families, devadasis, nomadic tribes, safai karmacharies, people affected by communal Riots, Exploits, free bonded labourers, widows, orphans living on foot- path , transgenders etc. The selection of beneficiaries done by the District Committee headed by the Deputy Commissioner.

For the year 2015-16 the proposal was submitted to provide Rs.120.00crores in the budget for construction of houses and as against this Rs.90.00 crores has been provided in the budget. For the year 2015-16 it is targeted to complete 5,000 houses.

**E. Infrastructure facility:**

The Government is providing Rs. 25 to 30 lakh per acre towards providing basic amenities like Drainage, Road, Drinking Water, Electricity etc for newly developed layouts from 2011-12. For this Rs.25.00 crore was provided in 2015-16 budget, as against this Rs. 6.27 crore is spent during the year up to December 2015.

**F. House Site**

Sites are distributed free of cost to poor site less families of both urban and rural areas with an annual income of less than Rs.32,000. The scheme was introduced during 1992-93. During 2000-01 to 2014-15, 2,69,090 sites have been distributed (1,54,107 sites in rural areas, 1,14,983 sites in urban areas). It has been targeted to distribute 20,000 sites (10,000 in rural and 10,000 in urban areas) during 2015-16. As against this 4,472 sites have been distributed so far i.e. till December 2015. District wise break-up for sites distributed during last 3 years is given at **Appendix 5.5 and 5.6.**

**G Nanna Mane (Affordable Housing for Low income groups)**

To provide affordable housing to the people of above poverty line but of low income group like auto drivers, workers of film industry, unorganised sector, beedi rollers, hamals, street Vendors etc. the state has introduced a new scheme during 2010-11. The annual income of the beneficiary is limited to Rs.1.00 lakh per annum. Four housing projects have been taken up during 2011-12 in locations like Talaguppa near Bidadi, Singanayanahalli and Hunasamaranahalli near Yelahanka, Kodathi, around Bengaluru under G+2 concept. The unit cost of the flat is Rs.3.90 lakh, 4.25 lakh and 5.20 lakh respectively.

**H. Dr.B.R. Ambedkar Nivasa Yojane**

From 2015-16 the Government has introduced Dr.B.R.Ambedkar Nivasa Yojane for providing houses to the house less SC/ST families. Under this scheme for 2015-16 the Government has sanctioned 1,50,000 houses, in which one lakh houses for Rural Area and 50,000 houses for Urban Areas. For rural areas the subsidy per house is fixed

Rs.1.50 lakh and for urban areas Rs.1.80 lakh. The beneficiaries are selected based on 2011 SECC (Socio Economic Caste Census) survey house less data. The Gram panchayaths has to submit the entire houseless list to Jagratha Samithi and Jagratha Samithi will select the beneficiaries out of that list.

**I. Urban Vertical Growth Policy:** From 2015-16 the Government proposed to introduce new policy for providing housing to the urban poor in vertical growth system using cost effective and new technologies. For 2015-16 it is proposed to take up 3500 houses at Mysore and Mandya town on pilot basis and 1000 houses for film workers at Bangalore Urban. Under this the unit cost of per house is Rs.4.5 to 5.00lakhs, in this Rs. 1,20,000 is provided by the government as subsidy and remaining amount has to be borne by the beneficiaries through self contribution or through bank.

**J. Rejuvenation of Nirmithi Kendras:** From 2015-16 the Government is proposed to convert the existing Nirmithi Kendra as a centre of excellence on low cost innovative technology centers for using new cost effective technologies in the construction, providing training and creating awareness about the new and cost effective technologies etc. For the year 2015-16 it is proposed to take up in 5 selected Nirmithi Kendras with Government grants of Rs.1.00 crore each.

**Budget Allocation for the year 2015-16**

The State has provided Rs.3260.00 crore for the implementation of different housing schemes. Against this allocation, Rs.2652.50 crore has been released so far and Rs.1702.84 crore have been spent till the end of December 2015.

**Highlights of Scheme:**

The EWS housing schemes helps the society both directly and indirectly.

- EWS housing improves the quality of life of poor
- 1746 lakh man days of direct and 873 lakh man days of indirect employment has been generated.
- Reduces the gap in the housing demand

➤ Ensures economic development.

### Challenges:

- Delay in selection of beneficiaries, incorrect identification of beneficiaries
- Steep increase in the land cost and non availability of land in both rural and urban areas the required demand cannot be met
- Lack of interest on the part of the beneficiaries to take up construction by themselves as they are mandated to do so.
- Non support from the financial institutions in providing loans to the beneficiaries and due to their non repayment capacity unable to achieve the expected target.

### New Initiatives

- A survey of hut-dwellers has been taken up during 2009-10. As per the survey around 10.50 lakh hut-dwellers have been identified
- Efforts are made to conduct houseless and site-less survey during the month of January to March in every year.
- **Direct release of funds to a beneficiary account:** From 2010-11 onwards, a system of on-line direct release of funds to the beneficiary account based on GPS verification has been introduced.
- **Introduction of GPS (Global Positioning System):** GPS system has been evolved during 2010-11 through which payment will be made directly to the beneficiary account after GPS verification of the house at each stage to avoid overlapping and assessment of actual progress.
- A lottery system for the selection of beneficiaries has been developed from 2013-14 to ensure transparency in the selection process.
- **Introduction of DGS (Digital Signature):** The earlier system of procuring beneficiary details through hard copies has been dispensed with since then. The beneficiary list is approved online with Digital Signature within 24 hours from 2013-14.
- Introduction of SMS: The SMS system has been introduced from 2013-14. The

SMS under various stages of process viz., approval of the list, Opening of bank account, release of funds etc. is sent to the Deputy Commissioner of the District, Chief Executive Officer of the Zilla Panchayat, Executive officer of the taluka panchayat, Commissioners/Chief Officers of the CMCs/TMCs/TPs and the beneficiary

- The beneficiary-wise information has been made available in the public domain under website <http://ashraya.kar.nic.in>
- **Involvement of Financial Institutions in the implementation EWS housing schemes:** The financial institutions have evinced keen interest to participate in the venture.
- Adoption of fast track technologies in construction of affordable housing for LIG
- Comprehensive guidelines has been issued for implementation of housing scheme and house site scheme.
- The State has announced 10,000 houses for special categories, in which 9,000 houses will be allocated to the districts based on their demand and 1,000 houses are earmarked for artisans
- A scheme to waive of loan has been introduced in 2014-15. Under this scheme around 10.84 lakhs beneficiaries will get the benefit.
- Focus has been laid on providing infrastructure to the newly developed layout from 2013-14 onwards.

## 5.3 RURAL INFRASTRUCTURE

### A) Karnataka Rural Infrastructure Development Ltd.

The Karnataka Land Army Corporation Limited was established as an undertaking of the Government of Karnataka in August 1974. The name of the Organization was changed from Karnataka Land Army Corporation Limited (KLAC) to Karnataka Rural Infrastructure Development Limited (KRIDL) with effect from August 2009. The organization was started with an authorized Government Share Capital of Rs. 15.00 crore and subscribed capital of Rs. 25.00 lakhs and further subscribed Rs. 12.00 crore during 2001-02. The Organization has the objective



of undertaking civil construction of tanks, irrigation works low cost hosing, roads, culverts, buildings etc., in rural areas by employing rural youth. Currently, organization has an annual turnover of Rs. 1700.00 crore with a staff around 900 including 340 highly dedicated and Qualified Civil Engineers handing Civil works all over the state. The main objective of the organization is to undertake development works in rural areas including employment oriented works entrusted by the state Government Department, Statutory Boards and Local Self Government under various schemes and programmes. The works are executed directly at Government (PWD) scheduled rates without involvement of contractors. The organization is a designated agency of the State Government for the purpose of department execution of works. The company has achieved highest turnover of Rs. 1700.00 crore during the financial year 2014-15. The company has achieved a net profit of Rs. 93.88 crore and also paid Rs. 5.00 crore as dividend to the State Government. In 2015-16 the company has fixed target of Rs. 1550.00 crore. The company is making sincere efforts to increase the turnover by approaching different Government Department to obtain entrustment works.

### **B) Western Ghats Development Programme:**

Developing hilly areas, conservation of forests and maintenance of ecology, providing irrigation facilities, benefits under agriculture, horticulture, sericulture, animal husbandry activities, marketing facilities to the outputs, vented dams-cum-foot bridges for cultivation of second crop in the year to the persons of the hilly areas are the major activities under the programme. The objectives of this programme include:

1. Capacity building for effective implementation of the programme by providing training facilities to the officers of Hilly Area Development Programme(HADP) and Western Ghats Development Programme (WGDP)

2. Programme of eco-preservation and eco-restoration with a focus on sustainable use of bio-diversity.
3. Soil and water conservation through land development activities such as leveling, bench terracing, land reshaping, amalgamation of paddy fields, land reclamation, contour bunding etc.,
4. Water harvesting and erosion control structures like check dams, vented dams, nala bunding, boulder bunds and checks, gully checks, ravine reclamation structures etc.,
5. Construction of farm ponds, diversion channels, waterways, vegetative filter strips etc., to regulate the flow and disposable excess water.
6. Focus on the needs and aspirations of local communities ensuring community participation in the strategies for conservation of bio-diversity and sustainable livelihoods.
7. Development of watershed based activities.
8. Development of spreading of technology/instruments/materials which are useful to the hill economy/society which are suitable to the small holdings to provide bio-fertilizers, seeds and other inputs.
9. Providing schemes for income generation by cultivating the medical plants, bamboo, jatropha and agro forestry.
10. Providing gap filling infrastructure such as laying of water pipelines, construction of foot bridges etc.,
11. Development activities through animal husbandry viz., artificial insemination for upgrading cattle, fodder development plots in farmers holding and Government farms, poultry development, piggery development, rabbit development, health camps and distribution of medicines, mineral mixtures and food ingredients and constant monitoring/providing funds to the Spice Board for regular growth of spices etc.,

**C) Thirteenth Finance Commission Grants**

The Thirteenth Finance Commission has recommended a five year tenure from 2010-11 to 2014-15 for the utilisation of its grants. The grants are released in 2 installments annually, based on the population in the ratio of 10:20:70 to Ziila, taluk and Grama Panchayats. The grants provided would be used for:

- Enhancing the quality of life of rural people through provision of drinking water, sanitation, health, women and children welfare activities, nutrition and development works
- Funds can be utilized for furniture in Anganwadis, sports equipment, laboratory equipment.
- Works not exceeding 20% of the funds may be utilized for modernization and building of roads.
- Works of sustainable infrastructure to be preferred.
- Under drinking water focus has to be for modernization, maintenance, protection of sources of drinking water and sanitation.

**D) Grama Swaraj Project**

The Gram Swaraj - Karnataka Panchayat Strengthening Project is being implemented from last 7 years, covering 1341 gram panchayats of 39 most backward taluks of the state identified by Dr. D.M. Nanjunadappa's High Power Committee Report. Implementation of the Project has been successfully completed on 30<sup>th</sup> March 2014.

The Objective of the Project is to ensure higher investment by GPs to improve the Social Indicators, improve revenue mobilization, improve monitoring and delivery of key services to rural population and effective participation in local planning.

Grant were released to the 1341GPs of most backward Taluks from last 6 financial years based on an objective criteria. 172 Samarthya Soudha Centers and 5 SATCOM studios are established across the state to enhance the capacity of PRIs. Rs. 672.81 crore has been released and Rs. 655.78 crores spent under different components.

**Table 5.6 Releases for the year 2010-11 to 2014-15 under 13<sup>th</sup> Finance Commission Grant, (Rs. crore)**

Year	Particulars of FC Grant	Amount Received by the State Government	Amount Transferred to the various tiers of PRIs (with %)		
			District Panchayat (10%)	Block Panchayat (20%)	Village Panchayat (70%)
2010-11	General Area Basic Grants	419.38	41.94	83.88	293.57
2011-12	General Area Basic/ Performance Grants	769.57	76.95	153.91	538.70
2012-13	General Area Basic/ Performance Grants/Interest	1008.60	100.86	201.72	706.02
2013-14	General Area Basic/ Performance Grants/Interest	1350.88	135.09	270.18	945.61
2014-15	General Area Basic Grants	344.42	34.44	68.88	241.09
2015-16	General Area Performance Grants	976.47	97.64	195.29	683.53
Grant Total		4869.32	486.92	973.86	3408.52

The grants provided are to be transferred within 5 days to the Panchayat Raj Institutions, online through State Bank of Mysore, G-Seva Branch and Axis Bank. The State Project Monitoring Unit had conducted an end line survey (Empirical Impact Evaluation Study) of the project and the report has been accepted and circulated to planning, finance and State Institute of Rural Development, Mysore. The major outcomes of the Project are as follows.,

- Untied and reliable block grants have created model in local Governance
- Assets built are of good quality and have raised the satisfaction level of local citizens.
- Double entry book keeping has made Governance more efficient and transparent.
- Project intervention facilitated higher tax compliance.
- Awareness and participation level in Gram Sabha and Ward Sabha have improved and made GP functionaries more responsive and responsible.
- Project had created permanent infrastructure like Samarthya Soudha and SATCOM.

The Project monitoring unit has prepared its Borrower's Implementation Completion Report and World Bank has prepared Project Implementation Completion Report (ICR) which was also circulated to all the concerned.

### **E) Suvarna Gramodaya Yojane**

Suvarna Gramodaya Yojane has been ventured to develop vibrant village communities by adopting an intensive and integrated approach to rural development. The programme was launched on the occasion of Golden Jubilee Celebrations of the formation of the State of Karnataka, involving Non Governmental Organizations and the village communities.

#### **Objectives of the scheme:**

- (a) To upgrade the physical environment of the selected villages for improving the quality of life.

- (b) To provide full and adequate infrastructure for human resources development including education, health services, childcare facilities etc.
- (c) To generate significant levels of non agricultural employment, especially for educated unemployed youth.
- (d) To support community awareness and development through self-help groups, cultural associations etc.

**Selection of Villages** is based on the rural population of each taluk in relation to total rural population of the State. Funds are allotted at the rate of Rs.2500 to 3000 per capita. In general, the villages having population above 2500 but below 8000 have been selected. In the hilly and western ghat areas, the population limit is relaxed. Member of Legislative Assembly has been entrusted with the task of selection of villages keeping view of the population limit fixed for the Taluk. Rs. 2500 is the stipulated per capita grant under the programme.

#### **First Phase: (2006-07 and 2007-08)**

1211 villages were selected in 1<sup>st</sup> Phase is completed.

#### **2<sup>nd</sup> Phase (Gulbarga revenue division):(2008-09)**

- No.of villages selected : 222
- Allocation : Rs.208.20 crore
- Release : Rs. 208.20 crore and Expenditure : Rs. 208.20 crore
- Completed road length (Kms) : 355.68 Kms.
- Completed drainage length (Kms) : 176.83 Kms.
- No.of Anganawadi & Samudaya Bhavana Buildings completed: 392

#### **3<sup>rd</sup> Phase:(2009-10)**

- No.of villages selected : 1606
- Allocation : Rs.1012.05 crore
- Release : Rs.1012.05 crore and Expenditure : Rs.1012.05 crore
- Completed road length (Kms) : 2303.22 Kms.

- Completed drainage length (Kms) : 996.92 Kms.
- No. of Anganawadi & Samudaya Bhavana Buildings completed: 2306

#### 4th Phase: (Gulbarga revenue division):(2010-11)

- No. of villages selected : 381
- Allocation : Rs.214.09 crore
- Release : Rs. 214.09 crore and Expenditure : 213.09 crore
- Completed road length (Kms) : 284.83 Kms.
- Completed drainage length (Kms) : 125.72 Kms.
- No. of Anganawadi & Samudaya Bhavana Buildings completed: 438

#### 5th Phase :(2012-13)

- No. of villages selected : 2193
- Allocation : Rs.1000.00 crore
- Release : Rs.672.37 crore and Expenditure : Rs.631.18 crore
- Completed road length (Kms) : 1260.29 Kms.
- Completed drainage length (Kms) : 351.38 Kms.
- No. of Anganawadi & Samudaya Bhavana Buildings completed: 443

Details of year wise and phase wise allocation of funds, expenditure and physical achievements is furnished in **Table 5.7 and 5.8.**

**Table 5.7 Year wise Allocation, releases and Expenditure of SGY, (Rs. crore) (Up to end of October-2015)**

Year	Budget Allocation	Opening Balance	Released	Available Fund	Expenditure
2006-07	200.00	0.11	163.24	163.24	0.00
2007-08	350.00	163.24	179.54	342.78	213.09
2008-09	300.00	129.69	295.72	425.41	364.64
2009-10	302.00	60.77	299.64	360.41	251.41
2010-11	400.00	109.00	401.59	510.59	431.07
2011-12	400.00	79.52	695.36	774.88	467.98
2012-13	349.14	306.91	331.34	638.25	439.69
2013-14	109.67	198.56	208.53	407.09	367.58
2014-15	445.30	39.51	422.76	462.26	425.61
2015-16	438.40	36.66	139.80	176.46	67.59

**Table 5.8 Physical Progress of SGY**

Phase	No. of selected villages	No of Villages with completed works	Length of road completed in km.	Length of drainage completed in km.	No. of Anganawadi & community halls completed
I	1211	1211	Works completed		
II	222	188	355.68	176.83	392
III	1606	1419	2303.02	996.92	2306
IV	381	313	284.83	125.72	438
V	2193	1279	1260.29	351.38	443
Total	5613	4320	4203.82	1650.85	3579

**Table 5. 9 District wise Number of villages selected**

District	1 <sup>st</sup> Phase	2 <sup>nd</sup> Phase	3 <sup>rd</sup> Phase	4 <sup>th</sup> Phase	5 <sup>th</sup> Phase	Total
Bagalkote	45		42		58	145
Bengaluru U	24		32		55	111
Bengaluru R	31		36		52	119
Belagavi	97		88		124	309
Ballary	32	38	38	48	52	208
Bidar	49	35	46	68	68	266
Vijayapura	34		46		62	142
Chikkaballapura	34		67		85	186
Chamarajnagara	24		25		31	80
Chikkamagluru	30		72		88	190
Chitradurga	32		52		72	156
D.Kannada	32		33		32	97
Davanagere	35		48		56	139
Dharwad	16		16		22	54
Gadag	19		19		30	68
Kalaburagi	43	44	68	82	118	355
Hasana	102		118		157	377
Haveri	29		40		59	128
Kodagu	20		25		24	69
Kolar	46		85		91	222
Koppala	31	25	32	61	51	200
Mandya	61		83		74	218
Mysuru	46		78		121	245
Ramanagara	42		70		60	172
Rayachuru	47	50	61	63	105	326
Shivamogga	45		57		87	189
Tumakuru	67		99		176	342
U.Kannada	48		66		90	204
Udupi	26		26		30	82
Yadgir	24	30	38	59	63	214
Total	1211	222	1606	381	2193	5613

Note: 2nd and 4th phase is being implemented in 6 districts of Gulbarga revenue division

### 5.3.1 Rural Water Supply:

The norm for providing potable drinking water is 55 litres per capita per day (LPCD) with a provision of 3 litres for drinking, 5 litres for cooking, 15 litres for bathing, 10 litres for washing utensils and domestic applications, 10 litres for ablution/toilets and 12 litres for washing cloths and other uses. Habitations with a population of 100 or more will be considered for coverage under the national rural water supply norms. A 'Habitation' is a locality in a village with a cluster of families. Considering the average size of the family as 5 persons, a 'habitation' should include 20 families totaling 100 persons, with the exception in hilly areas, where the habitation can have a population of less than 100 persons. Fully Covered (FC) habitations are those with entire population is provided with drinking water as per norms. Partially Covered habitations

are those where supply of drinking water is less than 55 LPCD. Habitations with access to safe drinking water source/point (from public/ private source) of at least 10 LPCD and less than to 55 LPCD, within 1.6 kms in the plains and within 100 meters in hilly areas are characterized as PC. Not Covered (NC) habitations are those where the coverage under safe water from all sources is below 10 LPCD and/or habitations with quality affected at source viz., excess salinity, iron, fluoride, arsenic or other toxic elements or biologically contaminated. Access to safe drinking water and sanitation is indispensable for a healthy life. According to the 2011 census, 3.98 crore persons live in rural areas of Karnataka in 59945 habitations (Projected figures for 2015). Among them, 11.85% (7108) are FC, 84.20% (50472) are PC and 3.95% (2365) are quality affected as on 1<sup>st</sup> April 2015. As per the National Rural Drinking

Water Programme (NRDWP), the concept of FC and PC are modified from conventional LPCD supply to percentage of population covered by water supply schemes. Accordingly, there are 5673 habitations with >0 and <25% population coverage, 18218 habitations with => 25 and <50% population coverage, 15507 habitations with = >50 and <75% population coverage, 11074 habitations with = >75 and <100% population coverage, 7108 habitations with 100% of population coverage. 2365 habitations are found to be affected with water quality problems. District wise details are furnished in Table 5.10.

The drinking water infrastructure of the State comprises 221004 bore wells fitted with hand pumps, 33831 piped water supply schemes and 47356 mini water supply schemes. Among the 59945 rural habitations covered under the schemes, about 7108 (11.85%) of habitations receive above 55 lpcd of water, 50472 (84.20%) receive less than 55 lpcd 2365 (3.95%) habitations are water quality-affected. Water scenario in rural area of Karnataka is shown in Table 5.11

### **1. Bharat Nirman/National Rural Drinking Water Programme (NRDWP):**

In order to meet adequate and safe drinking water supply requirements in rural areas, particularly in areas where coverage is less than 55 lpcd and in those villages which are affected by water quality problems due to over dependent on ground water based water supply schemes, Bharat Nirman a novel programme for building infrastructure and basic amenities in rural areas was launched at the instance of the Centre, during 2005. Phase- I of the Programme was implemented during 2005-06 to 2008-09. Phase-II is being implemented from 2009-10 to 2012-13. Details of physical progress are given in Table 5.12 and financial target and achievement from 2010-11 to 2015-16 in Table 5.13.

#### **(i) Action Plan 2015-16:**

In accordance with the guidelines of NRDWP Action plans for 2015-16 have been

formulated to cover habitations coming under 0-25%, 25-50% and 50-75% category and quality affected to 100% coverage category by providing 55 LPCD. In addition, spill overworks of 2014-15 in more than 75% coverage category are also incorporated. It is also intended to bring about 1944 habitations affected by water quality under this coverage. To achieve the above target, a provision of Rs. 1569.35 crores has been made for rural water supply programme in the annual action plan 2015-16 (Table 5.14).

#### **(ii) Source Sustainability Measures:**

Groundwater is the main source of water supply for rural drinking water needs of the state. Due to over exploitation of groundwater for irrigation and other uses, conservation of water for drinking purposes is, therefore imperative. Accordingly, construction of 191 pits and trenches, 906 check dams, 153 percolation tanks, 441 dug wells, and 27 roof top harvesting structures are proposed (Table 5.15) for groundwater recharge as per the action plan of 2015-16. 10% of the grants from the Centre amounting to Rs. 262.48 crore for this purpose.

#### **(iii) Water Quality Monitoring and Surveillance Programme (WQM&SP):**

The State has established 30 district-level laboratories to monitor the quality of drinking water in rural Karnataka and to meet drinking water standards. 100 taluk level laboratories are being commissioned. Field water testing kits have been distributed to 5635 Gram Panchayats to test the water during pre and post-monsoon seasons. If the chemical/biological parameters are beyond the permissible limits in the water samples, the values along with samples are sent to the district level laboratory for confirmation. Training is also imparted to village water and sanitation committee (VWSC) for testing water quality using the testing kits. In 2015-16, under the WQM&S programme, Rs. 30.38 crore is allocated against which Rs.4.02 crore is spent till December-2015. (Table 5.16)

**Table 5.10 - Drinking Water status in habitations with population coverage as on 1<sup>st</sup> April 2015**

District	Water Quality Affected Habitations	No. Of Habitations with '0' population coverage	No. of Habitations With Population Coverage > 0 and < 25%	No. of Habitations With Population Coverage >= 25 and < 50%	No. of Habitations With Population Coverage >= 50 and < 75%	No. of Habitations With Population Coverage >=75 and < 100%	No. Of Habitations with 100% Population Coverage
Bagalakote	33	0	23	325	178	275	176
Bengaluru Rural	14	0	144	716	231	144	22
Bengaluru urban	14	0	63	670	199	72	19
Belagavi	11	0	26	194	622	791	146
Ballary	54	0	40	168	266	321	163
Bidar	6	0	1	308	390	148	28
Vijayapura	69	0	12	210	233	278	247
Chamarajanagar	0	0	14	184	595	20	15
Chikkaballapura	293	0	268	222	772	309	57
Chikkamagaluru	14	0	313	1210	804	570	595
Chitradurga	159	0	267	438	326	368	73
D Kannada	77	0	53	1350	1268	648	186
Davanagere	221	0	28	178	291	260	158
Dharwad	2	0	4	96	200	75	11
Gadag	18	0	0	48	144	102	30
Kalaburagi	23	0	26	368	423	400	49
Hassan	63	0	814	1575	490	491	416
Haveri	1	0	2	207	217	147	137
Kodagu	63	0	814	1575	490	491	416
Kolar	1	0	2	207	217	147	137
Koppala	0	0	11	70	209	154	88
Mandya	310	0	195	415	826	218	8
Mysuru	4	0	135	170	105	233	91
Raichuru	165	0	46	421	455	630	269
Ramanagara	17	0	86	518	657	576	154
Shivamogga	53	0	1095	1367	1112	608	641
Tumakuru	445	0	787	2109	1094	660	241
Udupi	6	0	1	1433	1100	513	458
U Kannada	2	0	740	1811	1639	1369	1848
Yadgir	76	0	0	223	58	273	115
Total	2365	0	5673	18218	15507	11074	7108

**Table 5.11- Rural Water Scenario in Karnataka**

Service levels of water (LPCD)	Habitations (No)	Percentage
55 & above	7108	11.85
Less than 55	50472	84.20
Quality Affected	2365	3.95
<b>Total</b>	<b>59945</b>	<b>100</b>

(Norm for Rural Area = 55 lpcd)

**Table 5.12 - Water Supply Coverage under Bharat Nirman/NRDW programme**

Year	Total Coverage	Coverage of Habitations (No.)					
		0-25%	25-50%	50-75%	75-100%	Above 100%	Quality Affected
2010-11	6130	1	1146	952	1204	2708	-
2011-12	8757	8	2237	761	596	2783	1495
2012-13	13284	1338	4197	1213	637	3876	2023
2013-14	17522	2942	5506	4715	1921	490	1948
2014-15	15149	1805	4346	4028	2917	999	1054
2015-16 (Up to Dec-2015)	7695	1120	3179	3284	112	0	780

**Table 5.13 - Financial Target and Achievement under NRWDP, (Rs. crore)**

Year	Target	Achievement
2010-11	1167.07	947.53
2011-12	1656.74	1118.52
2012-13	1864.65	1807.11
2013-14	2056.89	1833.18
2014-15	1479.54	1656.89
2015-16 up to end of Dec-2015	1569.35	830.80

**Table 5.14 - Target and achievement under Action Plan 2015-16, (up to December-2015), (Rs. crore)**

Sl No.	Category (Percentage)	No. of habitations proposed for Coverage	Achievement	Action Plan amount	Expr.
1	>0<25	3131	1120	1569.35	830.80
2	>= 25<50	5252	3179		
3	> = 50 <75	117	3284		
4	> = 75 <100	0	112		
5	100	0	0		
6	Quality Affected	2000	780		

**Table 5.15 - Ground water Conservation Measures**

Structure	No.
Pits & Trenches	191
Check Dam	906
Percolation Tanks	153
Dug Wells/ Injection Wells	441
Others	563
Ooraries/ VillagePonds/Traditional Water Bodies	25
Roof Top Harvesting	27



**Table 5.16 Water Quality Monitoring and Surveillance Programme**

Sl. No.	Activity	Rs.in crore
1	HRD Activity	7.72
2	IEC Activity	14.05
3	Water Quality Monitoring and Surveillance	30.38
4	MIS.R&D	4.11
5	Community Involvement	-
6	Establishment	19.77
	Total	76.03

**(iv) Sub-mission programme to tackle water quality problems**

Acute water quality problems have been identified in 2365 habitations, of which 84.28% (2000 habitations) are proposed to be covered in 2015-16. Remaining habitations will be addressed subsequently. An estimated Rs.240.00 crore is required for 2015-16 to tackle on-going and new works.

**2. Desert Development Programme (DDP)**

Additional rural water supply schemes in drought prone districts of Bagalkote, Ballary, Vijayapura, Davanagere, Raichuru and Koppal are being implemented under this centrally sponsored Desert Development Programme since 1997-98. It is contemplated to provide 70 LPCD of water to human being and cattle in these drought affected DDP districts. Implementation of PWSS (piped water supply scheme), MWSS (mini water supply scheme) and bore wells are being taken up. Schools and anganwadis in rural

Since inception, 512 Schemes covering 7609 water quality habitations at an estimated cost of Rs. 7094.27 crore have been taken up under this programme. All the schemes are administratively approved & by December 2015, 236 schemes have been completed, 168 schemes are on-going, 32 schemes are under tendering process and 12 schemes are yet to be technically sanctioned.

areas also are being taken up under this programme (Table 5.17)

**3. Multi Village Scheme Project**

Drinking water supply schemes under Rajiv Gandhi National Drinking Water Mission have been formulated in rural areas with surface water as source to tackle water quality problem. Habitations affected by chemical contamination like arsenic, fluoride, TDS, nitrate and iron are provided safe drinking water after treating the surface sources. Under the programme, grants to an extent of 50% of the project cost is provided by the Centre. The surface sources viz., river, tank canal etc., are considered for safe drinking water supply under this Sub-Mission programme. The State has taken up Rajiv Gandhi Drinking Water Mission Programme under Bharat Nirman Programme to provide safe drinking water to water quality affected habitations in rural areas from 2004-05.

Under the 13th Finance Commission Schemes, Rs. 308.11 crore is proposed to be released in 4 years. 31 multi village schemes (MVS) and 387 RO units have been approved. Out of 31 MVS Schemes, Two works are completed, 3 are under tendering process, one yet to be technically sanctioned and 25 are under process.(Table 5.18&19).

**Table 5.17: Physical & Financial Progress (2010-11 & 2015-16)**

Year	Financial (Rs. crore)		Physical (Nos)	
	Target	Achievement	Target	Achievement
2010-11	68.60	48.60	562	354
2011-12	137.80	103.30	962	703
2012-13	268.11	211.98	1281	1036
2013-14	205.09	188.56	2088	1495
2014-15	481.43	451.80	1622	1100
2015-16 Up to Dec-2015	45.25	7.46	924	829

**Table 5.18 PROGRESS REPORT of Multi - Village Schemes UNDER 13TH FINANCE COMMISSION GRANTS, Rs in Lakhs**

Sl. No.	District	Total Schemes	Estimate Cost	Expenditure Incurred up to End of Dec-2015
1	Davangere	10	11416.25	5160.35
2	Bellary	15	12224.99	3760.05
3	Tumkur	5	2208.20	1053.63
4	Kolar	1	1072.00	0
Total		31	26921.40	9974.03

**Table 5.19 Water Purification Plants Progress Report, Sanctioned Under 13th Finance Commission Grants in 2012-13**

District	Nos of Plants allocated	No of Plants Installed	No of Plants commissioned	Power connection pending	Balance Plants to be installed	Estimated Amount	Expenditure
Tumkur	57	57	57	0	0	449.5	332.08
Gadag	45	45	43	0	2	436.57	265.07
Chitradurga	30	30	27	3	0	309.64	248.98
Mandya	15	15	15	0	0	128.82	53.26
Raichur	30	30	30	0	0	313.63	313.63
Hassan	5	5	5	0	0	48.94	25.46
Gulbarga	50	28	22	9	20	443.9	250.78
Yadgiri	20	16	14	4	2	201.76	109.99
Koppal	35	30	30	0	5	303.43	212.07
C.B.Pur	50	50	50	0	0	415	353.78
Kolar	50	50	50	0	0	473.4	315.96
Total	387	356	343	16	29	3524.59	2481.06

### 5.3.2. Rural Sanitation

#### 1. Swachha Bharat Mission (SBM)

Karnataka is making concerted efforts to implement total sanitation in the rural parts of the State. The State has been implementing a number of sanitation programmes from 1985, with the assistance of Central Government and external agencies like Danida, Royal Netherlands, World Bank, UNICEF and other development partners. "Nirmal Grama Yojane" has become operational in 1995 and was implemented for 8 years. Afterwards the Centrally sponsored scheme of "Total Sanitation Campaign" was in operation from 2005 to 2012. This Campaign was renamed as Nirmal Bharat Abhiyan from April 2012. Nirmal Bharat Abhiyan has since been rechristened as "Swachh Bharat Mission" from 2<sup>nd</sup> October 2014.

Under Swachh Bharat Mission, incentive of Rs. 12,000, of which, the share of Centre and the State being Rs. 9000 and Rs. 3000 respectively, is being provided to the eligible beneficiaries, belonging to BPL category, restricted APL families (which covers SC&ST families), small and marginal farmers, landless families Physically handicapped families and women headed families, etc), for the construction of individual household latrines. Incentive Rs. 15000/- (Rs.3000/- in excess of the State's share) is provided to under SCP/TSP allocations.

The mission aims at making all villages in the State defecation free villages. Besides, it has a wide focus of providing Individual sanitation, house sanitation, safe drinking water, suitable disposal of human excreta, disposal of waste and used water etc.

Though the State Government has implemented many schemes for improving rural sanitation, desired outcomes were not achieved. Many schemes focused on encouraging the rural masses to adopt sanitation facilities and to organize the community have been formulated under

SBM. Many schemes initiated to encourage the rural masses to adopt sanitation facilities and to organize the community have been formulated under SBM. Swachh Bharat Mission contemplates people oriented, demand driven and community participation. Construction of individual household toilets, management of solid and liquid wastes has been incorporated under Swachh Bharat Mission. Priority has been given to the activities of Information, Education and Communication and to build up technically best quality programmes. Various capacity building programmes have been chalked out to build capacity of the stake holders in a variety of sectors. Simple model toilets are being introduced to convince the rural population who are under the impression/misconception that the construction of individual household toilet is a costly affair. The 73rd Constitution Amendment, 1992 bestows complete responsibility on Grama Panchayats to ensure total rural sanitation.

#### Objectives

- 1) Construction of individual household toilets for families in the rural areas who do not have toilets.
- 2) To improve the standard of living of the rural people and reformation in the health of the rural people
- 3) Suitable disposal of waste and used water generated in the villages.
- 4) Construction of community toilets for the people in a village who do not have a place of their own for construction of individual toilets in a place where it can be easily accessible
- 5) To inculcate the habit of sanitation and cleanliness among rural children.
- 6) Maintenance of rural sanitation or production centers.
- 7) Maintenance and supervision of community toilets, keeping cleanliness around the premises of water sources, maintenance of drainages etc. Details of funding pattern under SBM is as hereunder.

**Table 5.20: Funding pattern for different component under Nirmal Bharat Abhiyan (Swachh Bharat Mission)**

Sl No.	Component	Components wise limits prescribed	Contribution percent		
			GOI	State	Beneficiary
a.	IEC & Start Up Activities and Capacity Building	Up to 8% of total project cost, with 3% to be utilized at the Central level and 5% at State level.	75%	25%	0%
b.	Revolving Fund	up to 5%	80%	20%	0%
c.	(i) Individual Household Latrines	Actual amount required for full coverage	Rs.9,000 (75%) 10,800 (90%) in case of NE States, J&K and Special category States)	Rs.3000 (25%) 1,200 (10%) in case of NE States, J&K and Special category States)	0%
	(ii) Community Sanitary Complexes	Actual amount required for full coverage	60%	30%	10%
d.	Administrative charges	Up to 2% of the project cost	75%	25%	0%
e.	Solid/Liquid Waste Management (Capital Cost)	Actual amount as per SLWM project cost within limits permitted	75%	25%	0%

**Table 5.21 NGP AWARDS BAGGED BY THE STATE**

Year	No. of GPS Awarded NGP	No. of Blocks awarded NGP	No. of Districts awarded NGP
2006-07	121	-	-
2007-08	479	3	-
2008-09	245	1	-
2009-10	121	-	-
2010-11	103	2	1
Total	1069	6	1

### 3. State Nairmalya Awards

The State has prioritized implementation of sanitation in rural areas. To encourage Panchayat raj institutions in this direction and to inculcate competitive spirit among grama panchayats, the State has initiated Nairmalya Awards. The award is being instituted to accelerate the campaign to achieve sustainability in the villages which has already been awarded Nirmal Grama Puraskar. Besides, awards are also being given to Best School, Best Anganawadi and also certificates/mementoes to best achievers. Details are in in **Table 5.22**.

### 4. IEC Activities

Intensive IEC activities are held to keep the people informed about the concept and implementation of SBM. Normally, IEC activities are carried out by making use of print and TV media, wall writings, dramas, declarations, jathas, short documentaries. Apart from this, NGOs plays a vital role in the implementation. In addition, information about the campaign is passed on through house visits, personal/group discussions, indoor/outdoor games, meetings, songs, quiz, oath taking, padayatras, shramdhan. The IEC activities are also being held through leadership by head of villages, speeches by religious leaders, etc.

**Table 5.22: Award amount at different stages for Nairmalya Awards**

Nairmalya award at Taluk level	
Best GP	Rs. 1.00 lakh
Best school	Rs. 20,000
Best Anganawadi	Rs. 10,000
Rajata Nairmalya at District level	
Best GP	Rs. 3/2/1 lakh(3 awards)
Best school	Rs. 30,000
Best Anganawadi	Rs. 15,000
Swarna Nairmalya at Division Level	
Best GP	Rs. 5/4/3 lakh (3 awards)
Taluk Panchayats	Rs.10 lakh
Nairmalya Ratna at State level	
Best GP	Rs. 10/7/5 lakh (3 awards)
Best TP	Rs.20 lakh
Best ZP	Rs.30 lakh

Rs.10.00 crore out of the total allocation provided under NBA is earmarked for the above awards.

**Table 5.23: Details of physical progress from the year 2008-09 to 2015-16 as at the end of November 2015 is furnished below:**

year	IHHLs	School Latrines	Anganwadi Latrines	Community Sanitary Complexes	Solid & Liquid Waste Management
2009-10	10877674	740	616	112	8
2010-11	810104	4719	3025	126	86
2011-12	414782	1062	1046	121	195
2012-13	296429	1758	687	131	75
2013-14	505517	1503	1416	88	101
2014-15	876919	1906	2766	95	60
2015-16	450052			27	43

### Capacity building activities

To ensure effective implementation of SBM, training programmes are being organized for the officials of Gram Panchayats, non-official personnel like Asha workers, Anganwadi workers, NYKS volunteers, representatives of selfhelp groups, volunteers of Bharat Nirman, elected representatives etc

- Officers/officials/Elected representatives are appraised of the implementation

process through discussions/meetings via Satcom media every month.

- Workshops are organized on the implementation of SBM for the elected representatives at the level of GPs, Taluks, and District levels.
- The officials at the level of Districts are being appointed as Nodal Officers of Taluks and entrusted with the responsibility of reviewing the progress of implementation and to achieve the target.

**Table 5.24: Details of financial progress for 2015-16 as at the end of November 2015 is furnished below:**

Item	State	Centre	Total
Releases	10556.81	31670.41	42227.22
Expenditure	9334.46	25934.43	35266.88

### New initiatives

1. Services of Asha workers, anganawadi workers are drawn in the implementation of SBM
2. All the ZPs to have been asked to appoint Swachhata Dhoots in the Grama Panchayats for implementation of SBM.
3. Guidelines on the strategy to be followed in the disposal of solid and liquid wastes

### Issues and Challenges

- The poor provisioning of adequate drinking water is compounded by continued depletion of ground water Table and presence of toxic minerals in drinking water.
- **Rural Sanitation:** There is a need to increase coverage of Individual Household Latrines (IHHL), besides separate toilet facility for girls in schools. Usage of toilets will not sustain without

provision of water supply. Thus, there is a need for convergence between water supply and sanitation schemes during design and implementation.

### 5.3.3 Rural Energy Programmes

National Biogas Manure and Management Programme (NBMMP), Karnataka State Bio-fuel Policy -2009 and Soura Belaku are the three programmes implemented under Rural Energy sector.

#### A) National Biogas Manure and Management Programme (NBMMP)

Biogas is a clean, non-polluting, smoke and soot-free fuel, containing methane gas produced from cattle dung, human waste and other organic matter in a biogas plant through a process called anaerobic digestion. The digested slurry will be good quality manure for agriculture. This centrally sponsored scheme implemented since 1982-83 is mainly a women oriented programme. The Centre has increased the subsidy rate with effect from 8<sup>th</sup> May 2014. Details of subsidy are given below. The cattle population in the State can augur construction of 6.80 lakh biogas plants. Beneficiaries are selected by the grama panchayats. During 2015-16, the State provided State and Central share is Rs.1256.00 lakh.

**Table 5.25A: Details of Subsidy given through NBMMP**

Particulars	Existing subsidy (in Rs.)	Revised subsidy (in Rs.)
Central Subsidy	3500	9000
Turn Key Fee	700	1500
Latrine Linked Biogas Plants (LLP)-incentives State subsidy is Rs.3500/-	500	1000

(GOK has provided state subsidy is Rs.3500.00 per plant)

**Table 5.25B: Progress of National Biogas Manure and Management Programme**

Year	Physical (Nos)		Financial (Rs.in lakhs)	
	Target	Achievement (S+C)	Target (S+C)	Achievement (S+C)
2007-08	4000	4573	756.50	337.57
2008-09	10000	6579	645.29+120.00	557.90
2009-10	10000	6954	841.33+120.00	693.37
2010-11	16000	12902	1463.08+120.00	997.79
2011-12	15000	10531	1503.20+120.00	1359.93
2012-13	12000	11985	1495.20	1161.19
2013-14	10300	9700	1465.91	1300.62
2014-15	10500	8222	1139.24	326.78
2015-16*	16000	2465	1256.00	#

\*(up to Dec 2015) # awaiting for central assistance.

### B) The Karnataka State Bio-fuel Policy

The Karnataka State Bio-fuel Policy has come into force from 1<sup>st</sup> March 2009. Karnataka Bio-fuel Policy is implemented through Karnataka State Bio-fuel Development Board. Rs.150.00 lakh is provided for 2015-16. Rs.112.50 lakhs has been released to Karnataka State Bio-fuel Development Board for implementation of various activities.

### C) Soura Belaku - Installation of Solar Street Lights at Grama Panchayats

Soura Belaku programme, started during 2009-10 aims at installation of Solar Street Lights at grama panchayat level. The Programme is implemented in selected pilot district - one from each revenue division. The programme is implemented through E-Procurement. Rs.310.00 lakh is provided during 2015-16. Year wise details targets and achievements are furnished in Table 5.26a to 5.26f.

**Table 5.26a: Physical and Financial progress under Soura Belaku Yojane 2009-10, Rs. lakh)**

District	Annual Target		Achievement	
	Physical	Financial	Physical	Financial
Bagalkote	178	50	178	50
Ballary	178	50	178	50
D Kannada	178	50	219	50
Shivamogga	180	50	204	50
<b>Total</b>	<b>714</b>	<b>200</b>	<b>779</b>	<b>200</b>

**Table 5.26b: Physical and Financial progress under Soura Belaku Yojane 2010-11 (Rs. lakh)**

Name of the district	Annual Target		Achievement	
	Physical	Financial	Physical	Financial
Chamarajanagara	180	50	180	50
Dharwad	180	50	180	50
Kolar	180	50	0	12.5
Raichuru	180	50	180	50
<b>Total</b>	<b>720</b>	<b>200</b>	<b>540</b>	<b>162.5</b>

**Table 5.26c: Physical and Financial progress under Soura Belaku Yojane 2011-12, Rs. in lakhs)**

District	Annual Target		Achievement	
	Physical	Financial	Physical	Financial
Belagavi	450	110	458	110
Chitradurga	208	50	254	50
Dharwad	208	50	257	50
Koppala	208	50	277	50
Mysore	208	50	224	50
<b>Total</b>	<b>1282</b>	<b>310</b>	<b>1470</b>	<b>310</b>

**Table 5.26d: Physical and Financial progress under Soura Belaku Yojane 2012-13 (Rs. lakh)**

District	Annual Target		Achievement	
	Physical	Financial	Physical	Financial
Tumakuru	210	55	311	55
Chikkamagaluru	210	50	255	50
Gadag	210	50	288	50
Dharwad	210	55	244	55
Kalaburagi	210	50	273	50
Bidar	210	50	210	50
<b>Total</b>	<b>1260</b>	<b>310</b>	<b>1581</b>	<b>310</b>

**Table 5.26e: Physical and Financial progress under Soura Belaku Yojane 2013-14 (Rs. in lakhs)**

District	Annual Target		Achievement	
	Physical	Financial	Physical	Financial
Gadag,	252	70	326	70
Kolar,	252	60	276	60
Mandya,	252	60	302	60
Uttara Kannada	252	60	302	60
Yadgiri	252	60	329	60
Total	1260	310	1535	310

**Table 5.26f: Physical and Financial progress under Soura Belaku Yojane 2014-15(Rs. in lakhs)**

District	Annual Target		Achievement	
	Physical	Financial	Physical*	Financial
Gadag,	315	71.25	0	71.25
Mysore	315	71.25	0	71.25
Haveri	315	71.25	0	71.25
Bagalkote	315	71.25	0	81.25
Kalburgi	50	15	0	15
Total	1310	310	0	310

\* E-Tendering is under process.

#### **D) Institutional support for rural energy development**

Mahatma Gandhi Institute for Rural Energy and Development

Mahatma Gandhi Institute for Rural Energy and Development(MGIRED) is a southern regional institute established with the assistance from the Ministry of New and Renewable Energy, Government of India. The Institute is a registered society set up in the year 2000, cater to the training needs of Southern States/Union Territories. Vision of the MGIRED is to create awareness and propagate the advanced technology in the development of the rural energy, ground water conservation, rain water harvesting and environmental protection to the rural masses.

MGIRED is committed itself to the following activities:-

1. Capacity Building
2. Demonstration of Rural/Renewable Energy Technologies
3. Demonstration of De-centralized Rural Energy Based Industry

4. Documentation and dissemination of information on Rural Energy Development/Rain Water Harvesting/Environmental Protection etc.
5. Research on Rural Energy
6. Advisory Services and Consultancy on Rural Energy, village adoption for implementing Rural Energy and related Rural Development Programme.

#### **5.3.4 Rural Roads Infrastructure**

##### **1. Pradhana Manthri Gram Sadak yojana (PMGSY)**

PMGSY was launched in the State during December 2000 with the objective of providing rural connectivity through all weather roads to the habitations having a population of 500 and above. Under this programme, Rs 4233.96 crore has been spent and 17391.67 km of road length has been asphalted as at the end of October 2015. Karnataka Rural Road Development Agency was constituted during 2005 to ensure effective implementation of all road connectivity programmes.



**Table 5.27- Rural Connectivity as per District Rural Road Map (DRRP)**

Year	2013-14
Bituminous Surface (Kms)	58184
Metal Surface (Kms)	21495
Earthen/Gravel Roads (Kms)	75866
Un Connected Habitations (Nos)	1771 habitations (with Population ranging from 250 to 499) & 10,269 habitations (having less than 250 Population)
Remarks	Up to end of 2012-13 it was reported as 2235 unconnected habitations. Now as per 2013-14 DRRP 1771 (population between 250-499) Nos of Unconnected habitations are identified.

The agency is involved in preparation of detailed project reports, implementation of the works (as approved by Government of India) as per the required standards and release grants provided by the Government of

## 2. Chief Minister's Grama Sadak Yojane

Rs. 13371.70 crore is provided under Mukhya Mantri Gramina Raste Abhivruddi Yojane for maintenance of roads in the budget for 2015-16. The funds provided have been allocated to Zilla Panchayats as per the Comprehensive Composite Development Index of Dr.D.M.Nanjundappa's Committee report on redressal of regional imbalances.

## 3. Rural Infrastructure Development Fund

### RIDF Nabard-15(2009-10)

250 roads & Bridges works at an estimated cost of Rs.11948.20 lakhs and 27 foot bridges works at a cost of Rs.190.00 lakhs were administratively approved during the year 2009-10. Out of 250 Roads & Bridges works, 243 works are completed, 3 works are under progress & 4 works are dropped. Out of 27 Foot Bridges works 27 works are completed, & 2 works are dropped.

### RIDF Nabard-16(2010-11)

251 Roads & Bridges works for Rs.151.27 crore and 153 Foot Bridge works for Rs.733.44 lakhs were sanctioned during 2010-11. Out of 251 Roads & Bridges works,

India. Connectivity is yet to be provided to 1771(population between 250-499)& 10269 (population less than 250) unconnected habitations. Details of rural connectivity from 2008-09 is shown in Table 5.27.

239 works are completed, 5 works are under progress & 7 works are dropped. Out of 153 Foot Bridges works 126 works are completed, 27 works are are dropped.

### RIDF Nabard-17(2011-12)

473 Roads & Bridges works at a cost of Rs.188.89 crore and 126 Foot Bridge works at a cost of Rs. 15.16 crore were approved during the year 2011-12. Out of 473 Roads & Bridges works, 443 works are completed 19 works are under progress & 10 works are dropped, 1 work yet to be started. Out of 126 Foot Bridges works 98 works are completed, 8 works are under progress & 20 works are dropped.

### RIDF Nabard-18(2012-13)

201 Road works at a cost of Rs.73.30 crore and 2 Bridge works for Rs.65.00 lakhs were sanctioned during 2012-13. 172 works are completed, 22 works are under progress & 4 works are dropped, 1 work yet to be started. 2 Foot Bridge works are completed.

### RIDF Nabard-19(2013-14)

391 works (roll over Projects of Nabard-18) amounting to Rs. 14095.00 lakhs is approved during 2013-14. Out of 391 Roads & Bridges

works, 171 works are completed, 115 works are under progress & 16 works are dropped. 89 works are yet to be started.

#### **RIDF Nabard-20 (2014-15):**

Government has administratively approved 365 roads & 79 Bridges works for Rs.18770.00 lakhs & 2290.00 lakhs, respectively. 87 Tanks works for Rs.1374.50 lakhs during the year 2014-15. Out of 365 Roads & 79 Bridges works, 1 road work is completed, 145 road works & 29 bridge works are under progress & 2 road works are dropped. 217 road works & 50 bridge works are yet to be started. Out of 87 Tanks works 3 works are completed & 32 works are under progress. 52 works are yet to be started.

#### **Issues and Challenges**

There is pressure to focus on maintenance of roads rather than new coverage owing to bad maintenance and shortage of funds at times.

### **5.4 Rural Employment and Livelihood**

#### **5.4.1 Mahatma Gandhi National Rural Employment Guarantee Scheme**

Mahatma Gandhi National Rural Employment Guarantee Scheme has been in operation in all the districts of Karnataka State since 2006-07 which is being implemented in a phased manner. The primary objective of the Act is to provide at least 100 days of guaranteed wage employment in a financial year to every rural household whose adult members volunteer to do unskilled manual work.

#### **Goals of the scheme set-out in the guidelines are as follows:**

- i. Social protection for the most vulnerable people living in rural India by providing employment opportunities
- ii. Livelihood security for the poor through creation of durable assets, improved

- iii. water security, soil conservation and higher land productivity
- iii. Drought-proofing and flood management in rural India
- iv. Empowerment of the socially disadvantaged, especially women, Scheduled Castes (SCs) and Scheduled Tribes (STs), through the processes of a rights-based legislation
- v. Strengthening decentralised, participatory planning through convergence of various anti-poverty and livelihoods initiatives
- vi. Deepening democracy at the grass-roots by strengthening Panchayati Raj Institutions
- vii. Effecting greater transparency and accountability in governance

MGNREGA is a powerful instrument for ensuring inclusive growth in rural India through its impact on social protection, livelihood security and democratic empowerment.

As compared to the erstwhile employment programmes, there is a paradigm shift in the present employment programme scheme as emerged under the Act. The following are the salient features of the shift in the present employment scheme.

- i. MGNREGA has given rise to the largest employment programme in human history and is unlike any other wage employment programme in its scale, architecture and thrust. Its bottom-up, people-centred, demand-driven, self-selecting, rights-based design is distinct and unprecedented.
- ii. MGNREGA provides a legal guarantee for wage employment.
- iii. It is a demand-driven programme where provision of work is triggered by the demand for work by wage-seekers.
- iv. There are legal provisions for allowances and compensation both in cases of failure to provide work on demand and delays in payment of wages for work undertaken.

**Table 5.28: Progress achieved under MGNREGS since inception  
(up to the end of December 2015)**

Districts	Available funds (Rs in lakhs)	Expenditure (Rs.in lakhs)	Person day generated (in lakhs)	Employment Provided (Households)	works		
					No.of works undertaken (Nos)	Completed (Nos)	Under progress
Bagalkot	3757	3607	920117	24804	22789	6360	16429
Bangalore Rural	457	53	16240	421	3516	580	2936
Bangalore Urban	772	623	169278	5118	11487	1972	9515
Belgaum	7620	7442	2546156	62482	66386	7633	58753
Bellary	2985	2873	866268	20290	25389	6349	19040
Bidar	2584	2612	674935	17505	32337	5857	26480
Bijapur	4402	4103	958663	22731	41481	5183	36298
Chamaraja nagar	2109	2043	465415	12070	12130	2978	9152
Chicka ballapur	2111	1823	457438	13075	29040	2444	26596
Chikmagalur	1570	1487	467457	15560	28754	2523	26231
Chitradurga	7482	7130	1372918	30001	30214	6283	23931
Dakshina Kannada	1086	936	297077	8192	10084	1193	8891
Davanagere	5433	5249	647131	16518	31462	6761	24701
Dharwad	2509	2416	644453	19990	26317	7436	18881
Gadag	1953	1840	471548	20318	29042	9795	19247
Gulbarga	4054	3457	835939	22836	31512	11858	19654
Hassan	4059	3937	1160495	32767	36307	6597	29710
Haveri	3043	2883	896704	24313	23374	2309	21065
Kodagu	329	212	56927	2146	13235	405	12830
Kolar	5406	5149	1288178	29996	25728	5843	19885
Koppal	3179	3057	669402	18599	43590	6700	36890
Mandya	1601	1491	399360	17296	52719	7264	45455
Mysore	1587	1426	337093	10160	27659	3618	24041
Raichur	7115	6599	2315638	52292	36324	7129	29195
Ramanagara	5628	5517	1728332	32922	58329	9740	48589
Shimoga	3700	3580	1201024	68183	40626	13506	27120
Tumkur	3617	3082	747368	23227	76128	30996	45132
Udupi	415	236	92947	3771	9620	348	9272
Uttara Kannada	2356	2185	650231	24003	13616	2200	11416
Yadgir	3874	2731	512083	13717	19034	2076	16958
Total	96795	89780	23866815	665303	908229	183936	724293

v. The scheme is being implemented as centrally sponsored scheme on cost sharing basis between centre and State Governments in the ratio of 90:10 nearly. Further under the scheme labour material ratio at 60:40 shall be maintained. Labour portion of 60% borne fully by Government of India and

material portion will be shared between central and State Governments in ratio of 75:25.

vi. Gram Panchayats (GPs) are to implement at least 50 per cent of the works in terms of cost. This order of devolution of financial resources to GPs is unprecedented.

- vii. Plans and decisions regarding the nature and choice of works to be undertaken, the order in which each work is to be triggered, site selection etc. are all to be made in open assemblies of the Gram Sabha(GS) and ratified by the GP. Works that are inserted at Intermediate Panchayat (IP) and District Panchayat(DP) level have to be approved and assigned a priority by the GS before administrative approval can be given. The GS may accept, amend or reject them.
- viii. Social audit is a new feature that is an integral part of MGNREGA. Potentially, this creates unprecedented accountability of performance, especially towards immediate stakeholders.

The annual allocation for 2015-16 as approved by the Government of India for the labour budget of MGNREGA for Karnataka is Rs. 2587.35 crores and the person days approved for generation of employment for the current year is 717.91 lakh. As at the end of December 2015 an amount of Rs. 897.80 crores has been spent and 238.67 lakh person days generated and during this period 6.65 lakh Households are provided employment. (Table 5.28).

#### 5.4.2 Self Employment Programme

The Government of India, Ministry of Rural Development has restructured SGSY as “Aajeevika”- National Rural Livelihoods Mission (NRLM) and being implemented from

2010-2011. The State Government is implementing this scheme in the phased manner through Karnataka State Rural Livelihood Promotion Society which is named as “Sanjeevini”.

The Mission implements central government, state government and World Bank schemes /programs under the umbrella of Sanjeevini. They are as follows:

1. National Rural Livelihood Mission (sub components : NRLP, RSETI, Interest Subvention, MKSP )
2. Deen Dayal Upadhyaya Grameen Koushalya Yojane (DDU-GKY)
3. Rajiv Gandhi Chaitanya Yojane (RGCY)
4. Interest Subvention State scheme
5. Nutrition Mission Program.

In addition to these major programs a number of minor/Pilot programs such as Panchayat Raj Institutions (PRI) convergence, Micro Enterprises Consultants (MEC), Friends of Coconut Tree (FOCT), Ksheera Sanjeevini, Mahila Kissan sashakthikaran Pariyojana (MKSP), Interest Subvention are also being implemented under Sanjeevini. The amount allocated to implement these programmes during 2015-16 is Rs. 7855.00 lakh.

During 2014-15, five districts and 20 taluks were selected under intensive approach and during 2015-16 additional 64 taluks blocks are being covered under intensive strategy. Remaining taluks will be brought under intensive approach during 2016-17 and 2017-18. The details of phasing plan for sanjeevini intensive strategy is in Table 5.29.

**Table 5.29: Sanjeevini Phase wise plan for Intensive Strategy**

Phase and year	No of Talukas				
	Most backward	More backward	Backward	Not backward	Total
Phase-1 (2014-15)	04	11	01	04	20
Phase-2 (2015-16)	35	27	02	-	64
Phase-3 (2016-17)	-	-	28	-	28
Phase-4 (2017-18)	-	04	02	58	64
Total	39	42	33	62	176

The component wise financial progress of Sanjeevini as on October 2015 is provided in Table 5.30

**Table 5.30 Interim Unaudited Financial Report (IUFRR) for the Period from 1-April-2015 to 31-Oct-2015**

Name Of the Scheme	Opening Balances	Receipts	Interest	Total Fund Available	Expenditure	Closing Balances
Aajeevika skills	300.61	5418.55	6.87	5726.03	-	5726.03
IS-Central	990.33	172.15	10.86	1173.34	742.88	430.46
IS-State	378.13	-	5.59	383.72	-	383.72
MKSP	34.90	-	1.42	36.32	-	36.32
NRLM	862.65	629.65	12.02	1504.32	1024.01	480.31
NRLP	512.43	1047.37	8.77	1568.57	1340.03	228.54
RSETIES	74.16	142.86	0.50	217.52	17.54	199.98
RGCY	1250.43	2350.00	53.99	3654.42	1273.95	2380.47
KCNM	325.34	-	-	325.34	68.42	256.91
Total	4728.99	9760.58	100.03	14589.61	4466.84	10122.77

### Issues and Challenges

Many of the households had not undertaken any income generating activities due to lack of proper training and mostly due to lack of entrepreneurial skills of inadequate marketing support and the associated market.

## 5. 5. FISCAL DECENTRALISATION IN KARNATAKA

### 5.5.1 Decentralised Planning in Karnataka

After effecting the 73<sup>rd</sup> Amendment to the Constitution, Karnataka was the first State to pass a new legislation in 1993, viz., The Karnataka Panchayat Raj Act, 1993. The Act provides for a three-tier structure of Panchayati Raj with Zilla Panchayats (at the district level) Taluk Panchayats (at the Taluk level) and Gram Panchayats (at the village level). The Bill for constituting panchayats, which was introduced on 1st April 1993, came into force from May 18, 1993. In conformity with the Eleventh Schedule of the Constitution, the 1993 Act has entrusted a wide range of functions (Schedule I, II and III) to panchayats. To carry out these functions, the Gram Panchayats receive an annual grant of Rs. 10 lakh per GP - for GPs with population of less than 8000 and for those with more than 8000 population an increment of Rs. 1 lakh for every 1000 population is provided. Rs. 616.62 crore has been allocated to the grama panchayats during 2015-16. GPs have also powers to levy tax on buildings and lands, levy water rate,

tax on entertainment, vehicles, advertisement and hoarding and collect market fee, fee on bus stands and on grazing cattle. Both the Taluk and Zilla Panchayatis are allowed to charge fee on their property used by others and they do not have powers to levy taxes. In addition, both the Grama Panchayatis and the Taluk Panchayatis get proceeds from cess on land revenue, surcharge on stamp duty levied by the State Government. Except for these, the panchayatis have to depend solely on the resources transferred from the Government.

The powers and functions of the Grama, Taluk and Zilla Panchayatis have been listed in sections 58, 145 and 184 of KPR ACT, 1993. As per the three schedules (I, II, III) the panchayatis are authorised to carry out functions such as preparation of annual plans, annual budgets and sectoral schemes for promotion of agriculture, animal husbandry, rural housing, drinking water, roads and bridges, rural electrification, education, rural sanitation, public health, women and child development, social welfare, public distribution system, maintenance of community assets, cooperative activities and promotion of libraries. Section 309 of 1993 Act provides for the preparation of development plan by the grama panchayatis, taluk panchayatis and zilla panchayatis. Furthermore, Section 310 of the Act makes it mandatory for the state to constitute District Planning Committees (DPCs) in each district which are required to consolidate the plans prepared by the panchayatis and municipal bodies and to prepare the draft district

development plan of the district by taking into consideration the needs of the spatial planning, physical and natural resources and the level of infrastructure development. Dr. D M Nanjundappa's Report on Redressal of Regional Imbalances also recommended that DPCs in each district should do the planning keeping 'taluk' as the primary unit in the planning process.

### **5.5.2 Recent Policy Initiatives to strengthen Decentralised Planning Process**

Karnataka comprises of 6,020 Gram Panchayats, 176 Taluk Panchayats and 30 Zilla Panchayats. The State has to its credit entrusting major responsibilities and devolving all the 29 functions (a first State to do so in the country as a whole) to the panchayats as enlisted under the Eleventh Schedule of the Constitution. In recent years, the State Government has been taking a proactive stance to strengthen the decentralised governance and planning process and to that effect has introduced many administrative innovations like the following:

- (i) The responsibility of plan formulation and implementation has been devolved to the panchayats by transferring funds, functions and functionaries.
- (ii) Introduction of social auditing in the form of Jamabandhi to ensure transparency in the system;
- (iii) Ombudsmen are appointed at the district level to ensure transparency and accountability in the implementation of important programmes like MGNREGS
- (iv) Computerisation of Grama Panchayatis, Taluk Panchayatis and Zilla Panchayatis.
- (v) Drawal of salary by the Grama Panchayati Secretaries from the Grama Panchayati account; ensure more accountability to their Panchayatis
- (vi) In order to strengthen the Grama Panchayats for effective implementation of programmes, effective utilization of grants, one post of Panchayat Development Officer in each of the 5627

GP and 2500 Second Division Accounts Assistant posts in the larger GPs have been created.

- (vii) Grama Panchayat Budget and Accounts Rules, 2006 has been enacted to ensure transparency in the maintenance of accounts. Besides, Double Entry Accounting System has been introduced.
- (viii) The State has launched capacity building programmes such as - certificate course for panchayati members, imparting functional literacy to illiterate Grama Panchayati members, training through satellite networks to elected panchayati functionaries at ANSSIRD, Mysore.
- (ix) As envisaged in the 73rd Constitutional Amendment guidelines for effective functioning of District Planning Committees are finalized.
- (x) The honorarium to the elected representatives of PRIs has been doubled.

### **5.5.3 Activity Mapping**

The State has evolved a detailed range of 'Activity Mapping' for all the three panchayats. Broadly, the activity mapping visualises both Zilla Panchayatis and Taluk Panchayatis as planners, facilitators and owners of common executive machinery, Grama Panchayats as the cutting edge of local service provision, and Grama Sabha and Ward Sabhas as instruments of downward accountability. The new activity mapping framework devolving functions has to be accompanied by adequate devolution of finances and functionaries. To translate this into reality, the Department of Rural Development and Panchayati Raj in coordination with other departments has devolved certain functions, functionaries and finances to PRIs.

### **5.5.4 Simplification and Rationalisation of Schemes**

Another step in the above direction is the simplification and rationalisation of schemes. Accordingly, the number of schemes in the Panchayat Sector of the budget is now reduced to 318 (190 plan and 128 non-plan schemes) thus simplifying the District Sector fund transfer mechanism. Minor schemes

have been merged into larger ones, giving greater flexibility to panchayatis to address their priorities.

### 5.5.5 Decentralized Planning Process – Allocation of Funds to District Sector

The decentralised planning process as described in the plan documents begins with the determination of annual plan size at the

state level, and allocation of funds to the district sector. Then district sector allocation for various programmes is done in consultation with the Chief Executive Officer of each Zilla Panchayat, District level Sectoral officers and State level Department officers. After this, the data is provided to Finance Department to integrate the district sector data with the State and also to print budget link documents.

**Table 5.31 - Sector wise Allocation of the District Sector State Plan Funds (Rs. lakh)**

Sector	2011-12	2012-13	2013-14	2014-15	2015-16
Education	100037	175653	234354	299565	340237
Sports & youth services	2079	2223	2770	2929	2483
Art & Culture and Library	74	69	88	104	166
Medical & Public health	12543	14254	17700	19035	21455
Family welfare	31115	35297	42195	46803	50246
Rural water supply	12925	22939	22983	23652	51488
Rural Housing	36408	53668	28225	101999	102000
Welfare of SCs & STs	33863	40151	53090	55244	61064
Welfare of BCs	9473	9715	14690	18663	22622
Welfare of Minorities	1494	1490	1816	2116	2769
Labour, Employment & Trg.	117	118	120	465	471
Welfare of Women & Children	55691	77226	92798	96785	102271
Welfare of Disabled & Sr. Citizens	540	651	814	1049	1158
Nutrition	28665	37557	68825	56855	61742
Agriculture	6970	4090	4192	4273	2967
Soil and Water Conservation	12817	20429	17995		
Horticulture	2012	2242	2127	2207	2442
Animal Husbandry	10406	11761	14145	15469	16002
Fisheries	865	643	714	771	907
Forest	2301	2288	2469	2779	3235
Co-operation	474	480	524	517	586
Agriculture Marketing	102	155	205	252	367
Area Development & RD programmes	15798	7182	7258	23610	12928
Rural Energy	1933	1925	1896	1569	1686
Rural Employment - NREG	126727	151280	151280	151000	151000
Grants to PRIs including ZP Office Buidings	81643	90292	91459	101003	104126
Minor Irrigation	76	74	76	76	100
Village & Small Industries	501	316	567	613	697
Sericulture	456	466	502	554	631
Roads & Bridges	15341	15518	15517	15920	13935
District Planning Unit	305	316	317	1748	489
Handlooms & Textiles	256	274	287	290	325
Science & Technology	158	151	152	157	176
Total	604165	780893	892150	1048070	1132771

Source: Department of Planning, Programme Monitoring and Statistics

The Budget Link Documents are placed before the Legislature as a part of State Budget. Once the budget is passed, the link documents are made available to the Zilla Panchayath for the preparation of Action Plans at ZP, TP and GP level. These PRIs prepare the action plans as per the allocations, discuss them in the various Standing Committees and place them in the general body meetings and seek guidance of the District Planning Committees after which the implementing officers start executing the plans/programmes. In the preparation of plans the ward sabhas and grama sabhas play a crucial role and their recommendations and suggestions do figure in such action plans emphasising the fact that the plans so prepared are the byproduct of people's wishes and demands. Thus, the entire planning process can be termed as 'participatory planning processes. Table 5.31 provides information on allocations to the different

sectors in the annual plans of 2011-12 to 2015-16.

As may be seen in Table 5.31 sectors like education, rural employment, welfare of women and children, welfare of Scheduled Castes and Scheduled Tribes, rural housing has been the priority sectors of panchayats having been receiving better allocation compared to other sectors. It can also be seen that there is a perceptible increase in the allocation made to these sectors across the plan years.

## **5.6 ISSUES AND CHALLENGES**

The capacity of panchayats and elected representatives is inadequate. Hence capacity building is necessary. Further there is need for greater functional and financial autonomy of local governments.

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# URBAN DEVELOPMENT

## 6

### Introduction:

Urban Development Department is responsible for all matters relating to urban areas in the State. Urbanization gives rise to various issues like (i) urban poverty and Slum Improvement (ii) increased pressure on basic services/civic amenities of housing, water supply, sanitation, electricity, (iii) need for focus on urban schooling and healthcare, (iv) proper solid waste management and maintenance of roads. Addressing these concerns is a big challenge for the State Government. The Urban Development Department comprises of the following Boards/Corporations/ Departments/ Urban Development Authorities /Urban Local Bodies:-

- BBMP and other 10 City Corporations
- BDA (Bengaluru Development Authority) and Other UDAs- 30
- BWSSB (Bengaluru Water Supply & Sewerage Board)
- KUWS&DB (Karnataka Urban Water Supply & Drainage Board)
- DMA (Directorate of Municipal Administration)
- DULT (Directorate of Urban Land Transport)
- BMRDA (Bengaluru Metropolitan Region Development Authority)
- BMRCL (Bengaluru Metro Rail Corporation Limited)
- KUIDFC (Karnataka Urban Infrastructure Development & Finance Corporation)
- DTCP (Directorate of Town & Country Planning).
- City Municipal Council- 57
- Town Municipal Council- 113
- Town Panchayats- 90

The total number of Urban Local Bodies (ULBs) in Karnataka is 271.

### 6.1 Trends in Urbanisation

Karnataka is India's 7<sup>th</sup> most urbanized State in India. As per Census 2011, of Karnataka's 6.1 crore population, 38.6% (i.e. 2.35 crore) reside in urban areas (**Table 6.1**). In terms of urbanisation, the State has witnessed an increase of 4.68 per cent in the proportion of urban population in the last decade. As per the Registrar General of India, for the decade 2001-2011, the absolute increase in population has been more in urban areas than in rural areas for the first time since independence. Karnataka's urban population has grown by 31.27% between 2001 and 2011, compared with 28.85% in the previous decade. The growth of urban population between 2001 and 2011 is also higher as compared to the growth of 7.63% in the rural population in the same period. The state is expected to reach an urban population proportion of 50% in the next fifteen years (2026). Among the districts, Bengaluru is the most urbanised district with 90.94 per cent of its population residing in urban areas (**Table 6.2**) followed by Dharwad district (56.82 per cent), Dakshina Kannada district (47.67 per cent), Mysuru district (41.50 per cent) and Bellary district (37.52 per cent). The least-urbanised district in the State is Kodagu with 14.61 per cent, preceded by Koppal district (16.81 per cent), Mandya district (17.08 per cent), Chamarajanagar district (17.14 per cent) and Yadgir district (18.79 per cent). The district wise details are given in Appendix 6.1.

**Table 6.1: Trends in Urbanization in Karnataka (1951-2011)**

Year	Karnataka's total Population (lakhs)	% of Urban Population in Karnataka
1951	194	22.95
1961	236	22.33
1971	293	24.31
1981	371	28.29
1991	448	30.91
2001	527	33.98
2011	611	38.57

Source: Census, 2011

**Table 6.2 Urbanisation in Karnataka Districts, 2011**

Top Five Districts Details			Bottom Five Districts Details	
Sl No	District	Urbanisation in %	District	Urbanisation in %
1	Bengaluru	91	Kodagu	15
2	Dharwad	57	Koppal	17
3	Dakshina Kannada	48	Mandya	17
4	Mysuru	41	Chamarajanagar	17
5	Bellary	38	Yadagiri	19

Source: Census, 2011

## 6.2 Urban Housing

Housing is evolved as a prime component over the period of time not only in providing shelter but also providing employment opportunities and in development of locations. To meet the growing demand of housing, the State Government has been pro-active in its housing policies. Housing for the poor and down-trodden assumes greater importance both in rural and urban areas in the State. The State Government has given greater attention to the problem of housing scarcity and increased the budgetary allocation year after year along with formulation of facilitating policies and guidelines.

According to Census 2011, about one-third of the households in the State live in one-room tenements; nearly 30 per cent more live in two-room tenements. When the disaggregated data become available, they were likely to reveal a significantly higher proportion of households living in one- or two-room tenements in the northern districts of the State.

The State Government has traditionally given high priority to public housing. It is one of the

few states, which has its own housing programmes for the EWS both in rural and urban areas apart from the centrally sponsored housing schemes for the EWS. In addition, the Karnataka Housing Board (KHB) caters to housing needs of low income, middle income and high-income groups. The Karnataka Slum Development Board (KSDB) is responsible for improvement of slums and resettlement of slum dwellers.

### 6.2.1 Karnataka Housing Board:

KHB is endeavoring to meet the rise in housing demand by undertaking layout formation, Construction of houses, land development schemes under joint venture scheme policy approved by Government of Karnataka and KHB Act. At present KHB is implementing the schemes approved by the Government such as 100 housing scheme, Suvarna Karnataka Housing Scheme and 225 Housing Schemes approved during 2010-11. The projects approved by the Government and Proposed projects are as per demand driven. Detailed Projects Reports are being prepared by pre-qualified Architectural and Engineering Firms and works are being monitored by pre-qualified, Professional

Management Consultants. The Schemes are offered to Pre-qualified turn-key contractors who will execute all the works such as civil works, electrical, water supply, sanitation, sewerage treatment plant works, landscaping including development of open spaces, parks and gardens etc.,

#### **The Main Objective of the KHB are –**

1. Survey of Housing demands in urban cities and Towns.
2. Acquisition of land (Government and Private) for Housing schemes.
3. Implementation of housing schemes as per demand, land and zonal rules as per transparency act.
4. Allotment of Site/Houses through lottery under KHB regulation act 1983.

#### **I. 100 HOUSING PROJECTS**

100 Housing Projects is being implemented since 2002. Details are as follows:-

- 96 Schemes have been completed at a cost of Rs.1002.94 crore. Out of these schemes 6067 houses and 26748 sites have been constructed/ developed.
- 3 schemes at the cost of Rs.19.73 Crore, is under implementation to develop 560 sites and to construct 40 houses.
- 1 scheme is in formulation.

#### **II. Suvarna Karnataka Programme**

Board has proposed to take up 50 Housing Scheme at various places under Suvarna Karnataka Scheme at a cost of Rs.1406.48 Crore as per the Government approval during July 2007. The Various stages of implementation of the Programme are as follows.

- 36 Schemes have been completed at a cost of Rs.1044.57 crore. Out of these schemes 1206 houses and 20486 sites have been constructed/developed.
- 7 schemes at the cost of Rs.411.89 Crore is under implementation to develop 1424 sites and to construct 1243 houses.
- 7 schemes are under formulation.

#### **III. 225 Housing Schemes**

Government has accorded approval vide Order No: DOH: 102: KHB: 2010 dated 18<sup>th</sup> May 2010 to take up 225 housing schemes during the year 2010-11 to develop 305786 sites and construct 131051 houses. Out of these schemes:-

- 9 Schemes have been completed at a cost of Rs. 108.72 Crore. Out of these completed schemes, 277 houses and 1442 sites have been constructed /developed.
- 31 schemes at the cost of Rs. 4412.27 Crore are under implementation to develop 57749 sites and construct 3507 houses.
- The Procurement of land is in progress for the remaining schemes.

#### **IV. Other Schemes**

- 53 Housing schemes were approved at a project cost of Rs.7888.04 Crore during September 2012 to develop 130471 Sites and to construct 6867 Houses.
- Out of the above schemes 5 Schemes are under implementation at a cost of Rs.756.45 Crore to construct 180 houses and develop Sites 8090.
- Remaining schemes are under formation.

#### **V. Details of Housing Schemes completed and allotment completed.**

There are 20 places identified across the State to develop 32405 Sites at a project cost of Rs.752.65 Crore. The details of various housing schemes completed under KHB are given in Table 6.3. Allotment of Houses and Sites are being done as per the KHB Allotment Regulation 1983 based on demand survey. The details of allotment from 2006-07 to 2014-15 under various categories are as per Table 6.4. The details of Budget and expenditure is as per Table 6.5.

**Table 6.3: Details of various housing schemes under KHB**

Year	Completed Projects				No. of Properties			Project Cost (Amt. in lakhs)
	100HP	SKHP	225HP	Board Scheme	Total	Houses	Sites	
Upto 2003					950	109605	17174	126779
2003-04	15	0	0	0	15	275	2623	2898
2004-05	14	0	0	6	20	585	2355	2940
2005-06	15	0	0	5	20	263	3724	3987
2006-07	6	0	0	3	9	552	2242	2794
2007-08	5	0	0	5	10	186	1671	1857
2008-09	11	0	0	2	13	764	4592	5356
2009-10	7	2	0	0	9	367	1947	2314
2010-11	10	5	0	0	15	768	6097	6865
2011-12	6	11	1	0	18	2661	6176	8837
2012-13	4	6	2	3	15	510	5350	5860
2013-14	0	9	4	0	13	546	10423	10969
2014-15	3	5	2	0	10	226	5715	5941

**Table 6.4 - Details of year wise allotment**

Year	Houses					Sites					Other (CA/Com. Shops)	Grand Total
	EWS	LIG	MIG	HIG	TOTAL	EWS	LIG	MIG	HIG	TOTAL		
Upto 2006					105466							105466
2006-07	0	2093	1273	281	3647	0	1779	2162	528	4469	0	8116
2007-08	5	1326	784	245	2360	5	1147	1358	573	3083	0	5443
2008-09	19	316	537	75	947	4	2396	2162	1049	5611	0	6558
2009-10	53	275	169	6	503	12	1398	1090	667	3167	92	3762
2010-11	0	144	127	20	291	152	3192	3068	2217	8629	55	8975
2011-12	1	628	478	135	1242	1935	2503	2575	1192	8205	268	9715
2012-13	48	523	536	127	1234	1963	4069	4684	2615	13331	376	14941
2013-14	58	460	485	137	1140	1244	1871	1588	988	5691	265	7096
2014-15	0	122	235	85	442	650	2231	1546	670	5097	366	5905
2015-16*	0	100	125	4	229	1403	1995	1642	679	5719	315	6263

\*(From April to January -2016)

**Table 6.5: The details of budget and expenditure (Rs. in Lakhs)**

Year	100HP		SKPH		225 HP		Board Scheme		Shopping Complex		53 HP	
	Budget	Expenditure	Budget	Expenditure	Budget	Expenditure	Budget	Expenditure	Budget	Expenditure	Budget	Expenditure
2006-07	24324.79	17985	6946	-	-	-	206	249	1384.75	30.36	-	-
2007-08	24324.79	15183.08	6946	-	10003	6042	735	-	1384.75	30.36		
2008-09	10992.91	5425.52	41294	-	-	-	12968	1014.89	459.38	19.71		
2009-10	9772.75	7819.78	5104	-	-	-	17388	709.63	395	432.38		
2010-11	10175.87	24637	34284	13985	-	-	15065	5813	505	-		
2011-12	9124.00	2170.58	51731.88	15801.88	68706.19	17558.91	720	6259.66	-	-		
2012-13	1590.03	1340	28683.10	21806.63	50658.16	36197.16	1387.68	890.62	-	-	27865	17068
2013-14	486.46	25.36	7720.88	9430.55	65212.85	63941.81	5600.58	4669.21	-	-	10599.60	4065.43
2014-15	396.81	0.30	11008.75	4162.12	30262.23	26356.11	2241.52	1428.02	-	-	8876.42	3139.32
2015-16*	573.67	195.00	1535.21	1479.00	24243.87	10353.00	648.85	752.00	-	-	5450.89	2868.00

\*From April to January - 2016

**(f) Deposit Contribution works**

Karnataka Housing Board has undertaken deposit contribution works as per entrustment by the Government. Up to October 2015 the details of works taken and progress is as follows -

- 475 building projects have been completed, amounting to Rs.735.02 Crore.
- 53 building projects are under progress amounting to Rs.249.91 Crore.
- 71 buildings Projects amounting to Rs.427.09 Crore are under formulation.

In line with the guidelines given in Affordable Housing Policy as stated

- KHB will take necessary action to construct at least 50% houses/flats for EWS/LIG category in each of their housing schemes.
- Government land shall be allotted on priority to KHB.
- KHB cross-subsidized the land cost of EWS/LIG Houses so as to bring is down the costs of these categories of houses to affordable limits.
- KHB will also examine to take up EWS/LIG flats on PPP module based on viability as per guidelines.
- KHB is adopting fast track and efficient construction technology.
- From inception KHB has constructed 117501 houses and allotted 64084 sites.

- From 2000-01 to 2015-16 KHB has constructed 11657 Houses under various housing schemes and developed 55827 sites which have been distributed.

**6.2.2 Urban Ashraya Scheme / Vajpayee Urban Housing Scheme**

This is State Sponsored scheme implemented for urban poor and it was introduced by the Government in the year 1991-92. The annual income of the beneficiary is Rs.32,000/-. The beneficiaries are selected by the Ashraya Committee comprising both official and non official members appointed by the Government and this committee is headed by the local MLA.

**6.2.3 Vajpayee Urban Housing Scheme**

In 2010-11 the Government of Karnataka has renamed the Urban Ashraya Scheme as Vajpayee Urban Housing Scheme. From 2013-14 the Government has fixed the unit cost of Rs. 2.00 lakhs per house. In this for General Category Rs.1.20lakhs is provided as subsidy by the State Government, Rs.30,000/- is compulsory beneficiary contribution and balance Rs.50,000/- is the bank loan or the beneficiary contribution.

**6.2.4 Housing demand survey**

RGRHCL has conducted a survey of Houseless and Siteless in the State during 2003. Accordingly, 1299789 House-less and 1298813 Site less peoples have been identified. Later in the year 2009 hut-dwellers survey has been conducted to make the state as hut-less State. As per the survey around 10.50 lakh hut-dwellers have been identified in the State. (**Table 6.6**).

**Table 6.6 –Details of district-wise no. of hut-dwellers**

District Name	No. of Hut-dwellers
Belgaum	84656
Bagalkot	9733
Bijapur	33586
Kalaburagi	94754
Bidar	54989
Raichur	86676
Koppal	36441
Gadag	27422
Dharwad	10889
UttaraKannada	19349
Haveri	33961
Bellary	75918
Chitradurga	29958
Davanagere	34093
Shimoga	39368
Udupi	5901
Chikmagalur	8053
Tumkur	91965
Kolar	14445
Bengaluru Urban	797
Bengaluru Rural	1486
Mandya	23115
Hassan	30982
DakshinaKannada	5296
Kodagu	2396
Mysuru	40714
Chamarajanagar	27788
Ramanagara	31618
Chikkaballapur	33262
Yadgiri	60389
Grand Total	1050000

**6.2.5 House Sites Scheme:**

For the last 14 years i.e. from 2000-01 to 2014-15, a total of 1,65,614 house sites have been formed and distributed under Vajapayee Urban House Sites Scheme. In the last 3

years i.e. from 2012-13 to 2014-15 the Company has formed 25,853 house sites as against the target of 40,000 house sites. During the current financial year i.e. 2015-16 up to the end of Dec 2015, 791 house sites have been formed and distributed.



**Table- 6.7: Year wise sites distributed under Vajpayee Urban House Sites Scheme**

District	2012-2013		2013-2014		2014-2015		Total		2015-16	
	Target	Sites Distributed	Target	Sites Distributed	Target	Sites Distributed	Target	Sites Distributed	Target	Sites Distributed Up to 01-12-2015
Bagalkot	1165	2101	572	0	572	54	2309	2155	548	0
Ballari	989	850	500	5323	500	21	1989	6194	488	0
Belagavi	1428	797	709	166	709	0	2846	963	668	0
Bengaluru Rural	446	0	219	0	219	0	884	0	210	0
Bengaluru Urban	647	1039	356	120	356	0	1359	1159	496	0
Bidar	595	644	296	19	296	0	1187	663	261	0
Chamarajanagar	502	85	250	37	250	0	1002	122	214	0
Chikkaballapura	595	39	296	0	296	0	1187	39	264	0
Chikkamagaluru	550	90	259	13	259	0	1068	103	290	0
Chitradurga	464	1432	223	0	223	0	910	1432	227	27
Dakshina Kannada	747	170	377	100	377	361	1501	631	324	49
Davanagere	717	363	372	61	372	273	1461	697	306	0
Dharwad	611	0	313	0	313	52	1237	52	311	0
Gadag	643	2510	305	64	305	0	1253	2574	384	400
Hassan	600	1022	287	0	287	0	1174	1022	332	0
Haveri	731	1731	360	0	360	1	1451	1732	379	0
Kalaburagi	921	565	468	332	468	241	1857	1138	431	50
Kodagu	303	0	145	0	145	0	593	0	182	0
Kolar	620	356	310	1	310	0	1240	357	299	0
Koppal	459	175	232	0	232	1926	923	2101	238	7
Mandya	532	66	255	0	255	0	1042	66	308	0
Mysuru	790	295	395	200	395	0	1580	495	391	0
Raichur	595	0	296	0	296	0	1187	0	294	163
Ramanagara	484	1368	258	0	258	0	1000	1368	211	0
Shivamogga	805	113	413	61	413	0	1631	174	414	0
Tumakuru	923	0	473	72	473	0	1869	72	462	0
Udupi	378	0	193	85	193	0	764	85	178	0
UttaraKannada	893	150	438	0	438	0	1769	150	434	0
Vijayapura	514	309	251	0	251	0	1016	309	282	0
Yadgiri	353	0	179	0	179	0	711	0	174	95
Grand Total	20000	16270	10000	6654	10000	2929	40000	25853	10000	791

### 6.2.5 House Sites

The Government is implementing the Rural House Site Scheme in rural areas and Vajpayee Urban Site Scheme in urban areas for EWS site-less families in the state. In rural areas 30 X 40 and in urban areas 20X 30 sites are provided at free of cost. In rural areas beneficiaries are selected through gram sabha and in urban areas through ashraya committee. This scheme was introduced by the Government in the year 1992-93.

During 2000-01 to 2014-15 269090 sites have been distributed (154107 sites in rural areas, 114983 sites in urban areas). For the year 2015-16 it is targeted to distribute 20,000 sites (10,000 in rural and 10,000 in urban areas) and as against this 4004 sites have been distributed up to December 2015.

### 6.2.6 Nanna Mane (Affordable Housing for Low income groups)

During 2010-11 the Government of Karnataka has introduced a new scheme for above poverty line people to provide affordable houses to the low income group families (LIG) like Auto drivers, Film Industry workers, Unorganised sector workers, Beedi workers, Hamals, Street Vendors etc. The annual income of the beneficiary is limited to Rs.1.00lakh per annum. In this regard the Government has taken up 4 projects during 2011-12 in and around Bengaluru. i.e. Talaguppa near Bidadi, Singanayanahalli and Hunasamaranahalli near Yelahanka, Kodathi under G+2 concepts. The unit cost of the flat is Rs.3.90lakh, 4.25lakh and 5.20lakh.

### 6.3 Urban Slums

The population living in urban slums in Karnataka has raised from 14.02 lakh (2001) to 32.91 lakh (2011) in a decade. This is a rise from 7.8 per cent of the total urban population of the State being slum-dwellers according to the 2001 Census to 13.9 per cent now. Bengaluru district has 21.94 per cent of the total slum population, and every fifth person in the Bruhat Bengaluru Mahanagara Palike (BBMP) limits lives in a slum. An

analysis of the 2011 Census data shows that Bengaluru is followed by Bellary and Dharwad, which have 6.09 per cent and 6.21 per cent share of the total urban population in slums, respectively. Udupi, Dakshina Kannada and Kodagu reported less than 1 per cent of the population in slums (see Appendix 6.5 for details).

The Board is implementing the centrally sponsored scheme of Basic Services to the Urban Poor (BSUP) in both Bengaluru and Mysuru cities to construct houses for slum dwellers and Integrated Housing and Slum Development Programme (I.H.S.D.P) with the intention to provide housing to slum dwellers and also improve the environmental conditions of the slums. The Board is implementing the following schemes, viz.

- Slum Improvement Programme
- Centrally sponsored Jawaharlal Nehru National Urban Renewal Mission (JnNURM)
- Basic Services to Urban Poor (BSUP)
- Integrated Housing and Slum Development Programme (IHSDP).
- Rajiv Awas Yojana (RAY)

#### (a) Slum Improvement Programme

During 2014-15, an amount of Rs.83.92 crore has been sanctioned in budget for providing basic amenities, this amount utilized for improvement of slums. In the current year 2015-16, out of the budgeted outlay of Rs.92.15 crore, an amount of Rs.45.40 crore has been utilized up to end of Dec 2015.

#### (b) Basic Services to the Urban Poor (BSUP):

This programme was launched to assist cities & towns in taking up housing and infrastructural facilities for the slum dwellers. Among 65 cities in the country, Bengaluru and Mysuru cities from Karnataka State have been selected under this programme. For BSUP programme, Karnataka Urban Infrastructure Development & Finance Corporation (KUIDFC) has been made as the nodal agency for monitoring of the scheme and Karnataka Slum Development Board (KSDB) as the implementing agency in the

state. The main objective of this programme is to provide basic services to slum dwellers including security of tenure at affordable prices, improved housing, water supply, sanitation and ensuring delivery of other already existing universal services of the Government for education, health and social security.

The Central Sanctioning and Monitoring Committee (CSMC) of Ministry of Housing and Urban Poverty Alleviation (MoHUPA) has sanctioned to construct 18180 houses including infrastructure in 3 phases in the selected slums of Bengaluru city with an estimated cost of Rs.522.23 crores and 6328 houses in Mysuru city with an estimated cost of Rs.203.97 crores on different CSMC meetings. The funding pattern between GOI and GOK for Bengaluru city is 50:50. The state share includes beneficiary contribution of 10% for SC/ST and for others is 12%.For

Mysuru city GOI share is 80% and the remaining 20% will be borne by GOK.

For the first time in the country, Karnataka Slum Development Board has adopted Cost effective and Fast Track Construction Technology called "Foam Technology" for ground floor houses and for G+3 houses Monolithic Shear wall Technology on pilot basis for construction of Dwelling Units with infrastructure works under JNNURM-BSUP. This Technology is eco-friendly, more stable and long lasting, user friendly and conventional bricks and cement blocks are totally avoided. Since inception of BSUP programme, out of 24508 houses 22905houses are completed and 1480 houses are at various stages of construction up to end of Dec 2015. The phase wise details of the project and the expenditure incurred are appended in Table 6.8.

**Table 6.8 - Phase wise details of the project and expenditure (Rs. crore)**

Sl. No	Name of City	No. of Houses Sanctioned	Total Project Cost(Revised)	Amount Released (Rs. Crore)	Expenditure (Rs. Crore)	No. of houses completed
	PHASE- I					
1	Bengaluru City	11603	261.17	234.98	246.93	10893
2	Mysuru City	2788	67.58	65.41	61.55	2680
	PHASE-II					
1	Bengaluru City	3151	124.28	101.02	100.71	2743
2	Mysuru City	2500	90.93	81.26	72.55	2484
	PHASE-III					
1	Bengaluru City	3426	136.79	105.25	109.37	3065
2	Mysuru City	1040	47.76	37.62	36.35	1040
	Total	24508	728.51	624.89	627.46	22905

### (c) Integrated Housing & Slum Development Programme (IHSDP)

For taking up Housing and Slum up gradation programme in Non-BSUP cities, Integrated Housing & Slum Development Programme (IHSDP) was launched along with BSUP in December 2005. This programme combines the existing schemes of Valmiki Ambedkar Awas Yojana (VAMBAY) & National Development Programme (NSDP) with an objective of integrated approach in ameliorating the conditions of the slum dwellers who do not possess adequate shelter and basic facilities, to strive for slum less cities with a healthy living and good environment and enhance public and private investment in housing and infrastructure development in urban areas.

The Central Sanctioning and Monitoring Committee (CSMC) of Ministry of Housing and Urban Poverty Alleviation (MoHUPA) has sanctioned 34 projects for Karnataka in 2 phases with a revised cost of Rs.410.80 crore for constructing 17237 houses of which the central share is 80% and State share 20%. Out of the state share, beneficiary contribution is 10%. A total of 17180 houses are completed up to end of Dec 2015 since inception of the programme and the remaining 70 houses are at various stages of

construction. The details of Progress achieved under IHSDP are given Table 6.9.

**d) Rajiv Awas Yojana:** Government of India had launched Rajiv Awas Yojana, a flagship programme on June, 2011, for integrated development of slums. The primary objective of the RAY is to improve and provide housing, basic civic infrastructure and social amenities in intervened slums. RAY envisages two-step implementation strategy

- Preparatory Phase (2011-13)
- Implementation Phase (2013-2022)

The scheme is applicable to all cities of the country. During the preparatory phase, Slum free City Plan of Action (SFCPoA) will be prepared based on socio economic survey and GIS mapping of all slums of the cities on whole city basis. During the implementation phase, Detailed Project Reports (DPRs) will be prepared following a 'whole slum' approach on the basis of prioritization of slums in SFCPoAs and projects will be implemented.

RAY is administrated by Ministry of Housing and Urban Poverty Alleviation (MoHUPA). The Ministry will fund for implementation of projects based on the population of the cities as indicated below:

**Table 6.9: Details of IHSDP, (Rs. in crore)**

Sl.No	No.of City/Town	No.of Houses sanctioned	Total Revised Project Cost	Amount Released	Expenditure	No. of houses completed
1	25 City/ towns	13053	277.90	272.09	253.36	12997
2	8 City/ Towns	4184	132.90	130.41	115.27	4183
Total		17237	410.80	402.50	368.63	17180

**Table 6.9A: Details of Rajiv Awas Yojana, (Rs. in crore)**

City	Funding Pattern				
	Component	Central Share	State Share	ULB Share	Beneficiaries Share
Cities with above 5 lakh population	Housing	50	40	0	10
	Infrastructure	50	25	25	0
Cities with below 5 lakh population	Housing	75	15	0	10
	Infrastructure	75	15	10	0

### e) Affordable Housing in Partnership (AHP) Scheme:

In order to increase affordable housing stock and as preventive strategy for containment of growth of future slums, Affordable Housing in Partnership (AHP) will be implemented as part of the scheme. Central support will be provided at the rate of Rs. 75,000 per EWS/LIG Dwelling Units of size upto 40 sqm for housing and internal development components. Under Affordable Housing in Partnership Scheme, projects may be taken up under various kinds of partnerships.

The DUs would be a mix of EWS/LIG/MIG/HIG/Commercial units/rental houses. Dwelling Units with carpet area shall be between 21 to 27 Sqm for EWS category and 28 to 60 Sqm for LIG category. A project size of minimum 250 dwelling units and 35% of the total number of dwelling units constructed with carpet area of 21-27 sqm for EWS category will be considered as Affordable housing projects. The constructed DUs will be sold out by inviting applications. Allotments of DUs will be made following a transparent procedure e.g. through draw of lottery.

Under AHP, 3 projects with an investment of Rs. 5607.00 lakh for construction of 992 dwelling units, with all the essential services, in 3 different locations in Bengaluru city have been approved so far.

## 6.4 Urban Infrastructure

Provision of infrastructure services is fundamental to economic growth and urban development. Urban infrastructure covers following: Water supply (for drinking, industrial, commercial and public usages), Sanitation (including Sewerage and Drainage), Domestic Energy, Road Infrastructure and Urban Transport.

### 6.4.1 Water Supply

A number of water supply projects have been taken up to augment water supply considering the existing shortage of water supply to the urban areas in the state and the

enormous cost and problems associated with the augmentation of water supply, the following issues become relevant:

- Conservation of the water resources of the State
- Adoption of alternative methods of augmenting supply
- Reducing water losses
- Pricing of water
- Scope for private sector participation
- Institutional framework

At present BWSSB is supplying treated Cauvery Water to Bengaluru City under the Cauvery Water Supply Scheme (CWSS) Stage I, II, III & Stage IV Phase I & II with total installed capacity of 1310 MLD. This quantity of water provided to the core areas of BBMP including the erstwhile 7 CMC's and 1 TMC area covering total area of 575 sq.km but excluding 110 village areas of BBMP covering 225 sq.km. In order to provide water supply to the newly added 110 villages which are part of BBMP, BWSSB is finding it difficult to meet the water requirements even after implementation of CWSS Stage IV, Phase II scheme.

Subsequently, the Urban Development Department, Govt. of Karnataka (GoK) allocated an additional 10 TMC (775 MLD) of Cauvery Water for Bengaluru city. It is now necessary to formulate the CWSS Stage V scheme for Bengaluru City and Detailed Project Report (DPR) has been prepared for getting the financial assistance from funding agencies, such as JICA (Japan International Co-operation Agency). Considering the technical aspects and water demand it is proposed to take up the Stage V Scheme in two Phases i.e., Phase I of 500 MLD (6.45 TMC) capacity and Phase II of 275 MLD (3.55 TMC) capacity.

### (a) Water supply schemes

The State Government has approved the funding pattern for water supply scheme in July 2011. Accordingly the funding pattern for water supply schemes is given in **Table 6.10.**

**Table 6.10: Details of funding pattern for water supply schemes**

Category	Government Grant	Loan from financial institution	ULB Share
City Corporation	40	50	10
City Municipal Council	60	30	10
Town Municipal council	75	20	5
Town Panchayat	95	--	5

**Table 6.11: Details of progress of water supply schemes**

Year	Financial (Rs. In Crores)		Physical	
	Target	Achievement	Target	Achievement
2008-09	304.74	156.90	26	19
2009-10	315.07	199.40	17	9
2010-11	255.86	133.58	21	10
2011-12	160.03	176.44	17	11
2012-13	186.31	276.33	11	8
2013-14	175.97	218.06	9	4
2014-15	176.00	305.43	13	7
2015-16 (up to Dec 2015)	104.35 (Excluding IEBR)	117.95	12	2

For the year 2015-16, there are 33 on-going water supply schemes with the budget allocation of Rs.149.16 crore. It is proposed to commission 12 schemes during the current year. The remaining schemes will be under progress. The physical and financial details of water supply schemes are given in **Table 6.11**.

The BWSSB is committed to providing drinking water of unquestionable quality in sufficient quantity and to treat the sewage generated to the required parameters. As the leader in providing water and sanitation services, BWSSB is recognized as an effective instrument of change through adopting state-of-the-art technologies for improving the quality of its services to the general public.

Construction of Ground level reservoirs under DC works of BDA, providing water supply and UGD lines in BDA layouts, providing water supply lines and house service connections under GBWASP in the former 7 CMC and 1 TMC are being taken up.

Its responsibility is providing UGD facilities with house service connection, lateral sewers, trunk sewers under KMRP and JNNURM in 7 CMCs & 1 TMC areas, providing and laying water supply and UGD pipelines to 110 villages of BBMP areas and providing individual toilet facilities in slums under Slum Development Component of KMRP.

#### **(b) KUIDFC Water Supply**

KUIDFC, a Government Company registered under the Companies Act, 1956, acts as a Nodal Agency for implementation of various Urban Infrastructure Projects of the State Government and Government of India. Projects/Schemes being implemented by KUIDFC through Bruhat Bengaluru Mahanagara Palike (BBMP), 10 City Corporations and other Urban Local Bodies in the State of Karnataka. On-Going Projects/Schemes are Karnataka Urban Water Sector Improvement Project (KWASIP), Karnataka Urban Water Supply Modernization Project (KUWSMP), Karnataka Integrated Urban Water Management

Investment Programme(KISWRMIP), Implementation of Water Supply and Under Ground Drainage Programme in 16 ULBs.

Augmentation of water supply work amounting to Rs. 7.33 cr has been completed in Madikeri, Savanur, Chintamani, Hassan, Jewargi and Sira. Works amounting to Rs. 7.35 crore are under progress in Chikkamagalur, Holenarasipura and Chitradurga. 24x7 Water Supply works is being implemented in the towns of Haliyal, Nanjangud and Magadi at an estimated cost of Rs. 58.36 cr. Distribution network of 222 km have been laid and 23,100 houses are being connected with water supply. The spill over works is expected to be completed by March 2016.

### (c) Municipal Investment Component

This component provides investment support for urban infrastructure improvement in selected 32 ULBs of the State. The ULBs have been grouped into 4 packages of 9, 5, 10 and 8 ULBs. Out of a total 91 works contract proposed under this component, 75 have been completed, 15 are under progress and 1 work is yet to be awarded.

### 6.4.2 Sanitation (Including Sewerage and Drainage)

The Ministry of Urban Development, GOI brought out a National Sanitation Policy in

2008. The vision for urban sanitation in India is set forth thus: "All Indian cities and towns become totally sanitized, healthy and livable and ensure and sustain good public health and environmental outcomes for all their citizens with a special focus on hygienic and

affordable sanitation facilities for the urban poor and women". City Sanitation Plan preparation envisaged under NUSP-2008 by GoI includes:

- State Sanitation Policy (draft) proposed by the Government.
- Final CSP reports of all the 8 towns submitted to GoI.
- CSP reports submitted by SIUD Mysuru for 7 Towns viz., Davangere, Chitradurga, Bidar, Raichur, Harihar and Yadgir (under BRGF fund) is submitted to GoI for funding support for implementation.
- SIUD is preparing CSP reports for 13 towns through All India Institute of Local Self Government (AIIILSG)
- To improve the sanitary condition in urban areas, construction of STP is proposed in Doddaballpur, Tiptur, Chikkaballpur and Humnabad.
- The work of STP in Chikkaballpur is completed and in Dodaballapura the same is nearing completion. Construction of STP is under way in Humnabad and Tiptur.

### (a) Under Ground Drainage (UGD) Schemes

The State Government has approved the funding pattern for UGD schemes in July 2011 as given in Table 6.12.

For the year 2015-16, there are 53 on-going schemes with the Budget allocation of Rs.134.33 crore. It is proposed to commission 11 scheme during the current year of which, 1 Scheme is commissioned as at the end of June 2015 and remaining schemes are in progress. The details of progress are given in **Table 6.13 and 6.14.**

**Table 6.12 - Details of funding pattern for UGD Schemes**

Category	Funding Pattern		
	Loan From Financial Institution	Govt. Loan	Local Body Contribution
Corporations	50%	20%	30%
City Municipal Council	50%	25%	25%
Town Municipal Council and Town Panchayat	50%	30%	20%

**Table 6.13: Details of progress of UDG Schemes**

Year	Financial (Rs. in Crore)		Physical(No. of schemes)	
	Target	Achievement	Target	Achievement
2008-09	117.45	39.02	4	--
2009-10	139.93	63.49	6	1
2010-11	97.10	72.52	8	1
2011-12	84.01	64.31	7	1
2012-13	148.65	83.03	6	1
2013-14	109.92	127.17	9	1
2014-15	112.00	253.85	11	1
2015-16 ( upto Dec 2015)	90.71	137.09	6	1

**Table 6.14: Details of Schemes Commissioned (Cumulative)**

Year	Water Supply Schemes	Board Water Supply Schemes	Under Ground Drainage Schemes
2008-09	446	20	45
2009-10	453	20	46
2010-11	463	20	47
2011-12	474	20	48
2012-13	482	20	49
2013-14	486	20	50
2014-15	493	20	51
2015-16 (up to Dec 2015)	495	20	52

The KUWS&DB is responsible for providing water supply and sewerage schemes in 213 urban areas of Karnataka except Bruhath Bengaluru Mahanagara Palike. The Board has implemented assured safe drinking water to 196 urban areas. The Board is implementing 10 schemes for shifting the source of water from ground water to assured surface source of water. All these schemes would be completed by the year 2017. By the year 2017 only 7 urban areas are left with sub-surface water as source. At present 49 urban areas are provided with UGD facilities. In most of the urban areas the sewerage system is covered in core areas. The newly developed areas are not provided with Sewerage system. The Board has prepared a Master plan for providing UGD scheme to all the urban areas in Karnataka amounting to Rs.16920 Crores during 2011 rates. The Board aims to provide UGD facilities to all urban areas in phased manner depending upon the availability of funds.

UGD work amounting to Rs. 27 crore has been completed in Chikkaballapur and the UGD missing link works at Hassan and

Chintamani are completed at a cost of Rs. 6.21 crore. Laying of UGD pipeline work of Tiptur amounting to Rs 17.34 crore has been completed. Works amounting to Rs. 86.64 crore are under progress in Doddaballapur, Bhadravathi, Humnabad and Harihara. Sewerage network length of 385 km has been laid and 49,550 Houses service connections are being provided.

#### 6.4.3 Domestic Energy:

The census 2011 revealed that 64.33% of households in urban areas are using LPG/PNG for cooking followed by firewood (21.23%), Kerosene (11.67%) and the remaining Households use the other sources such as Crop residue (0.91%), Biogas (0.80%), Electricity (0.21%), Coal/Lignite (0.11%), Cowpat (0.10%) and other sources (0.11). The details of Census-2011 information on fuel for cooking district wise are given in Appendix 6.4.



#### 6.4.4 Road Infrastructure

Roads and Roadside drains - Works have been completed in Madikeri, Sringeri, Chittapur, Hassan, Kolar, Savanur, Robertsonpet, Chitradurga, Chintamani, Hassan (savings), Kanakapura, Nagamangala, Shimoga, Chikkamagalur and Hiriya to bring in better road connectivity.

#### 6.4.5 Urban Land Transport:

The Directorate of Urban Land Transport focused its attention on preparation of mobility plans for 12 cities the directorate has now submitted a proposal for sanction of grant from the Government of Japan for pilot project for implementation of Bengaluru Traffic Information Centre and other interventions relating to traffic management.

In order to facilitate multimodal integration and ease of access to metro station area, Station Accessibility Plans are being prepared. Apart from the station accessibility plans, detailed Project Reports for integration of seven bus terminals with metro stations are being taken up in-house by the Directorate involving the stakeholders of BMTC, BMRCL and BBMP.

#### Bus Rapid Transit System (BRTS) for Hubballi-Dharwad:

Under the Hubballi-Dharwad BRTS project, all procurements except for ITS and procurement of plant and machinery for depots and workshops have been finalized. During the current year, tenders for preparation of city plan and construction of Foot Over Bridges have been finalized and work orders issued. The construction of Mixed Traffic Lanes is under progress. Tenders for construction of ROB at Navalur have been called.

#### Sub-Urban Rail System for Bengaluru:

M/s. RITES has submitted a detailed project report for phase-I of the Bengaluru Suburban Rail project. The Railways have given their comments and the same have been communicated to M/s. RITES for compliance.

#### Public Bicycle Sharing System in Mysuru:

The tenders for the implementation of Public Bicycle Sharing System in Mysuru have been finalized and work orders have been issued for procurement, installation and operation of Public Bicycle Sharing System in Mysuru.

#### State Urban Transport Fund:

As on date, the State Urban Transport Fund has been leveraged to promote the construction of transit infrastructure in Bidar, Bellary, Madhugiri, Challakere and various other cities.

State Urban Transport Fund is also utilized for the strengthening and Introduction of City bus services in tier-ii cities. Urban Local Bodies during the current year till now to promote public and non-motorized transport.

#### Capacity Building and Partnerships:

The staff of DULT is regularly deputed to various conferences and workshops held in the country so as to regularly update their skills. The directorate has also organized a workshop for preparation Station Accessibility Plan – Bengaluru for all stakeholders especially pertaining to the Transport Model of Bengaluru. DULT has also organized training in VISSIM and GIS software used for transportation modeling for its staff. The work shop was organized for “Bengaluru Sub-Urban Rail Transit project: Potentials for Innovative Financing and planning Strategies” with Curtin University, Australia and Cistup.

#### Best Practices:

#### The Monsoon Studio:

The Monsoon Studio is DULT's urban design initiative conceived as an annual design studio to work on urbanisation strategies comprising of mobility planning and place making schemes for the cities of Karnataka. Monsoon Studio 2014 (August 18th- 23rd) was collaboration between DULT, the Architecture Department of BVB College of Engineering, and the Hubballi-Dharwad BRTS Company.

**Cycle Day Initiative:**

The Cycle Day Initiative was started in October of 2013 at Cubbon Park by Bengaluru Coalition of Open Streets (BCOS) anchored by the Directorate of Urban Land Transport (DULT) in partnership with a group of like-minded NGOs, cycling enthusiasts and citizen sat least for short distance commutes and chores, the long term goal is to achieve a critical mass of public interested to promote and use Non-Motorized Transportation. The Cycle Day event is conducted in different localities in the Bengaluru Metropolitan area. A nominal number of free bicycles are provided to the public.

**Vehicle Free Day:**

The Directorate of Urban Land Transport, Urban Development Department, GoK as a part of its sustainable initiatives proposed to make the fourth Saturday of every month a Vehicle Free Day since 31<sup>st</sup> August 2013 and is now on the third Saturday of every month. This initiative is to encourage DULT employees to give up the use of car/two-wheeler (including government vehicles) for a day, in an effort to make promote the sustainable modes of transport like Public Transport (Buses & Metro), and walking and cycling. This initiative started on the 31<sup>st</sup> August and has successfully completed its twenty-seventh month on November 2015.

The trips of DULT staff to and from work produce 24 tons of carbon dioxide per year (carbon footprint of DULT). The vehicle free day makes it possible to produce 4 tons less carbon dioxide (CO<sub>2</sub>) per year. If replicated all over the city, this could save energy as well as protect the environment.

DULT has been constituted as a nodal agency for planning and co-ordination of transport related development and integrating land use with transport, throughout the state. In order to achieve this objective, it is necessary to strengthen the institutional arrangements of DULT considering the fact that detailed technical and intricate traffic and transport planning and engineering matters are to be handled by the Directorate.

**Open Streets-Bengaluru:**

Open Streets-Bengaluru is a joint initiative by multiple organizations such as DULT, BMTC, Bengaluru Traffic Police, BMRCL, Department of Forest, Ecology and Environment, Department of Tourism, BBMP, Karnataka State Pollution Control Board, local citizen groups and initiatives such as Cycle Day, Bengaluru. HSR layout had been identified as an area where this pioneering initiative was launched on 20th September, 2015. On this day from 06:00 AM to 09:00 PM, the use of motorized vehicles was banned in all the 7 sectors of HSR layout. BMTC introduced additional services for people travelling within HSR and also to important hubs like KR Market, Majestic, Shivajinagar etc. Cycle rentals were provided at four locations and hundred cycles were made available for people to use on producing identity card on this day.

**Setting up of transport modeling lab:**

This will consist of state-of-art of software that are necessary for projecting traffic forecast and studying various traffic improvement alternatives in a scientific manner. The procurement of necessary software and hardware for establishing the lab is underway.

**CHALLENGES AND FUTURE OUTLOOK OF DEPARTMENT:**

The Directorate of Urban Land Transport intends to prepare a strategic framework to guide its growth in future. The strategic framework is also expected to redefine the goals of the organisation with reference to the achievements as on date and challenges in the future. Accordingly, the DULT proposes to revise its organisational structure to form nine verticals, each focusing on certain facet of urban transport. As a part of its vision, the Directorate of Urban Land Transport proposes to setup a traffic information centre to gather and analyse transport related information and to disseminate the analysis to stakeholders in Urban Transport sector. The Directorate of Urban Land Transport will also focus on implementation of its plans and recommendations with specific focus on cities other than Bengaluru.

## 6.5 Urban Environment

The physical expansion and demographic growth of urban areas have exerted an adverse impact on the urban environment. The large scale conversion of agricultural land in the urban periphery for urban uses like industries, housing and infrastructure has resulted not only in loss of greenery but in creation of urban heat islands. A large number of trees and water bodies have given way to concrete structures. The increase in motor vehicular traffic in cities and industrialization has contributed to air pollution which in turn has an adverse effect on the health of the people. Cities are huge consumers of energy and resources generating more waste than they can absorb. The increasing consumption of water is leading to depletion of water resources, particularly underground water. The enormous quantities of waste generated in cities, proliferation of slums and lack of sanitation are serious environmental hazards.

### 6.5.1 Solid Waste Management:

The Government of Karnataka (GoK) with an objective to improve the quality of Solid Waste Management (SWM) services in the Bruhat Bengaluru Mahanagara Palike (BBMP) area has proposed to establish Solid Waste processing, treatment and disposal facilities. The Karnataka Urban Infrastructure Development and Finance Corporation (KUIDFC) has been nominated as the Nodal Agency. The Government has allocated Rs.440 crore for this purpose. The civil works are to be implemented through Karnataka Rural Infrastructure Development Ltd. (KRIDL) on Deposit contribution basis.

**Table 6.15: The details of the mechanical composting facilities and the current status is as follows;**

Name of the Location	Extent (acres)	Capacity (TPD)	Current status
Lingadheeranahalli	11	200	Commissioned
Doddabidarkal	9	200	Commissioned
Kannahalli	23.75	500	Commissioned
Seegehalli	7	200	Commissioned
Subbarayanapalya	9.34	200	Commissioned
Chikkanagamangala	15.3	500	Shall be commissioned shortly
KCDC, Kudlu	30	500	<ul style="list-style-type: none"> <li>• Processing of 200 TPD of waste using existing facility is in progress</li> <li>• Upgradation works underway</li> </ul>

The Solid Waste processing, treatment and disposal facilities are established in 6 sites besides upgrading the KCDC plant. These plants can handle about 2300 TPD of waste. KUIDFC has engaged consultants for the preparation of DPRs for treatment and disposal facilities under the Technical assistance component of Karnataka Municipal Reforms Project (KMRP) with the concurrence of the World Bank. All necessary waste processing equipment and machineries and waste handling vehicles have been procured.

KUIDFC has engaged National Institute for Interdisciplinary Science and Technology Council of Scientific and Industrial Research, Thiruvananthapuram as consultants, for providing tailor made solution for controlling odour inside and outside the sheds. Once the same is implemented these plants would be free from odour nuisance besides being first of its kind in the country.

Environmental clearances for all the proposed units have been obtained from State Level Environment Impact Assessment Authority of Karnataka, as mandated under EIA Notification, 2006. The consent for establishment of units has been obtained from KSPCB. Also, the approvals from BDA are obtained.

In order to Operate and maintain these plants, Private Operators have been appointed through a "Performance Based Management Contract" for carrying out day-to-day operations in an efficient and effective manner.

### Initiatives Taken Up

#### Solid Waste Management:

Municipal Solid Waste Management is one of the basic functions of the Municipalities. Rapid urbanization, heterogeneous nature of waste, lack of awareness among the public and various other stake holders, lack of appropriate infrastructure, disintegrated & unscientific approach of waste management has made the waste management into an unmanageable situation.

There are totally 219 Urban Local Bodies (ULBs) in the State including BBMP. Recently 54 Gram Panchayaths have been upgraded to ULBs. ULBs have to follow Municipal Solid Waste (Management & Handling) Rules, 2000 (MSW Rules) notified by MoEF for Municipal Solid Waste Management (MSWM) in their limits. As per the MSW Rules, all the ULBs are responsible for any infrastructure development for collection, storage, segregation, transportation, processing and disposal of municipal solid wastes.

As per 2011 Census, Karnataka has an urban population of 2.36 crores (38.67% of the State population) and approximately generates about 4000 – 4500 tons of MSW everyday (excluding BBMP) with a per capita waste generation rate of 200 grams to 400 grams per day.

#### Steps taken towards Solid Waste Management:

As per MSW Rules, following steps have been taken in ULBs of the State, in order to achieve scientific and systematic waste management system.

- a. Procurement of land for processing and disposal of waste and development of basic required infrastructure such as construction of compound walls, approach road, internal roads, watchman shed, bore-wells, electricity connections, plantation of trees & plants in the periphery of the landfill site etc.
- b. Instructions have been issued to ULBs
  - to carryout segregation of waste at source at least into wet & dry waste.
  - to carryout door-to-door collection of waste

- to establish dry waste collection centres at ward level to manage dry wastes at ward level itself
  - to establish decentralized waste processing units in order to manage waste at ward level itself to minimise burden on transportation & landfill site.
  - to establish separate collection and transportation system for bulk waste, chicken & mutton waste, C & D waste etc.
  - to establish composting facilities at landfill site such as, windrow platform, vermi-composting units, bio-gas units etc.
  - to minimise the qty. of waste going to landfill to less than 20% of the total incoming waste
  - to procure modern type of door-to-door collection vehicles, simple waste processing machines, shredders, plastic baling machines, screening machines, compactors etc.
- c. Normative standards for various SWM activities such as street sweeping, door-to-door collection of waste, cleaning of public toilets, public places, markets etc. have been formulated in order to standardize the outsourcing activities.
  - d. Under Swachh Bharat Mission (SBM), ULBs have been asked to prepare DPRs for integrated solid waste management which includes micro-level planning for door to door collection of waste, management of dry/recyclable wastes etc.

#### Funds allocated for SWM

Apart from grants from 13<sup>th</sup> FC, SFC untied, CMSMTDP, etc., funds have been Earmarked under State Budgets for ISWM in ULBs of the State. Under State Budget, Rs.51.82 crore was provided during the year 2013-14. A sum of Rs.75 Crore has been exclusively released during the year 2014-15 to ULBs of the State for SWM purpose. A sum of Rs.45 crore has been allocated in the Budget 2015-16 and it will be released shortly to ULBs. Under Swachh Bharat Mission, MoUD has allocated Rs.512.52 crore of central share for SWM in 219 ULBs of Karnataka including BBMP.

### Present Status of SWM implementation:

Total no. of ULBs in Karnataka (Excluding BBMP & 5 NACs) <b>(10 CCs, 41 CMCs, 94 TMCs and 68 TPs)</b>	213
No. of ULBs possessing landfill sites	207
No. of ULBs which are yet to procure landfill sites <b>(Devanahalli, Vijayapura, Dandeli &amp; Kolar)</b>	4
No. of ULBs having common landfill sites <b>(Ullala TMC in Mangalore CC &amp; Saligrama TP in Udupi CMC)</b>	2
No. of ULBs in which basic infrastructures at landfill sites are established	191
No. of ULBs in which sanitary landfill facilities are developed <b>(Mangalore, Belgaum, Udupi, Shimoga, Karwar, Puttur, Kundapur, Kalaburagi, Bellary, Bagalkot, Mudhol, Chitradurga and Mysuru)</b>	13
No. of ULBs in which composting facilities such as Windrow platforms / vermi sheds are constructed / being constructed	155
Number of ULBs in which Door to Door collection of waste is carried out (partially)	205
Number of ULBs in which segregation is started (partially in few wards)	106

### Clean Our City Programme:

In order to achieve proper & sustainable waste management system, 'CLEAN OUR CITY' programme has been successfully implemented in Kolar & Raichur CMCs, in which, door to door collection of waste, separate dry waste handling system, decenarised waste processing etc have been carried out systematically.

### City Sanitation Plan (CSP):

MoUD, GoI has formulated National Urban Sanitation Policy, 2008 (NUSP) for the purpose of safe handling and disposal of liquid & solid wastes. Under NUSP, each city has to prepare CSPs which includes components such as construction of toilets (individual / community / public), Septage management, UGD and sewage treatment plants (STPs), solid waste management, storm water drains, drinking water etc. As per NUSP, 2008, the CSPs for 30 cities namely, Hubballi-Dharwad City Corporation, Mysuru City Corporation, Bellary City Corporation, Mangaluru City Corporation, Kalburagi City Corporation, Belagavi City Corporation, Tumakur City Corporation,

Shivamogga City Corporation Vijayapura City Corporation, Davanagere City Corporation, Chitradurga City Municipal Council, Bidar City Municipal Council, Raichur City Municipal Council, Harihara City Municipal Council, Yadagiri City Municipal Council, Basavakalyana City Municipal Council, Shahabad City Municipal Council, Sindhanur City Municipal Council, Tiptur City Municipal Council, Alanda Town Municipal Council, Shahapur Town Municipal Council, Hiriyur Town Municipal Council, Harapanahalli Town Municipal Council, Humnabad Town Municipal Council, Lingasugur Town Municipal Council, Manvi Town Municipal Council, Sedam Town Municipal Council, Shorapur Town Municipal Council, Bhalki Town Municipal Council and Challakere Town Municipal Council have been already prepared. The work of preparation of State Sanitation Strategy (SSS) under NUSP and preparation of CSPs for remaining CMCs of the State has been entrusted to CMAK and the work is under progress.

### Construction of Modern Abattoirs:

The DPRs for construction of modern abattoirs in Mysuru, Hosapete, Chitradurga and Chamarajanagara cities have been

prepared and approval from Govt. of India has been already obtained. The selection of Project Management Consultant (PMC) for Mysuru, Chitradurga & Hospet is already done and selection of PMC for Chamarajanagar is under progress.

#### Way forward:

- Procurement of Simple Waste Processing Machines, Waste Segregation Machines and plastic baling machines by the ULBs.
- Achievement of 100% segregation of waste at source and also 100% door to door collection.
- Maximum recovery of recyclable wastes and minimization of waste going to landfills.
- Construction of Modern Slaughter houses in the 20 selected major cities of the State.

- Establishment of Dry waste collection centres at the ward level in the ULBs.
- Procurement of land for waste processing and disposal in Kumta and Dandeli towns.
- Improve collection and treatment efficiencies of the waste.
- Bringing amendment to The Karnataka Municipalities Act, 1964 with respect to imposition of penalties.

#### Electricity Generation Calculation

Though the 15 Kva Generator is expected to generate 12 Kwh of electricity with an intake of 8m<sup>3</sup>/hr. of biogas. The plant generates 160m<sup>3</sup> of biogas per day i.e. a supply of 160 m<sup>3</sup>/ (8 m<sup>3</sup>/hr) = 20 hour a day, with 160m<sup>3</sup> biogas one can generate 12 Kwhx 20hr = 240 Kwh in a day. The electricity generated from the plant will be utilized for the plant operations and for street lighting.

**Table: 6.16 Indicators of Solid Waste Management**

Indicators	Bench mark
MSW Collection Efficiency	100%
MSW Collection Efficiency	100%
% households under door to door collection	100%
% of Road Length cleaned per day	30%
Vehicle Adequacy Ratio	100%
Treatment Efficiency	80%
Cost per ton of solid waste management	Rs.1400 per ton
Extent of segregation of MSW	60%
Extent of scientific disposal of MSW	100%
Extent of cost recovery in SWM	100%
Efficiency in redressal of customer complain	100%

### 6.5.2 Environmental Challenges (air pollution, water pollution, noise pollution etc.):

Sustainable urban development is not a choice but a necessity. If cities are to meet the needs of their citizens (United Nations 2007). Some of the most critical problems facing our cities concern the health impacts of urban pollution generated by inadequate water, sanitation, drainage, poor waste management and air pollution. This set of problems known as the 'Brown Agenda' combined with what are called the 'Green Issues' such as depletion of water and forest resources, upgradation of environmentally fragile lands, occupation of areas prone to flooding, landslides etc. and the carbon emissions from energy use, heating, industry and transport now known as 'Climate Change Issues' all pose serious challenges to the health of the eco system of a city and its people. To tackle these issues, an Urban Environmental Management Action Plan must be formulated. A city specific plan would be required for large cities such as Bengaluru, Hubballi-Dharwad, Mysuru and Mangalore and a common strategy can be evolved for other towns and smaller cities in the State. The major components of the action plan could be the following:

**i) Conservation of water resources:** The objective should be to reduce the demand for fresh water. Conservation measures such as rain water harvesting should be made mandatory.

**ii) Waste Water Management:** The recycling and re-use of waste water should be encouraged in cities which generate substantial quantities of sewerage and silage. Decentralized waste water treatment plants must be set up at appropriate places.

**iii) Controlling Air pollution:** Air quality monitoring systems must be set up to measure various pollutants like carbon dioxide, carbon monoxide etc. Controlling air pollution depend upon factors such as density of vehicular traffic and emission from industries. The Prevention of Air Pollution Act will have to be enforced strictly.

**iv) Energy Conservation:** Cities consume enormous quantities of energy. In view of the shortage of electrical power, it is imperative to promote the use of renewable energy such as solar and wind power and other energy efficiency measures. Urban design will have to take into account the efficient use of energy and promote green buildings.

#### (a) Urban Conservation and Built Heritage:

Urban conservation has been defined as follows:

“Urban conservation seeks to retain that part of the urban environment whose character is improvement of national or local heritage. It also seeks to enhance the environmental character by ensuring that the sitting and the design of any new development is complementary to it”.

This heritage may be in the form of:

- Buildings or places of architectural, historical or cultural importance.
- Unique temples, mosques, and other monuments
- Designed environments such as Russell Market or City Market in Bengaluru, Connaught Place in Delhi etc.
- Water front areas: lakes, rivers or sea.
- Centers of recreation and tourism - natural or man made

“Other items may be added depending on their significance to heritage”.

#### (b) Waste Water Management (WWM):

**Environmental Action Plan – B – Project:** Existing sewerage system of Bengaluru City has been taken up under JnNURM, Government of India. The works included in this scheme have been taken up. Preliminary works are under progress. For balance work the tender received for the second call has been cancelled due to very high tender premium quoted by the bidder. Now action is initiated for fresh bidding. After completion of this project it is possible to divert 150 MLD of

waste water flowing in the storm water drains to the treatment plants for treatment and disposal to natural valleys / water bodies.

**Under Ground Drainage (UGD):** Works under progress in Doddaballapur, Chikkaballpur, Bhadravathi, Tiptur, Humnabad and Harihara. The UGD missing link works at Hassan and Chintamani are completed.

**Storm Water Drains (SWD):** Works have been completed in Sringeri, Hassan, Savanur, Kolar, Robertsonpet. Further, works under progress in Chintamani, Chitradurga, Chikkamangalur, Sira, T.Narsipura, Gurmitikaland Shimoga.

Works for a length of 33.59 km, amounting to Rs. 41 crore has been completed in Sringeri, Hassan, Savanur, Kolar, Robertsonpet, Gurmitikal, Chitradurga and Chintamani. Further, works amounting to Rs. 2.02 crore is under progress in Chikkamangalur.

**Solid Waste Management:** The work of development of Land fill site in Chitradurga has been completed. Preparation of bid documents for outsourcing Operation and maintenance is underway.

The work of development of Land fill site in Chitradurga at a cost of Rs. 1.56 cr has been completed. Bid documents for outsourcing Operation and maintenance through Performance Based Management Contract has been prepared in consultation with WB and the same has been forwarded to ULB for further necessary action.

**Rain Water Harvesting (RWH):** Works amounting to Rs. 2.70 crore have been completed in Kolar, Savanur, Robertsonpet, Chitradurga, Chintamani, Sira, Nagamangala and Hiriyur.

**Construction of Low Cost Sanitation (LCS):** Construction of 3139 LCS units at a cost of Rs. 6.84 crore have been completed.

## 6.6 Development of Bengaluru Region

### a) Bengaluru Metropolitan Region Development Authority (BMRDA):

The Bengaluru Metropolitan Region Development Authority (BMRDA) is an Authority established under the Bengaluru Metropolitan Region Development Authority Act, 1985 (Karnataka Act No. 39 of 1985), for

the purposes of planning, coordinating and supervising the proper and orderly development of the area within the Bengaluru Metropolitan Region and allied matters.

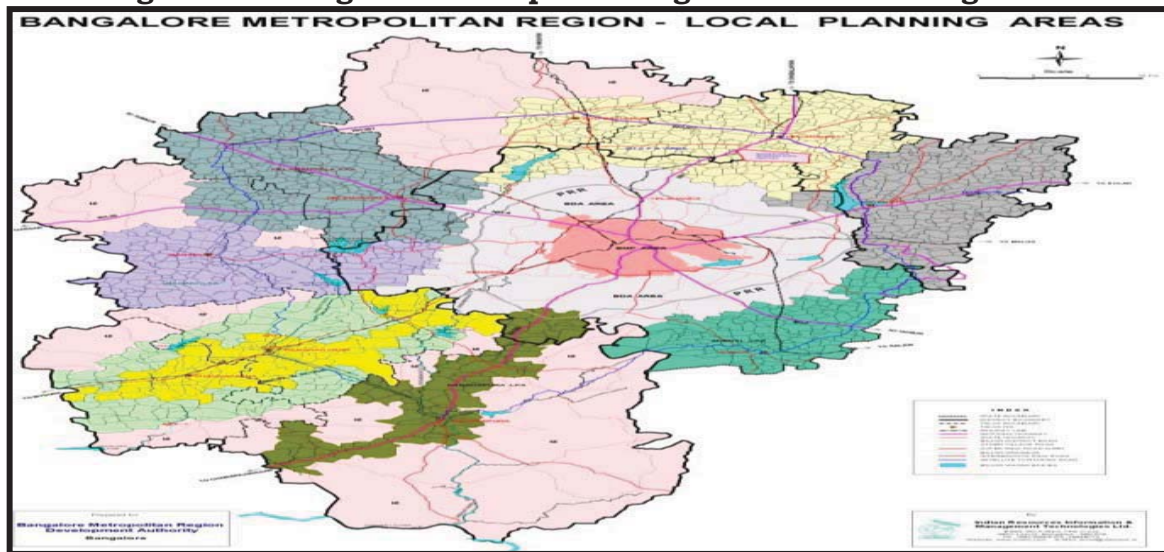
### Structure Plan:-

The BMRDA had prepared the Structure Plan in 1998 based on the availability and future prospects in respect of the natural resources and infrastructure and the trend of urbanization in the region. The Structure Plan was approved by the Government vide G.O. No. UDD 51 BMR 2002 dated 21.9.2005. As per the Structure Plan, the areas suitable for urbanization have been categorized as Area Planning Zones (APZs) and areas where agriculture is a predominant occupation and / or forestry is abundant, conservation has been stressed more and such areas have been classified as Interstitial Zones (IZs). The Structure Plan along with related information has been brought out in a book form and made available to the general public for sale. It has also been placed on the website of the BMRDA.

The Structure Plan prepared by the BMRDA is in the nature of a broad area development plan for the entire BMR and requires preparation of detailed sector specific and area specific plans. Separate Planning Authorities and Urban Development Authorities have been constituted for the various Local Planning Areas under the Karnataka Town and Country Planning Act, 1961 and other Acts for preparation of detailed Master Plans and enforcement of the same. The Authorities so formed are, besides the Bengaluru Development Authority, as follows:

- 1) Bengaluru International Airport Area Planning Authority (BIAAPA).
- 2) Nelamangala Planning Authority.
- 3) Magadi Planning Authority.
- 4) Kanakapura Planning Authority.
- 5) Ramanagara-Channapatna Urban Development Authority (RCUDA).
- 6) Bengaluru-Mysuru Infrastructure Corridor Area Planning Authority (BMICAPA)Part.
- 7) Anekal Planning Authority.
- 8) Hosakote Planning Authority.



**Figure 6.1: Bengaluru Metropolitan region- Local Planning Areas****Schemes:**

The BMRDA has during the year prepared several schemes to implement the Structure Plan in coordination with the concerned organizations. The details are given in following paras:

**Development of Satellite Town Ring Road (STRR) and Individual Town Ring Roads (ITRR) and also Intermediate Ring Road (IRR) and the Radial Roads (RR):**

The Structure Plan had mooted development of a pair of ring roads and several radial roads with a view to improve the connectivity in the Region. The authority has in the 10<sup>th</sup> Meeting of the Executive Committee held on 15-6-2006, decided to pursue this proposal. The initial project report is being prepared in collaboration with the Public Works Department. Surveys of these Roads have been conducted and a Notification has also been issued restricting any development in these roads alignment. The objective of these ring roads is to segregate the highway traffic from the local traffic and also to pave the way

for a systematic expansion and growth of Bengaluru.

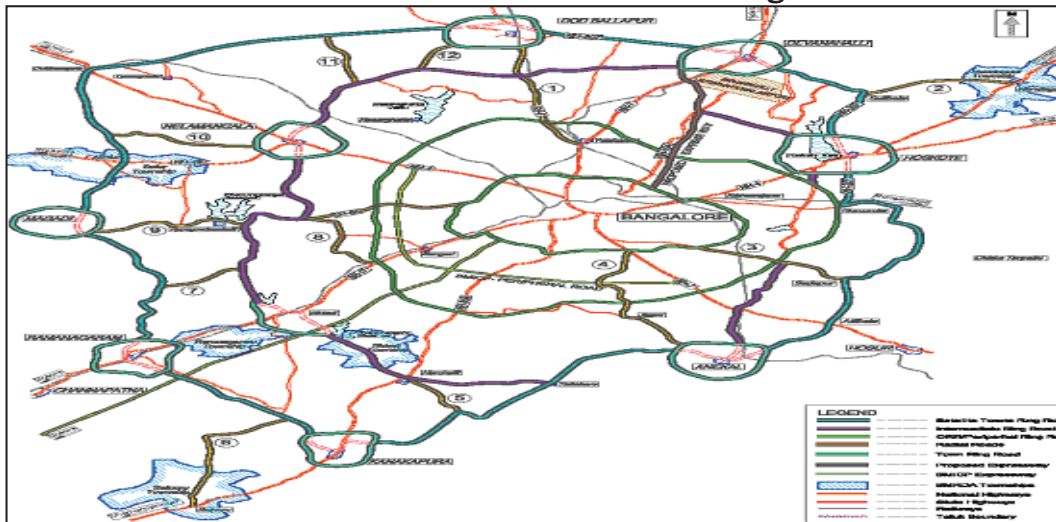
In the first instance the STRR and ITRR have been notified as State Highway (Special-2) in the Karnataka Gazette dated 12-9-2007 along with the road alignment by the Public Works Department. The Superintending Engineer, PWD, Ananda Rao Circle, Bengaluru has been designated as the Competent Authority to receive the objections and to finalize the alignment from public till 31-1-2008. M/s SECON Pvt. Ltd., has been appointed to prepare and submit the Techno-Economic Feasibility Report in respect of STRR and ITRR. The said firm has prepared the same and submitted to this Authority on 04.10.2008. Totally for the entire Ring Roads Network in BMR, a sum of Rs.6,04,40,305/- has been spent for the preparation of this report and survey work so far.

The total length of STRR along with 7 Town Ring Roads about 365 K.Ms. has been divided into 4 packages, which is presented in Table 6.16b.

**Table 6.16a: The survey works completed for Roads**

Name of the Road	Length	Extent of land required for acquisition in acres (approximate)
STRR road	204 Kms.	3826-06 acres
IRR road	185 Kms.	2563-05 acres
RR road	179 Kms.	1860-12 acres
ITRR road	163 Kms.	3899-22 acres

**Figure 6.2: Satellite Towns Ring Road, Intermediate Ring Road, Radial Roads and Individual Town Ring Road**



**Table 6.16b: Proposed Ring Roads under BMRDA**

Package	Connectivity	Length-Km
Northern	Dobbuspeta, Doddaballapura, Devanahalli	88.5
Eastern	Devanahalli, Hosakote, Sarjapura, Attibele (on Hosur Road)	78.0
Southern	Attibele, Anekal, Kanakapura, Ramanagaram	128.0
Western	Ramanagaram, Magadi, Dobbuspeta	70.0
Total		364.5

An amount of Rs.100 crore for each package i.e. Rs. 400 crore in all to be provided to BMRDA in the financial year 2007-08, in the above mentioned Government order. The PWD Department has to take approval of Government for the implementation of the STRR and ITRR. During the period of report there is no progress in these schemes.

The ongoing BMRDA’s activities in implementing the structure plan are as follows,

- i) Preparation of Master Plans for the Local Planning Authorities, Preparation of IMP for Ramanagar-Channapatna LPA,
- ii) Preparation of Scientific base maps using Satellite imagery for the Local Planning Areas,
- iii) Preparation of Seamless spatial data base for Bengaluru Metropolitan Region,
- iv) Computerization of Records, layout Plans and building plans of BMRDA and 6 LPAs in the jurisdiction of this Authority, Comprehensive Traffic and Transportation Study (CTTS),

- v) Issue of Plan approvals electronically using e-vinyasa software,
- vi) Study on Historical/Heritage monuments buildings of Bengaluru Metropolitan Region.

**(b) Bruhath Bengaluru Mahanagara Palike (BBMP):**

The Bengaluru Mahanagara Palike (Bengaluru City Corporation) was established in 1949 by merging two separate municipalities, which were in charge of the administration of the "City Area" and the Cantonment Area of the city. The Population of Bengaluru at that time was about 0.75 million. The municipal corporation started with 7 divisions with as many elected councilors. This was subsequently increased to 50 divisions: the area of the city was expanded to include 87 wards in 1991, 100 wards in 1995 and 198 wards in 2007. Prior to the formation of Greater Bengaluru the city had an area of 226 Sq.km and was organized into 100 wards represented by a counselor in the city corporation. 7 CMC's and 1 TMC were added up with the previous 3 zones viz, east, west and south.

Eight Urban Local Bodies around Bengaluru consisting of city Municipal councils (CMC) and one Town Municipal Council (TMC) viz, Yelahanka CMC, Byatarayanapura CMC, K.R.Puram, CMC, Mahadevapura, CMC Bommanahalli, CMC, Rajarajeshwari Nagar CMC, Dasarahali CMC, and Kengeri TMC were created in 1996. Bengaluru has now transformed into Bengaluru with 7 CMCs, 1 TMC and 100 villages being appended to the Bengaluru City. The city's total area has now expanded from 225 sq.km to over 800 sq.km and the population too has increased correspondingly.

BBMP comprising 8 zones viz, R.R.Nagar, Bommanahalli, Dasarahalli, Mahadevapura, Yelahanka East, South and West is developing very rapidly and hence, the government is contemplating to bifurcate the BBMP.

**State Finance Commission Grants:**

State Finance Commission grants are mainly the transfer of financial resources from the state government to local bodies in the terms of tax shares, grant-in-aids etc., during the year 2015-16 Tide Grants Rs.181.62 Crores and Untied Grants Rs.163.29 Crores received. Same grants have been utilised for the purpose for which the grants have been given in the year 2015-16.

**Jawaharlal Nehru National Urban Renewal Mission (JnNURM)**

The JnNURM was launched in December 2005. In order to provide reforms linked central assistance to State Governments for the development of urban infrastructure, a Mission Mode Approach was adopted in 65 selected cities. In Karnataka, Bengaluru and Mysuru are selected under this Scheme.

The Mission has two components, Urban Infrastructure and governance (UIG) and Basic Service for the Urban Poor (BSUP).

**UIG:** UIG sub Component addresses the needs of Urban Infrastructure. BBMP has taken up remodelling of drains, construction of underpasses, grade-separators, Up-gradation of skywalks under this component.

**BSUP:** The Objective of this scheme is the focused attention to integrated development of Basic services to Urban Poor in the Cities covered under the mission. The funding pattern will be 50% for GOI, 40% from GOK, 10 from the ULB or beneficiary.

**Other Schemes of BBMP:**

BBMP has taken up many infrastructure projects to improve the infrastructure of the city. Flyovers, Underpasses, Grade separators, Signal free roads, road widening has smoothed the traffic flow of the city.

**Construction of 4 Signal free corridors:**

4 signal free corridors of 52 KM length offering a seamless commute to people travelling from one part of the city to other are under progress, at a cost of Rs.500.00 crore.

**Table 6.17: Details of Construction of 4 Signal free corridors**

Name of Project	Commencement Date	Grants	Financial Progress (Rs.in Cr.)	Status
Dr.Rajkumar road from Govt. soap factory junction to Magadi road Deviation junction (1 grade separator & Corridor Improvements)	19-05-2014	Nagarothana Grants	5.01	Works are in progress
Outer Ring road from Central Silk Board to Mysuru road (5 grade separators & Corridor improvements)	01-09-2015	Nagarothana Grants	7.67	Works are in progress
Old Airport road corridor from ASC centre to Kundalahalli junction (3 grade separators and corridor improvements)	19-02-2014	Nagarothana Grants	45.49	Works are in progress
Corridor from Mekhri circle to NH-608 via Whitefield and hope farm junction (3 grade separators and corridor improvements)	10-07-2015	Nagarothana Grants	7.50	Works are in progress

**Table 6.18: Details of Tender Sure Works**

Name of Project	Commencement Date	Grants	Financial Progress (Rs.in Cr.)	Status
Upgradation of 7 CBD roads in Banagalore city as per Tender Sure standards	29-11-2013	Nagarothana Grants	55.00	Works are in progress
Upgradation of 5CBD roads in Banagalore city as per Tender Sure standards	19-02-2014	Nagarothana Grants	6.57	Works are in progress

**Tender Sure Work:**

In the Central business district, 12 roads measuring 17 KM, have been chosen to upgrade them to the world class standards at a cost of Rs.200.00 Cr. wherein 2 roads have been inaugurated by Hon'ble Chief Minister for public use on 20-06-2015. Works on other 05 works are in progress.

**Major Arterial/Sub Arterial Road works:**

- In this financial year, out of the 3800 KM Arterial, Sub-arterial roads and other Major roads, 268 roads measuring 350 KM are being developed at Rs.417.00

crore under Hon'ble Chief Minister's Nagarothana Grants, expected to be completed by Jun-2016.

- Further, under Hon'ble Chief Minister's special grant, 112 works measuring 220KM in length have been tendered out to develop some other important city roads at an estimated cost of Rs.260.00 crore. A second batch of 1086 works are important roads in city limits amounting to 1100 KM at an estimated cost of Rs.735 crore are presently being tendered out.

**Lakes development works:**

During the year 2015-16 for development of 26 lakes a sum of Rs.35.00 crores under Nagarothana grants have been sanctioned by the Government. Out of which a sum of Rs.23.92 crore have been spent.

**Storm Water Drain (SWD) works:**

In this financial year, for development of Storm Water Drain a sum of Rs.90.00 crore under Nagarothana grants have been sanctioned by the government. Out of which a sum of Rs.66.02 crore have been spent for 163 works.

**Major Project works:**

- The major projects taken up in Bengaluru City under Nagarothana grants is as follows:

**(c) Bengaluru Metro Rail Corporation Limited (BMRCL)**

Metro rail is a vital component of the transformation of the urban transport scenario in India. With urban population continuously growing, there is a need for green solutions. Mass Rapid Transit Systems are fast, safe and comfortable to travel. This alone will encourage people to switch over from personalized vehicles to public transport.

The Project is being implemented through a Special Purpose Vehicle (SPV) Bengaluru Metro Rail Corporation Limited (BMRCL), with an equal share holding owned by Government of India and Government of Karnataka.

The Bengaluru Metro Rail project - Phase 1 consists of Standard gauge double line, 750V DC electrified North- South and East -West Corridors weaving through the bustling commercial and residential areas of the city.

The East-West corridor is 18.10 km. long, starting from Baiyyappanahalli and terminating at Mysuru Road terminal, going via Old Madras Road, Indira Nagar, Ulsoor, Trinity Circle, M.G. Road, Cricket Stadium, Vidhana Soudha, Majestic, City Railway Station, Magadi Road, Hosahalli, Vijayanagar and DeepanjaliNagar.

The North-South Corridor is 24.20 Kms long starting from Hesarghatta Cross terminal and goes upto Puttenahalli Cross via Jalahalli, Peenya Industrial Area, Peenya Village, Yeshwantpur

**Table 6.19: Details of BBMP Major Project works**

Name of Project	Grants	Financial Progress (Rs.in lakhs)	Status
8 lane corridor at Okalipuram junction and fountain circle	Nagarothana Grants	10284.00	Work in progress
Flyover at Kitturu Rani Chennamma Circle, ORR	Nagarothana Grants	3580.00	Work in progress
20m Corridor Along Madiwala Tank Bund	Nagarothana Grants	1586.00	Work in progress
MLCP Expand at Freedom Park-Gandhi Nagar	Nagarothana Grants	7981.00	Work in progress
Grade Separator at the junction of West of chord road and 10 <sup>th</sup> cross Rajaji Nagar	Nagarothana Grants	2499.00	Work in progress
Grade Separator at Magadi road and siddaiah puranik road junction	Nagarothana Grants	2476.00	Work in progress
Up-gradation of 5 CBD roads in Bengaluru City as per tender Sure guidelines: Phase-2	Nagarothana Grants	8646.00	Work in progress

industrial Area, Yeshwantpur, Soap factory, Mahalakshmi, Rajajinagar, Kuvempu Road, Malleshwaram, Swastik, Majestic, Chikkapete, City Market, K.R. Road, Lalbagh, South End Circle, Jayanagar, RV Road, Banashankari and Jayprakash Nagar.

Out of the 42.3 km., 8.8 km. is underground near City Railway Station, VidhanaSoudha, Majestic, Chickpet and City Market and the rest 33.5 km will be elevated.

The funding pattern is 14.1% equity would be from each of the Governments GoI and GoK. Subordinate debt would be 9.4% from GoI and 19.1% from GoK. Remaining 43.3% would be from borrowings from JICA, AFD, HUDCO and ADB.

The utilities shifting work for the project utility started from 2nd October, 2006 on MG Road and the first civil construction work was in Eastern corridor i.e., Reach 1 (Baiyappanahalli to MG road- 6.7 Kms) and it started in April 2007.

#### Phase-1 Project Progress:

1. Bengaluru Metro Rail Project Phase-1 physical progress is 96% and financial progress is 96% as on December-2015.

2. The section between Baiyappanahalli and M.G. Road (6.7 Km with 6 stations) including Baiyappanahalli Depot was commissioned on 20-10-2011.
3. The section between Peenya and Sampige Road part of North-South Carridor along with Peenya Depot (10.30 Km. and 10 stations) has been commissioned on 28-02-2014.
4. The extension of Reach-3a that is 3b from Jalahalli to Nagasandra Station commissioned on 1st May 2015.
5. The section between Magadi Road and Mysuru Road terminal having 6.50 Km. with 6 stations commissioned on 16th November 2015.
6. The entire phase-1 is expected to complete by mid of 2016.

#### Phase-2

The Phase-2 of the Bengaluru Metro Rail project was sanctioned by GoI in February 2014. The Project consists of Four Extensions to the existing lines and two New Lines. The total length of Phase-2 is 72.095 km with 61 stations (49 Elevated and 12 Underground). The estimated project cost is Rs.26,405 Crore.

**Table 6.20: Summary of Break-up of costs**

Name of the Line	Length of the Line in Km	Estimated Completion Cost (Rs. in Crore)
Baiyappanahalli to ITPL-Whitefield	15.500	4845.00
Mysuru Road Terminal to Kengeri	6.465	1867.95
Hesaraghatta Crossto BIEC	3.770	1168.22
Puttenahalli Cross to Anjanapura Township	6.290	1765.88
R.V. Road to Bommasandra	18.820	5744.09
Gottigere to Nagawara	21.250	11014.00
Total	72.095	26405.14

## STATUS OF PHASE-2

Phase-2 preliminary works such as Geo Technical surveys and concept designs of structures have been completed. The process for land acquisition, shifting of utilities and calling of tender for civil works has been started. Reach-4 Extension (Puttenahalli to Anjanapura) tenders for civil work have already been invited and technical evaluation is under progress. The tenders for civil works in Reach-2 Extension (Mysuru Road to Kengeri) have been awarded and work started.

### Centrally Sponsored Mega City Scheme

- Government of India has introduced the centrally sponsored Mega City scheme during the year 1995.
- Under this scheme a sum of Rs.241.75 crore central share and equal share under state grant i.e.Rs.241.75 crore was provided to KUIDFC.KUIDFC has been made the Nodal Agency for overseeing the works under this scheme.
- The amount released under this scheme to the extent of Rs.483.50 crore has been

given to various institutions as loan for implementation of 55 different components of the scheme.

- The infrastructure created under this scheme aims at improving the living standards of people within urban areas.
- The interest rates charged for loans sanctioned under this scheme has been classified as below:
  - i. Group-A-Remunerative projects – 6.5%
  - ii. Group-B-Cost recovery projects – 5.5%
  - iii. Group-C-Service oriented projects – 4.5%
- For this loans a moratorium of 2 years has been given and interest has to be paid quarterly commencing from 3<sup>rd</sup> year to that of 8<sup>th</sup> year.
- This Mega City Project has come to an end on 31.03.2005 and in its place. Central government has introduced JnNURM with effect from 03.12.2005
- The interest and repayment of principle under this scheme has been converted into Mega City revolving fund and the same is being used for various infrastructure facilities.
- All the terms and conditions available to the Mega City Schemes are also applicable to Mega City revolving fund.

### Mega City Revolving Fund (MCRF)

Statuses of Projects sanctioned under the Mega City Revolving Fund are as follows (as of 31.12.2015):

Total No. of projects sanctioned	: 29
Total Cost of projects sanctioned	: Rs. 4573.17 crore
Total Loan sanctioned for the projects	: Rs. 2242.59 crore
Total Loan released by KUIDFC to various Implementing agencies	: Rs. 881.33 crore
Total No. of projects completed	: 6
Total cost of projects completed	: Rs.685.23 crore (loan component: Rs.342.61)
Total No. of projects under progress	: 9
Total cost of projects under progress	: Rs.1685.20 crore (loan component: Rs.725.88)
Total No. of projects Cancelled (Due to non-implementation within 1 Year *)	: 7
Total cost of the Cancelled projects	: 987.06crore (loan component: Rs.443.30)
Total No. of projects yet to be taken up	:7
Total cost of the projects yet to be taken up	: Rs.1215.68 crore(loan component:Rs.730.80)

As per decision taken 24<sup>th</sup> SLSC meeting held on 22<sup>nd</sup> June-2010.

**Smart City Mission:**

The Government of India has launched Smart City Mission on 25th June 2015 and has issued guidelines regarding Implementation of the Scheme. The mission will cover 100 cities and its duration will be five years (FY 2015-16 to FY 2019-2020). The government of India has allocated 6 cities for Karnataka State. Government of Karnataka has appointed KUIDFC as the Nodal Agency (SLNA) for the Smart City Mission. Under SCM following six (6) cities for Smart City Mission in Karnataka.

1. Mangaluru
2. Belagavi
3. Shivamogga
4. Hubballi-Dharawad
5. Tumakuru
6. Davanagere

**Gaps and Constraints:**

- Rapid urbanisation and migration into urban areas has led to immense pressure on service delivery and planning for urban civic services.
- Land issues involved in *in situ* development including litigation, availability, soil conditions and other technical parameters.
- Multiple stake holding agencies and involved coordination and permissions.
- Transit accommodation not being provided under Mission, space constraints hinder logistics of construction management.
- Beneficiary participation in terms of accepting G+3 configuration, financial contribution etc.

**Challenges and Outlook:**

**Stakeholder & Agency Co-ordination:** the sheer extent of coordination and the number of stakeholders involved in the implementation of such highly ambitious and innovative infrastructure projects involve an immense level of coordination among those involved, resulting in complex project management issues. There is a need for detailed planning and sequencing of all involved activities including permission and involvement of various agencies & stakeholders right from the conceptualisation & planning stages of the projects.

- **Fund Management:** The infrastructure projects proposed require large quantum of financing leading to challenges in fund mobilisation, fund flow and accountability & ownership issues at various levels. Details project planning with emphasis on financial estimated and Agency commitment to adhere to financial targets are critical in prudent fiscal management economic growth.



### **Karnataka Integrated Urban Water Management Investment Programme “Jalasiri”**

Approval of Government of Karnataka has been accorded for implementation of the ADB assisted “Karnataka Integrated Urban Water Management Investment Programme” (KIUWMIP) vide GO No. UDD/214/PRJ/2013 dt. 20.09.2013.

Under Tranche-1 of the programme, it is proposed to implement 24X7 water supply for 4 towns viz., (i) Davanagere(ii) Harihar (iii) Byadagiand (iv) Ranebennur and improve sewerage system in 3 towns viz., (i) Davanagere(ii) Harihar & (iii) Byadgi located in the lower reaches of the “Upper Tungabhadra Sub-basin” (pilot sub-basin), at an estimated cost of Rs.473.80 crore.

**Present Status for Tranche -1 towns:** Tenders: The works of Davanagere Sewerage, Harihara Sewerage and 20 mld and 5 mld STP at Davanagere have been awarded.

**Davangere Sewerage works:** Physical progress:11.2 kms of network and 27 manholes have been completed. Financial progress: A sum ofRs. 1702.40lakh has been spent.

**Harihara Sewerage works:** Physical progress: 9.60 km of network, 1.0 km of pumping main, 291 Nos. of manholes completed. Construction of2 wetwells & construction of STP is under progress. Financial progress: A sum of Rs.1194.23lakh has been spent.

**20 mld and 5 mld STP at Davangere:** Preliminary designs are under review. Layout plan is approved.

**Byadgi Sewerage works:** Work has been tendered.

**24/7 water supply for Tranche-1 towns:** DPRs of Harihara, Ranebennur & Byadgi towns and PDR of Davanagere town pertaining to 24/7 water supply scheme is submitted by the DPR consultants, viability of gap funding for the additional fund requirement is being explored.

**Tranche - 2 towns:** Review of Preliminary Design reports of 24/7 water supply to Kundapura and Puttur towns and sewerage PDR of Udupi & Puttur are under progress.

#### **New Initiatives:**

#### **City Cluster Development & Heritage Based Development**

##### **City Cluster Development:**

City Cluster Development (CCD) is an urban led strategy towards promotion of economic and social development under which closely located areas of human settlements are linked together functionally, structurally and spatially to form an integrated urban region. Karnataka Urban Infrastructure Development and Finance Corporation

(KUIDFC) has conceptualized CCD around Bengaluru on the lines of Asian Development Bank’s City Cluster Development guidelines. The Government of Karnataka, in its order No. UDD 45 PRJ 2012 dated 28.01.2013, has approved ADB funded City Cluster Development Project at a total project cost of US\$ 450 Million or Rs.2100 Crore for Phase-I with sharing pattern in the ratio of 67:33 between ADB (US \$ 300 Million) and GoK (US \$ 150 Million).KUIDFC is nominated as the nodal and coordinating agency on behalf of

Govt. of Karnataka for this project.

### **Heritage Based Development:**

The KUIDFC is planning for a state-level heritage based urban development program for Karnataka aimed at improving the quality of life and socioeconomic development opportunities in heritage towns and cities through the enhanced conservation and management of the state's unique heritage assets. The program would be the first-of-its-kind in India and is expected to serve as a demonstration model to other states interested in better preservation of their heritage to generate lasting development impacts in cities and towns with unique heritage assets. The proposed programme aims at improving the quality of life and economic opportunities in heritage towns/cities through the enhanced conservation and management of Karnataka's unique heritage assets. The estimated cost of the project is approximately US \$ 150 million and KUIDFC is looking forward to seek financial assistance from World Bank for this project.

KUIDFC is the nodal agency on behalf of GoK for coordinating with Indian Heritage Cities Network Foundation (IHCN-F) at Mysuru which has been formed with the active support of the Ministry of Urban Development GoI and the initiative of UNESCO and to promote heritage based urban development. IHCN-F will provide technical assistance, conduct trainings and help in capacity building and also involve in the development of heritage based master plans. It is also proposed to develop Heritage Master Plan for Bijapur, Bidar, Kalaburagi and Badami on priority basis by the Heritage Planning Cell. The HPC work will lead to area based or precinct development schemes for these cities. And it is proposed to take up heritage based urban infrastructure works in Bijapur, Kalaburagi and Badami. Indian Heritage Cities Network Foundation are preparing Heritage Resource Plans for Bidar and individual consultants are hired for Bijapur, Kalaburagi and Badami for preparing the area wise development plan and DPRs.

### **Municipal Reforms Cell –DMA**

- An exclusive cell dedicated for municipal reforms.
- Managed by Senior KAS and KMAS Officers and Professionals hired directly from the market.
- The cell has in house Data Center with centralized software applications
- Responsible for business process re-engineering, Design, Development, implementation, O and M along with monitoring the usage of e-Governance applications.
- Provides in house hands on training for ULB, DUDC and DMA officials.

### **Reforms in Service Delivery:**

#### **Phase-I**

- Fund-based Double Entry Accrual Accounting System (FDEAAS)
- Aasthi- GIS-based Property Tax Information System (schematic GIS)
- Birth & Death Registration and Certification System (B&D)
- Public Grievance and Redressal System (PGR)
- ULB Website

#### **Ongoing:**

- Jananidhi or Water Tariff
- Asset Management System

### **d) Bengaluru Development Authority (BDA):**

The Bengaluru Development Authority (BDA) established on 16<sup>th</sup> January 1976 under a separate act of the State Legislature viz the BDA Act 1976. The Authority has been established with the goals of planning function of the City Planning Authority and the developmental functions as in the erstwhile city improvement Trust Board (CITB) Bengaluru is a metropolitan city covering an area of 1306 sq mts attracting people around the world. The Authority also having aims at checking the haphazard and irregular growth of the city. The Garden City

has a glorious past track records with varied culture life style and has very salubrious climate.

**Objectives of the Authority are as follows:**

The objectives of the Authority shall be to promote and secure the development of the Bengaluru Metropolitan Area and for the purpose the Authority shall have the power to acquire, hold, manage and dispose of movable and immovable property, whether within or outside are under its jurisdiction. To carry out building, engineering and other operations and generally to do all things necessary of expedient for the purpose of such development and for purpose incidental thereto.

Bengaluru Development Authority also performs and development functions as per the direction of the Government as issued from time to time such as preparation of Development plan for Group Housing and Layouts, Approval of building plans (BDA Jurisdiction), Other statutory functions under KTCP Act, formation of Ring Road to minimize traffic congestion and facilitate commuters to reach their destination quickly. Rejuvenation of tanks which are vital for all living beings and increase the ground water level, Construction of Fly over to prevent traffic jam and provide safe, speed and smooth transport planning and implementation Schemes to provide for Residential/Commercial/ Industrial/Civic Amenities sites/Parks & Play Grounds, construction of Commercial complex/construction of houses to Economically weaker section & Development of Major infrastructure facilities etc.

**Construction of Houses for EWS:**

The Government of Karnataka has allotted 323 acres of land for the formation of Housing Projects for the members of economically weaker Section of the Society 190 Acres of land has been handed over to BDA for Construction of houses for Economically Weaker Section of the Society. Land cost of Rs. 40.00 crore is paid to the Government. BDA has taken up construction of about

30000 Housing units in 18 different places at Bengaluru. Ten projects such as Nandini, Valagerahalli Phase-1, 2, 3, 4, Halagevaderahalli, Malagala, Alur Phase-1, Doddabanahalli Phase-1, 2, Gunjur Phase- 1 & 2, Kaniminike Phase-1, Kothnur and Thippasandra are completed and so far 8184 flats Constructed out of which 4658 flats are allotted to public, Revenue expected from these flats is about Rs. 586.95 crore out of which Rs.552.00 (Dec 2015) crore is received. So far Rs.755.00 (Dec 2015) crore has been spent.

**The formation of peripheral Ring Road**

The formation of peripheral Ring Road at an estimated cost of Rs. 5.800 crore will be taken up with the Financial Assistance from JICA. The loan proposal is under process and the sanction is expected. Government order dated 19.01.2013 is issued and accorded approval for the payment of Land Compensation in the form of cash or TDP or develop land at 60:40 ratio. For the Financial Year 2015-16 Rs.100 crore provision is made.

**Development of Lakes**

The provision of Rs.50.00 crore is made in the budget estimates towards Rejuvenation and development of lakes and Rs.8.00 crore is made for new plantation in BDA layout and rejuvenated tank bed areas Rs.4.00 crore is made for maintenance of Nursery Gardens and Horticulture works in BDA Layout. Already 12 lakes have been developed at the cost of Rs.104.61 crore and has been made available for public use.

**Formation of layouts and distribution of sites:**

Bengaluru Development Authority has proposed the formation of five new layouts with the joint participation of land owners. It is proposed to share developed land in lieu of land compensation. The new layouts are namely Nada Prabhu Kempegowda Layout, Dr.Shivarama Karanth Layout, Sri.D.Devaraju Urs Layout, Sri.S.Nijalingappa Layout & Sri.K.C.Reddy Layouts. Under these schemes out of the total

developed area one portion i.e. 60:40 ratio instead of land compensation will be given.

During 2015-16, formation of Nadaprabhu Kempegowda and Arkavathi layout are in progress. For payment of land compensation for Nadaprabhu Kempegowda layout and execution of civil works in both layouts a provision of Rs.305.00 crore is made in the Budget Estimate.

Application from the public for the distribution of 5000 sites of different dimensions proposed by BDA to be formed under Nadaprabhu Kempegowda layouts have been invited.

### 6.7 Urban Governance:

The reality of urban governance in Karnataka and in India general, in the context of a local government, stands in contrast to the philosophy of the Constitution. The colonial authoritarian structure of city governance continues to this day with resistance to sharing political power with local urban institutions. It is therefore, one could find a scenario where apart from urban local bodies, there is a host of parastatal Urban Development and departmental agencies dealing with urban services. This is particularly so in metropolitan cities where there are separate government agencies dealing with water supply and sewerage, transport, land and infrastructure development etc.

### 6.8 Master Planning

#### (a) Integrating spatial planning with economic development planning:

Urban planning in the State, as in the rest of the country, has been mostly identified with town planning or land use, planning. It is necessary to broaden the vision of the urban planning process and integrate spatial planning with economic development planning. The 74th CAA has provided a new framework to the planning process and mandates:

a) Constitution of a District Planning Committee at the district level charged with the responsibility of preparing a draft District Development Plan.

b) Constitution of a Metropolitan Planning Committee in every metropolitan area which would be responsible to prepare a draft development plan for the metropolitan area.

c) Municipalities to be responsible for urban planning including town planning and for preparation of plans for economic development and social justice. The Constitution does not provide for planning at the state level which is guided by the Five Year Plan. From the perspective of urban development, however, it is essential to formulate a spatial plan at the state level.

#### (b) State Level Spatial Planning:

The approach to urban development in the Five Year Plans has been ad hoc and piecemeal. As pointed out by the National Commission on Urbanisation, there has been a lack of spatial concern in the planning

**Table 6.21: The Revenue and expenditure details for the last Seven years are as follows:**

Year	Budget Estimate		Revised Estimates		Accounts	
	Receipts	Payments	Receipts	Payments	Receipts	Payments
2010-11	3650.08	3643.64			446.35	696.66
2011-12	5074.02	5067.65	716.59	716.19	646.97	721.54
2012-13	4927.27	4925.43	749.17	1029.05	749.17	1050.42
2013-14	1946.32	1944.33	880.03	1104.71	954.60	1073.73
2014-15	1999.55	1998.42	762.56	1069.86	230.00	245.25
2015-16 *	1838.78	1838.69	-	-	552.00	755.00

\*(Up to Dec 2015)

process, and no efforts have been made to link the process of urbanization with the general pattern of economic development. Spatial planning deals with a hierarchical system of settlements and plays a vital role in investment decisions depending on the growth potential of different settlements. Planned economic development should take into account the locational aspects of development. The objective of spatial planning is to generate a process of spatial development which optimizes utilization of resources, reduces regional, spatial and economic imbalances, strengthens rural and urban relationships, protects the environment and maintains an ecological balance (NCU). A State-level Perspective Spatial Plan must be prepared highlighting policies relating to the development of the thrust areas of the State like development of natural resources, regional development, settlement pattern, population distribution policy, transportation networks, water and power supply systems, areas of tourist interest and environmental issues.

### **Regional Development:**

The Industrial Policy of the state aims at industrialization in backward regions and also development of industrial corridors and identifying potential locations to set up industries. In this context, it is essential to identify a spatial configuration of the existing and future urbanization in or near cities and along emerging urban corridors.

### **(c) Planning for metropolitan areas:**

Although Bengaluru is the only metropolitan city in Karnataka at present, Hubballi-Dharwad and Mysuru are fast emerging as metros and as such, it is necessary to plan for orderly development of these three metropolitan areas in the State. The Bengaluru metropolitan area covers an extent of about 1307 sq. kms of which about 420 sq kms is earmarked as agricultural land or green belt. The Bengaluru City Corporation or BBMP which has been extended recently from an area of 223 sq. kms to 709 sq. kms comes within the metropolitan planning area. The Bengaluru Development Authority is the

Planning Authority for the metropolitan area and is also responsible for land development and housing. With increasing urbanization in its hinterland. Bengaluru is facing enormous challenges in providing infrastructure and services to meet the needs of the growing population. The BMRDA was set up in 1985 to address the problems of the region and prepare a Structure Plan. But this Authority has not been able to function in the manner envisaged by the law makers.

The Expert Committee on the Governance of Bengaluru has suggested setting up a Metropolitan Planning Committee for the Bengaluru Metropolitan Region (8,000 sq. kms) covering Bengaluru Urban, Bengaluru Rural and Ramanagaram districts. The composition, powers and functions of the MPC as recommended by Expert Committee may be adopted. In order to deal effectively with the planning and development issues of Hubballi- Dharwad and Mysuru, Metropolitan Planning Committees must be set up for these two cities now itself without waiting for the next Census in 2011 when their population will go beyond one million. The physical jurisdiction of these two metropolitan areas must be carefully demarcated taking into consideration the peripheral outgrowths and potential for urban expansion.

### **(d) Planning at the city level:**

Under the Constitution, urban planning and town planning as also social and economic development and protection of the environment are functions to be performed by the urban local bodies. However, in Karnataka, these responsibilities have not yet been assigned to the municipalities. Once the scope of the municipal functions is expanded, municipal management will acquire a new dimension. To the traditional municipal functions of water supply, sanitation, solid waste management and regulatory functions such as licencing, construction of buildings, regulation of food establishments etc. will be added planning and development functions. At present, Master Plans under the KTCP Act are prepared by the Local planning Authorities or UDAs. Under the JNNURM, the

Municipalities are expected to prepare a City Development Plan. The present practice of having a master plan, a city development plan and a comprehensive development plan should be given up. Only one plan should be prepared at the city level which includes the spatial plan, development plan and development control measures and such plan should be prepared by the Municipality. The capacity of ULBs should be enhanced to take on planning responsibilities.

The time frame for different plans will be as follows:

- (a) A 15 – 20 year Spatial Perspective Plan for the State.
- (b) A five year development plan for the district/ metropolitan area.
- (c) A five year plan for each municipality with city / town.
- (d) Annual plan for the district and the local body with budgetary allocations.

**(e) Town and Country Planning:**

Preparation of Master Plans for the orderly development of Cities, Towns and Villages in the State and providing technical assistance to Urban Development Authorities, Planning Authorities and Local Bodies in the State for implementation of these plans and schemes are the major activities of the Department.

The Karnataka Town and Country Planning Act, 1961 has been extended to 132 Urban Centers in the State and Authorities have been constituted to these Urban Centers after declaring Local Planning Area. Accordingly, in addition to Bengaluru Development Authority, 28 Urban Development Authorities and 39 Planning Authorities are functioning in the State and in respect of 64 Towns, Municipal Areas have been declared as Local Planning Areas and the respective Municipal Councils are functioning as Planning Authorities., As per 74<sup>th</sup> Constitutional Amendment Act local bodies are required to function as Planning Authorities and have to perform the planning functions. The Department is assisting these Planning Authorities in preparation of Master Plans for the respective L.P.A.As on date Government

has approved Master Plans for 97 Cities / Towns in the State.

The Department is extending technical assistance to Karnataka Housing Board, Karnataka Industrial Area Development Board, Karnataka Slum Clearance Board, Revenue Department and such other Departments involved in the urban and rural settlements. Further, the Department is extending technical assistance to local bodies / departments in the preparation of Town Extension Schemes, Development / Improvement Schemes, Rehabilitation Schemes, Ashraya Schemes and other such schemes. In the last 1 year the progress achieved by the department is as follows;

- Master Plans for 05 Cities / Towns have been approved by Government.
- Preparation of Scientific base maps for the urban areas of the state are being taken up in stages under various projects.
- Preparation of base maps using Satellite images and total station survey is being taken up under the KMR project for 31 urban areas in 4 packages. Work is under progress by M/s N.K. Build con for package-1 for 11 towns and for the other 3 packages, process is in different stages of implementation.
- KTCP Act 1961 has been extended to 15 Municipal / Town Panchayat Areas and these Municipalities / Town Panchayats have been declared Municipal / Town Panchayat Planning Authorities.
- As per the Central Government reforms agenda to issue property title certificate, the maps for Hassan city using total status is taken up the work is under progress by M/s Secon Private Limited.
- Under the central Government Sponsored NUIS scheme, preparation of base maps for 06urban areas is ongoing. This project is funded by the central and state government on the 75 / 25 basis. KGDC, SOL and NRSC have prepared draft maps and work is in progress.
- The state government has taken up the project of computerisation of all Urban Development Authorities / Planning

Authorities / Municipal Planning Authorities and Department of Town and Country Planning on the estimated cost 4.5 crores, out of which 1.5 crores has been released by State Town Planning Board. The same project is entrusted to Karnataka Municipalities Data Society. As a pilot project, website for Shimoga Urban Development has been created and is ready to be launched similar websites Mysuru, Belgum, Tumkur, Bellary and Kalaburagi are also created and for rest of the UDA's work is in progress.

### **6.8.1 74<sup>th</sup> Constitutional Amendment Act:**

The passage of 74th CAA has provided new opportunities for urban governance reforms in the country. The municipal bodies have for the first time been provided the constitutional status of the third tier of government. They have been vested with increased responsibilities as a result of the devolution of 18 functions through the 12th schedule to the Constitution. Clearly, the intention of the Constitution is to provide a democratic structure of governance at the local level.

Local democracy is based on the principle of subsidiarity i.e., functions which are local in nature should be performed by the local government. Thus, public health, water supply, sanitation, public works, public safety, welfare, recreation and regulation of construction, food and trade activities all come within the domain of the local bodies. Besides these traditional core functions of municipalities, the Constitution has included certain other functions like planning for economic development and social justice, urban poverty alleviation, and urban and town planning. However, while recognizing local governments and providing a list of functions which could be performed by them, the Constitution does not directly endow them with any functions, responsibilities and powers. They derive their powers and functions from the States through specific legislation. Thus, in practice, it is the state governments which determine the degree of autonomy of the local bodies.

### **New Institutional Arrangements:**

The image of local government is equally characterized by democracy and efficiency. This should be the guiding principle. The elected representatives formulate the policy and set the targets. The administration's task is to support the elected representatives in this endeavor and reach the defined targets without detailed political supervision. The present system of separation of powers between the deliberative wing (the Council) and the executive wing (the Commissioner and his staff) must be replaced by a system where political responsibility and accountability go together. This is possible only if the executive powers are vested in the elected representatives. The following alternative proposals can be considered: (i) Directly elected Mayoral system (ii) Mayor-in-Council System (iii) Ward Committees (iv) Neighborhood Area Committee (NAC) (v) Functions of Municipalities, (vi) Role of parastatals, (vii) Capacity building (viii) participatory city governance (ix) citizen participation in neighborhood improvement and (x) legal framework.

### **6.8.2 Development Programmes:**

#### **Jawaharlal Nehru National Urban Renewal Mission (JNNURM):**

The Mission aims at creating economically productive, efficient, equitable and responsive cities. It is being implemented in the cities of Bengaluru and Mysuru in Karnataka with KUIDFC as the Nodal Agency. The Mission includes 67 urban development projects and 35 urban reforms, thereby acts as a Catalyst of Urban Growth.

#### **Phase I: UIG Sub-Mission:**

39 projects at an estimated cost of Rs.2887.19 crore are being implemented in Bengaluru. 25 projects have been completed till date, including 6 Underpass, 2 flyovers, 1 Grade separator, 2 Road works, 2 Drinking water supply projects, 10 TTMC, 5 public transport and 1 UGD project have been completed at a cost of Rs.980.51 crore.

2053.21 km of UGD lines have also been laid till date under Phase I.

10 projects at an estimated cost of Rs.878.65 crore are being implemented in Mysuru. Transport infrastructure facilities at TTMCs procurement of 150 buses for public transport, ITS & IES Project for Mysuru city, Water Management through Rain Water Harvesting at ZOO in Mysuru city have been completed during Phase I at a cost of Rs.56.84 crore.

#### **BSUP Sub-Mission:**

Construction of 27,925 Dwelling Units with all essential civic services and infrastructure in 158 slums benefitting 1,39,625 dwellers have been sanctioned at an estimated cost of Rs.584.83 crore for Bengaluru and at an estimated cost of Rs.258.84 crore for Mysuru of which 25,691 DUs in all have been completed and 1982 DUs are under construction.

#### **Reforms:**

States are mandated to undertake Reforms under JnNURM. Out of the 35 mandated reforms, 34 have been fully implemented, making Karnataka the SECOND in the country with 95.4% calibration for Reforms according to MoUD.

#### **Successful Initiatives - UIG**

The Project, "Installation of **Bulk Flow Meters on City Distribution Mains**" completed in December 2009 at a cost of Rs.12.49 crores has enabled instant checks of leakages in water supply and distribution resulting in significant reduction in leakage and gain in revenues besides the considerable environmental benefit of savings in potable water and social impact due to equitable supply of water to the citizens of the city. The Project, "**Augmentation of Drinking Water from CWSS, Stage IV-Phase I by additional**

**100 MLD for 7 municipal councils**" completed in December 2007 at a cost of Rs.15.83 crore has improved per capita supply as also in the 72 wards of ULBs which were merged with PIA service area. There is increase in the number of metered connections to 30,450 with plans for doubling this number. The social and economic contribution due to provision of potable water is significant.

**Mysuru:** The Project "Intelligent Transport System & - Innovative Environment System for Mysuru City" completed in November 2013 at a cost of Rs.22.24 crore, is the first of its kind project in the country transforming public transportation system. With end to end seamless merging of technologies, the system provides real time information of bus service across 500 Buses, 80 Bus Stops and 2 Bus Terminals, with state of the art Vehicle Tracking System, Central Control Station, Passenger Information Management System, Communication Sub System, Travel Demand Management, Incident and Emergency Management System and Operational and Maintenance Specification Fleet Management System. The socio-economic benefits of the project are incalculable.

#### **Successful Initiatives – BSUP:**

Pantharapalya slum is situated near Rajarajeshwarinagar in land of 6 A. 4 G. declared by KSDB during 2001. There are 1088 families with 6000 population belonging to different sections of the society.

The dwellers were facing problem of adequate shelter, roads, streetlights, drainage, potable water and individual toilet. Absence of basic amenities created many health and environmental problems, which lowered the quality of life of the dwellers. This slum was selected under Phase I project of JnNURM-BSUP to provide housing and infrastructure of slums.



**Table 6.22: Details of Phase I project of JnNURM-BSUP**

Number of DUs	1088 (G+3)
Project Cost including infrastructure	Rs.2310 lakh
Cost per DU excluding infrastructure	Rs.1.80 lakh
Carpet area	25 sq. m.
Date of start	18-11-2009
Services	Connected to City water supply UGD and Electrical Lines. Concrete Pavement.
Status	Fully occupied
Other Amenities	Schools & Medical facilities adjoining
Connectivity	Bus services available, Metro under construction, State Highway adjoining and Nearest Railway Station within 100 m.

Community participation is adopted during planning as well as implementation stages, ensuring quality of construction and were made responsible for community services and maintenance of these facilities.

#### **Successful Initiatives – Reforms:**

JnNURM scheme also has an inbuilt Reforms Mechanism for better Citizen Services by the ULBs. Out of 35 mandated Reforms 34 Reforms are fully implemented and **Karnataka stands SECOND in the Country by scoring 95.4% in Reforms calibration by Ministry of Urban Development (MoUD)**. The Major reforms that need to be mentioned are: implementation of 74th CAA, Public Disclosure law, enactment of Community Participation Law, integration of city Planning Functions, E-Governance Applications, Administrative and Structural Reforms, Earmarking of Municipal Budget to the Urban Poor, Computerization of Land Records, Repealing Urban Land Ceiling Act, Property Tax Reforms, Municipal Accounting Systems, conversion of Agriculture land to Non-Agriculture Land, System of Property Title Certification, Streamline Building Plan Approvals, Basic Services to the Urban Poor, PPP, etc.

#### **New Initiatives:**

##### **Transition Phase:**

MoUD is presently considering projects for sanctioning under Transition Phase. Under UIG Sub-Mission, 7 projects have been sanctioned for Bengaluru and Mysuru, of which 2 projects at a cost of Rs.137.50 crore

have been sanctioned for Bengaluru and 5 projects for Mysuru at a cost of Rs.280.63 crore.

In the Urban Transport Sector, GOI has sanctioned projects worth Rs.298.50 crore for Bengaluru and Mysuru, including 593 buses and 6 Depots. In Non-Mission cities, 1108 buses for 30 towns and Transit Infrastructure facilities for 18 towns have been sanctioned. In all 1701 buses and 23 Depots/ Bus Stands have been sanctioned for Karnataka.

#### **Capacity Building:**

The Arun Maira Committee, the Ramachandran Committee and the High Powered Expert Committee on Urban Infrastructure and Services (HPEC) recommendations and the experiences accumulated in implementation of Phase-I, JnNURM, have highlighted the need for capacity building as the key to improve governance and service delivery systems at State and ULB levels. Principal components are (i) Capacity development of ULBs for strengthened urban management and (ii) Creation of supporting structures and mechanisms at State and Central level to facilitate capacity building of ULBs.

#### **Gaps and Constraints**

- Rapid urbanisation and migration into urban areas has led to immense pressure on service delivery and planning for urban civic services.

- Land issues involved in *in situ* development including litigation, availability, soil conditions and other technical parameters.
- Multiple stake holding agencies and involved coordination and permissions.
- Transit accommodation not being provided under Mission, space constraints hinder logistics of construction management.
- Beneficiary participation in terms of accepting G+3 configuration, financial contribution, etc.

### Challenges and Outlook of KUIDFC

**Stakeholder & Agency Coordination:** the sheer extent of coordination and the number of stakeholders involved in the implementation of such highly ambitious and innovative infrastructure projects involve an immense level of coordination among those involved, resulting in complex project management issues. There is a need for detailed planning and sequencing of all involved activities including permission and involvement of various agencies & stakeholders right from the conceptualization & planning stages of the projects.

**Fund Management:** The infrastructure projects proposed require large quantum of financing leading to challenges in fund mobilisation, fund flow and accountability & ownership issues at various levels. Details project planning with emphasis on financial estimated and Agency commitment to adhere to financial targets are critical in prudent fiscal management economic growth.

### URBAN POVERTY ALLEVIATION

#### National Urban Livelihoods Mission – (NULM)

##### Background:

As per the Govt of India Planning commission poverty estimates 2011-12, nearly 15.25% of the urban population in Karnataka is estimated to be below poverty line. Government of Karnataka has been implementing many poverty alleviation schemes in the urban areas. Swarna Jayanthi Shahari Rozgar Yojana (SJSRY) is one such scheme being implemented by the Department of Urban Development,

Government of Karnataka, since December 1997.

Based on a systematic review of SJSRY, the Ministry of Housing and Urban Poverty Alleviation, GOI has decided to restructure/rename of the SJSRY as “National Urban Livelihoods Mission” (NULM). NULM which is approved by the GOI on 24<sup>th</sup> September 2013 is to be implemented in a mission mode across the country with a clear objective of urban poverty reduction through the creation and strengthening of institutional platforms for the urban poor.

#### National Urban Livelihoods Mission:-

##### Mission Statement:

The State Urban Livelihoods Mission will aim “to reduce poverty and vulnerability of the urban poor households by enabling them to access gainful self-employment & skilled wage employment opportunities, resulting in appreciable improvements in the livelihood on a sustainable basis, through building strong grassroots level institutions of the poor”.

##### Strategy: NULM will adopt the following strategy.

- Building capacity of the urban poor, their institutions and the machinery involved in the implementation of livelihoods development and poverty alleviation programmes through handholding support;
- Building skills to enable access to growing market-based job opportunities offered by emerging urban economies;
- Training for and support to the establishment of micro-enterprises by the urban poor– self and group;
- Ensure availability and access for the urban homeless population to permanent 24-hour shelters including the basic infrastructural facilities like water supply, sanitation, safety and security;
- To address livelihood concerns of the urban street vendors by facilitating access to suitable spaces, institutional credit, social security and skills to the urban street vendors for accessing emerging market opportunities.

### NULM Mission Cities and Target Population

In the 12th Five Year Plan, NULM will be implemented in all District Headquarter Towns and all other cities with a population of 100,000 or more as per 2011 Census.

The primary target of NULM is the urban poor, including the urban homeless. The Socioeconomic and Caste Census (SECC), 2011 for identification of urban poor is currently under progress. Accordingly, as an interim measure, the target of NULM will be the urban population identified presently as below poverty line population in urban areas by the States/UTs. The coverage may be

broadened to include families of disadvantaged groups like SCs, STs, women, minorities, disabled etc.,.

**Components of the NULM:** NULM have the following 6 components

- Social Mobilisation & Institution Development (SM&ID)
- Capacity Building& Training (CB&T)
- Employment through Skill Training & Placement (EST&P)
- Self-Employment Programme (SEP)
- Support to Street Vendor (SSV)
- Scheme of Shelter for Urban Homeless (SUH).

**Table 6.23: Selected cities for implementation of NULM in Karnataka**

Sl. No	Name of the Districts/City	Population as per 2011 census
The cities with population of 1 lakh and above		
1	BBMP	84,18,567
2	Chitradurga	1,45,853
3	Davangere	4,34,971
4	Kolar	1,38,462
5	Robertsonpet	1,62,230
6	Bhadravathi	1,51,102
7	Shimoga	3,22,650
8	Tumkur	30,2143
9	Chikkamangalur	1,18,401
10	Mangalore	4,99,487
11	Hassan	1,55,006
12	Mandya	1,37,358
13	Mysuru	9,20,550
14	Udupi	1,44,960
15	Bagalkote	1,11,933
16	Belgaum	4,90,045
17	Bijapur	3,27,427
18	Hubballi-Dharwad	9,43,788
19	Gadag-Betageri	1,72,612
20	Ranebennur	1,06,406
21	Bidar	2,16,020
22	Bellary	4,10,445
23	Hospet	2,06,167
24	Kalaburagi	5,43,147
25	Gangavathi	1,14,642
26	Raichur	2,34,073
The Districts Headquarter cities having less than 1 lakh population as per the 2011 census.		
1	Ramanagaram	95,167
2	Chikkaballapur	63,652
3	Chamarajanagara	69,875
4	Karwar	77,139
5	Yadgir	74,294
6	Bengaluru Rural Doddaballapur *	93,105
7	Madikeri	33,381
8	Koppal	70,698
9	Haveri	67,102

\* As there is no District Headquarter for Bengaluru Rural district, the city with highest population, Doddaballapur is proposed for consideration.

**Table 6.24: NULM Action Plan 2015-16**

Sl No	NULM Component	Physical Target	Proposed Total Expenditure (Rs. Lakhs)	Central Share (Rs. Lakhs)	State Share (Rs. Lakhs)	% Central Share
1	SM & ID	4382	867.20	650.40	216.80	9.25
2	EST & P	36131	4364.49	3273.37	1091.12	52.25
3	SEP	5405	467.53	350.65	116.88	6.82
4	CBT		804.54	603.41	201.14	9.05
5	SUH	35 cities	961.25	720.94	240.31	13.96
6	SUSV	35 Cities	978.50	733.88	244.63	4.99
7	I Sub- Total		8443.51	6332.63	2110.88	96.32
8	A & OE		152.67	114.50	38.17	1.75
9	IEC		131	98.25	32.75	1.50
10	II Sub Total		283.67	212.75	70.92	3.25
Grand Total (I+II)			8727.18	6545.39	2181.80	100.00

urban street vendors for accessing emerging market opportunities.

### State Urban Livelihoods Mission (SULM):

#### (i) Mission Statement:

The State Urban Livelihoods Mission will aim “to reduce poverty and vulnerability of the urban poor households by enabling them to access gainful self-employment & skilled wage employment opportunities, resulting in appreciable improvements in the livelihood on a sustainable basis, through building strong grassroots level institutions of the poor”.

#### (ii) Strategy: SULM will adopt the following strategy.

- Building capacity of the urban poor, their institutions and the machinery involved in the implementation of livelihoods development and poverty alleviation programmes through handholding support;
- Building skills to enable access to growing market-based job opportunities offered by emerging urban economies;
- Training for and support to the establishment of micro-enterprises by the urban poor- self and group;
- To address livelihood concerns of the urban street vendors by facilitating access to suitable spaces, institutional credit, social security and skills to the

#### (iii) SULM Mission Cities and Target Population

In the 12th Five Year Plan, SULM will be implemented in 179 Urban Local Bodies.

The primary target of SULM is the urban poor, including the urban homeless. The Socioeconomic and Caste Census (SECC), 2011 for identification of urban poor is currently under progress. Accordingly, as an interim measure, the target of NULM will be the urban population identified presently as below poverty line population in urban areas by the States/UTs. The coverage may be broadened to include families of disadvantaged groups like SCs, STs, women, minorities, disabled etc.,.

#### (iv) Components of the SULM: SULM have the following 4 components

- Social Mobilisation & Institution Development (SM&ID)
- Employment through Skill Training & Placement (EST&P)
- Self-Employment Programme (SEP)
- Support to Street Vendor (SUSV)

**Table 6.25: SULM Action Plan 2015-16**

Sl No	NULM Component	Physical Target	Budget Allocation (Rs. Lakh)	State Grant only (Rs. Lakh)
1	SM & ID	2496	500.00	500.00
2	EST & P	10240	1500.00	1500.00
3	SEP	3332	375.00	375.00
4	SUSV		125.00	125.00
Grand Total			2500.00	2500.00

### Chief Ministers' Small and Medium Town Development Programme (CMSMTDP):

CMSMTDP and NAGAROTHANA programme of Government of Karnataka are being implemented through the Directorate of Municipal Administration (DMA). The Urban Development Department is the overall implementing agency and DMA will act as a Nodal agency under this programme. The project finance is met out of Government Grants & Market Borrowings by **Karnataka Water and Sanitation Pooled Fund Trust** (KWSPF Trust).

### Nagarothana CMSMTDP Phase -2 Project:

Nagarothana Chief Minister's Small and Medium Towns Development Programme (CMSMTDP) Phase II has been approved for 211 ULBs with total outlay of Rs.1810.00 Crore for a period of 3 years in the State Budget for the year 2012-13 with the following allocation.

- Chief Minister's Small and Medium Towns Development Programme (CMSMTDP) phase-2 was announced in the budget speech of 2011-12
- 211 small and medium towns (Urban local bodies)
- Guidelines issued Govt. Order vide dated: 13-09-2012 and 07-11-2012.
- Funding pattern: 50% Government Grant and 50% Loan from KUIDFC.
- The details of ULB wise allocation is as follows.

### Progress:

Rs.1015.87 crore expenditure has been incurred up to Dec 2015 as against the released amount of Rs.1223.78 crore. Urban Local Bodies have completed 901 works as against the approved works of 2050.

### Nagarothana Kalaburagi Cabinet:

State Cabinet meeting held in Kalaburagi on 04<sup>th</sup> October 2010 has announced Rs.365.54 crore as special grant for 11 Urban local bodies in the backward in Kalaburagi revenue division.

**Table 6.26: details of fund allocation through CMSMTDP (Rs. In Crore)**

Category	Nos	Allocation	Total
Dist. Head Quarter CMCs	21	30.00	630.00
Other CMCs	23	15.00	345.00
TMCs	94	5.00	470.00
TP/NAC	73	5.00	365.00
Total	211		1810.00

**Table 6.27: Grant announced to Nagarothana scheme at Kalaburagi Cabinet, (Rs. in Lakh)**

Sl. No.	Name Of the Town	allocation	Approved Action Plan	
			No of works	Amount
1	Koppal CMC	2500.00	50	2500.00
2	Yadgiri CMC	7481.00	31	7481.00
3	Shahappura TMC	1700.00	14	1700.00
4	Shorapura TMC	2765.00	22	2765.00
5	Gurumitkal TP	723.00	27	723.00
6	Hospet CMC	5000.00	53	5000.00
7	Siraguppa	2865.00	1	2865.00
8	Kampli TMC	2000.00	18	2000.00
9	Bijapur CMC	10000.00	238	10000.00
10	Sindanur	620.00	6	620.00
11	Bidar CMC	900.00	1	900.00
	Total	36554.00	461	36554.00

**Progress:**

A sum of Rs.147.46 crore expenditure has been incurred up to Dec 2015 as against the released amount of Rs.190.12 crore. 11 Urban Local Bodies have completed 216 works as against the approved works of 461.

**Scheme for implementation of Commercial/ Infrastructure projects in vacant lands of ULBs**

The Government of Karnataka acting through Karnataka Water & Sanitation Pooled Fund Trust (KWSPFT) for which KUIDFC is the fund manager, plans to encourage Urban Local Bodies who own real estate of significant value, to unlock the values in these real estates, develop models on sound commercial basis for development of these lands with an aim to improve infrastructure and quality of public life. The projects identified based on their commercial potential are in the nature of new commercial complexes re-locating existing markets, traffic and parking terminals. In about 11 ULBs, this activity was explored and pursued with the help of two financial consultants and transaction advisors, viz., M/s Feedback Infrastructure Services Private Limited and M/s CRISIL with whom KWSPFT Trust has entered into an agreement. They will be providing end to end counselling in conception, structuring, implementation and completion of the projects. As of now, in respect all the 11 ULBs pre-feasibility reports are submitted by the Consultants of which 5 projects belonging to 3 ULBs viz., Chintamani, Chikkamagaluru and Moodabidre, were found prima facie viable to be taken up under PPP. The same is being pursued further.

The trust would assist in borrowing the funds on behalf of ULB's from the Banks/Financial Institutions/Bonds/Tax free bonds for PPP Projects, and complete hand holding for PPP Projects. The repayment of loan availed would be met out of revenue generated from the commercial assets.

**Highlight of best practice and success stories:**

1. The entire CMSMTDP Programme is with a bifocal emphasis:
  - a) Enabling ULBs to access market funding through pooled fund mechanism in a cost effective manner by building up a sustainable structure of borrowing based on the rating of external agencies which are periodically revalidated.
  - b) To bring into ambit all small and medium towns/ULBs spread throughout the

State by widening the geographical spread of capital expenditure throughout the state, to provide a congenial urban environment with its spin-off on the economic growth rate.

2. The UIDF scheme acts as an incentive to ULBs to gradually upgrade their skills in project implementation and induces social sector capital formation by moderating borrowing cost with rebate on Interest rates.

**6.8.3 Externally Aided Projects:****Karnataka Municipal Reforms Project (KMRP –World Bank assisted)**

The **Karnataka Municipal Reforms Project (KMRP)** aims to improve the quality of life of citizens by improving the delivery of urban services and promoting good governance among the urban local bodies (ULBs). KMRP addresses the need to strengthen institutional and financial frame works in Urban Service Delivery at ULB level. The total funding for this project is Rs.1364 crore and expenditure, as on Dec 2015 is Rs.1246.05 crore.

**Institutional Development Component:**

This component includes support for implementation of statewide reforms namely implementation of Double Entry Accrual Based Accounting system in 158 Urban Local bodies (ULB) and computerization of municipal functions in 164 ULBs of the State. A separate Cell under the control of the Directorate of Municipal Administration has been created for this purpose. The computerization of municipal function covers 5 modules namely ULB website, Public Grievance Redressal, Birth and Death Certification and GIS based property tax information and the same are made live in all 164 ULBs. The Double Entry Accrual Based Accounting modules have been completed and is live in 158 ULBs.

This component also supports preparation of geo referenced base maps for 28 urban areas. A dedicated Urban Mapping cell has been constituted under the control of Directorate of Town and Country Planning to oversee the implementation. Work under progress. Data in digital form completed and clearance from Ministry of Defence (MoD) obtained for 12 towns. Preparation of base maps at scale 1:2000 is underway for 15 towns and would be completed by December 2015.

This component also provides capacity building activity to the ULB officials and elected representatives in identified 21 areas for which State Institute of Urban Development (SIUD), Mysuru has been appointed as the nodal agency. So far, 25,539 municipal functionaries

have been trained and all training related activities have been completed under the project.

**Municipal Investment Component:**

This component provides investment support for urban infrastructure improvement in selected 32 ULBs of the State. The ULBs have been grouped into 4 packages of 9, 5, 10 and 8 ULBs. Out of a total 91 works contract proposed under this component, 75 have been completed, 15 are under progress and 1 work is yet to be awarded.

**Bengaluru Development Component:**

Bengaluru Road Rehabilitation component supports rehabilitation of core city road network including improvement of foot path, drainage etc. The road rehabilitation work has already been completed by the BBMP.

Greater Bengaluru Underground Drainage Program under the project supports construction of underground (UGD) sewerage network of House Service Connections (HSC). This component has been dovetailed with JNNURM program with the approval of GoI has been made available to BWSSB LCS units have been constructed in the slum settlements under the Greater Bengaluru pro-poor sanitation program.

**North Karnataka Urban Sector Investment Programme (NKUSIP)**

The North Karnataka Urban Sector Investment Programme (NKUSIP) is the third Asian Development Bank assisted urban development project in Karnataka. The expected impact of the Investment Program is improved urban infrastructure and services resulting in overall improvement of quality of life in the ULBs, where this programme is being implemented. This will lead to increase in economic opportunities and growth in north Karnataka, and reduced imbalances between north Karnataka and the rest of the state.

25 towns are covered under this program. The project cost is Rs.1980 Crore out of which, ADB loan is Rs.1188 Crore and Government of Karnataka share is Rs.792 Crore. The major components under the program are water supply, sewerage, storm water drainage, road improvement, slum improvement and non-municipal infrastructure such as fire &

emergency service, tourism & information and lake development.

ADB's Multi-tranche Financing Facility (MFF) is utilized for the programme. All four tranche loans have been signed and made effective. 47 contracts are completed, 69 contracts are in progress, 5 contracts are terminated, procurement for 7 contracts are in progress. The Tranche 1 has been closed financially.

The overall financial progress for the financial year 2015-16, by the end of Dec 2015 is Rs.236.22 crore as against the budget allocation of 362.00 Crore.

The highlights of NKUSIP are as follows:

- (a) Based on the lessons learnt from previous projects, the implementation is done on decentralized perspective.
- (b) Advance action is being taken for acquisition of land, securing permission from the line agencies prior to contracting the packages.
- (c) Implementation of 24 X 7 water supply sub-projects at a cost of about Rs.400 Crores adopting Performance Based Management Contracts. This will benefit about 3,00,000 households in 13 ULBs. The operation of 24 X 7 water supply works in Ilkal will commence during 2015-16.
- (d) Community Development Programme activities through NGOs in each of the program towns is being done to ensure sustainability of initiatives.
- (e) Urban mapping in selected Program ULBs through Aerial Photogrammetry and Satellite Imagery.
- (f) State of art Sewage Treatment Plants are being constructed in Hubballi-Dharwad, Davangere and Kalburgi. The 40 MLD Sequential Batch Reactor type Sewage Treatment Plant at Hubballi has been commissioned successfully.

**Karnataka Urban Water Supply Modernisation Project (KUWSMP):**

Based on the success of 24x7 water supply Demonstration Project, the proposal of up-scaling 24x7 water supply to the entire corporation areas of Belgaum, Kalaburagi and Hubballi-Dharwad at an estimated cost of Rs.1809 crore has been approved, vide

**Table 6.28: Details of the estimated cost of the project KUWSMP**

City	Estimated Amount (Rs. in crore)
Belgaum	427
Kalaburagi	489
Hubballi-Dharwad	763
Project Management and Technical Assistance for Sector Development	130
Total	1809

Govt. Order No. UDD 244 PRJ 2013, dated 7.11.2013. The share of the World Bank is 66% (Rs.1209 crore). The details of the estimated cost of the project is as under Two studies viz., (i) Social & Environmental Assessment and (ii) Communication & Stakeholder Intermediation Strategy have been completed.

The above projects are proposed to be implemented on 'Performance Based Management Contract (PBMC)'.

- a) Design & Implementation Period – 4 years
- b) Operation & Management Period – 8 years

Bids received from the prequalified bidders for "Operator Services" for Kalburgi, Belagavi and Hubballi-Dharwad have been opened in e-portal on 6<sup>th</sup>, 7<sup>th</sup> and 8<sup>th</sup> October 2015 respectively and the bids are under evaluation.

### **Implementation of Water Supply and Under Ground Drainage in 16 ULBs**

#### **Background**

Government of Karnataka, Vide Government Order No.UDD 14 PRJ 2012, Bengaluru, dated: 20-11-2012, has accorded sanction for implementing water supply and UGD in 16 towns at an estimated cost of Rs. 205.00 crore.

Towns include where no investment has been made either under Externally Aided Projects or under the action plans of KUWS&DB in 2010-2011 & 2011-12.

#### **Period**

Implementation of the project in all the towns to be completed in 3 years.

#### **Funding Pattern**

Project funding is through 50% borrowing from domestic market & 50% through Government Grant.

#### **Repayment**

Repayment of borrowing would be through securitization of SFC devolution / Beneficiary Contribution / General Revenues of ULBs.

#### **Implementation Structure:**

Implementation structure is in line of Externally Aided Projects viz., constitution of Empowered Committee, Project Monitoring Unit., Project Implementation Unit, Third Party Inspection, etc., for implementation of the project.

#### **Project Status:**

16 towns have been divided into 3 packages.3 Consultancy firms have been appointed by following KTPP act. The



Contract Agreement is signed by all consultants. The selected consultancy firms are as follows:

1. M/s Voyants Solutions Pvt. Ltd.,  
Package – I  
(6 towns viz. Gajendragad, Naregal, Mundargi, Bankapur, Alnavar & Mulki)
2. M/s CDM Smith India Private Limited  
Package – II  
(5 towns viz. Kampli, Tekkalakote, Kottur, Kamalapura & Molakalmur)
3. M/s Tata Consulting Engineers Limited  
Package – III  
(5 towns viz. Mahalingapura, Teredal, Mudagal, Kudachi & Shiralkoppa)

#### **Present Status:**

The Final DPRs for Water Supply of (1) Kottur (2) Kamalapura(3) Kampli (4) Kudachi (5) Mulki (6) Tekkalakote (7) Mundargi (8) Shiralkoppa (9) Teredal (10) Mudagal & (11) Mahalingapura have been submitted to the Chief Engineer, NKUSIP for according Technical sanction. The Chief Engineer has technically sanctioned the approval of Final DPRs for Water Supply of (1) Kottur(2) Kampli(3) Kamalapura(4) Mulki(5) Mundargi(6) Tekkalakote(7) Mudgal(8) Mahalingapur(9)Kudachi& (10) Teredal.

Further, in the 2nd Empowered committee meeting held on 16.07.2015 under the chairmanship of Additional Chief Secretary, Government of Karnataka, the Managing Director, KUWS&DB expressed that out of the 16 towns, KUWSDB has already taken up the work in 9 towns, & out of these, in 6 towns works have started/on-going & DPRs have been finalized for 3 towns .

The Committee felt that, for the purpose of synergy and co-ordination, KUWSDB can take up distribution network in all the 16 towns.

Hence, The Empowered Committee has resolved to transfer the 16 town project along with the appointed Design and construction Supervision Consultant, and the allocation made in the budget towards the project to

KUWS&DB, in order to avoid duplication of works. The same has been forwarded to the Government for issuance of a Government Order.

### **6.9 Financing Urban Development**

The Urban Local Bodies require the financial resources for the following activities:

- i) Provision of municipal services
- ii) Operation and Maintenance of assets (O&M)
- iii) Infrastructure Development
- iv) Debt Servicing

The ULBs in general are characterized by low municipal receipts leading to low municipal expenditure and low level of municipal services. This can be explained by low elasticity and buoyancy of local taxes, poor tax administration and lack of financial autonomy for local governments.

The resource base of the Urban Local Bodies is composed of the following sources.

- (1) Own revenue (tax and non-tax)
- (2) Government grants
- (3) User charges
- (4) External assistance (loans)

#### **Devolution Framework**

Under Article 243Y of the constitution, the State Finance commission is expected to:

- undertake a review of the finances of municipalities.
- estimate the future financial requirements of municipalities.
- design a package of:
  - a) taxes, duties, tolls and fees that may be assigned to municipalities and shared between the state and municipalities, and
  - b) grant-in-aid that may be extended to municipalities out of the consolidated fund of the state.
- suggest measures for strengthening the financing of municipalities.

The state's devolution of revenue grants thus takes place through the institution of the SFC. The framework of devolution suggested by the SFCs demarcated the amount of state resources to be made available to the local governments and applied a percentage share on that amount for devolution to rural and urban local bodies. According to the Government Order of April 12, 2006, based on the recommendations of the II SFC, the share of ULBs in the State's NLGRR\* is to be increased from 6% in 2005-06 to 8% in 2009-10. Government chose to adopt the principle of NLNRR\* instead of NLGRR recommended by II SFC.

### Government Grants

An analysis of the revenue sources of ULBs carried out by III SFC shows that over 60 percent of their revenues comes from government grants. The dependency ratio of City Corporations and City Municipal Councils is less than 50% compared to Town Municipal Councils and Town Panchayats where it is more than 50%.

An important recommendation of SFC pertains to earmarking of funds for what is known as Global Protection and Global Provision. Global Protection includes committed expenditure on payment of salaries and pension contribution to municipal employees, shortages in repayment of loans and power sector dues. Global provision includes items such as shortfalls in the ULB share for water supply and sewerage projects, shortfall in externally aided projects, settlement of arrears of cess and provision for incentivisation of funds.

An assessment of the devolution process indicates that there are delays in

implementation of the recommendations of SFC leading to accumulation of undeveloped amounts to ULBs. The undeveloped amount for 2007-08 stood at Rs.525 crores. Secondly, the State's policy of intervention to protect the interests of ULBs by payment of municipal dues through SFC devolutions may be well intentioned but it could act as a disincentive to improving their own revenues. It is suggested that an Urban Finance Framework be developed in a manner that ensures consistent support in the form of grants and at the same time link it to the performance of ULBs.

### 6.9.1 Municipal Finance and ULBs in Karnataka:

#### Directorate of Municipal Administration (DMA): Role & Responsibilities:

- Nodal Agency for regulating day to day governance of 218 ULBs including Corporations in the State.
- Supervising administration in Corporations & ULBs as mandated in Corporations Act Municipal Acts and its interpretation.
- Facilitating implementation and monitoring of schemes/ programmes of State and Central Government.
- Formulating service rules and conditions for corporations municipal employees, recruitment of staff and officers.
- Regulating service delivery in Corporations & ULBs.

The Directorate of Municipal Administration is the Nodal Agency to monitor the Administrative, Developmental and Financial Activities of the Corporations & ULBs (218 Nos.) coming under its jurisdiction. The details of Corporations & ULBs in the State are as shown below.

**Table 6.29: Number of ULBs in Karnataka**

Category of ULB	No.s
City corporations	10
City Municipal Councils	56
Town Municipal Councils	92
Town Panchayats	55
Notified Area Committees	05
Total	218

**Table: 6.30: Budget for the year 2015-16**

Scheme	Allocation
State Finance Commission Grants (GOK)	3068.64
Nagarottana Yojane	614.53
a. 100 Crs Scheme- 10CCs	398.00
b. CMSMTDP Phase II	355.07
c. Kalaburagi Cabinet	100.00
SJSRY/NULM (GOI & GOK) (75:25)	58.67
RAY (GOI, GOK & ULBs) (80:10:10)	127.86
NULM – State Scheme	25.00
Gruha Bhagya Scheme for Pourakarmikas	50.00
14th FC- General Basic Grant (GOI)	388.75
Grand Total	5186.52

Note: Budget excluding BBMP

**Table: 6.31: Budget for Nagarothan Yojane in Karnataka for the year 2015-16, (Rs. in crore)**

Scheme	Govt. Grant	Loan
Nagarottana Yojane		
Rs. 100 Crore Nagarothana Phase-2 project for 7 City Corporations	0.00	180.00
Rs. 100 Crore Nagarothana Phase-3 project for 10 City Corporations	298.00	0.00
Special Grants for Mysuru, Kalburgi, Tumakuru, Belagavi and Hubballi-Dharwad City Corporations	100.00	0.00
CMSMTDP Nagarothana Phase-2 project for 211 Urban Local Bodies	355.07	250.00
Kalaburagi Cabinet approved Nagarothana project for 11 ULBs of Hyderabad Karnataka region	100.00	0.00
Total	853.07	430.00

**Progress:**

- Rs.100 crore Nagarothana phase-2 project: Rs.430.09 crore expenditure is incurred up to September 2015 as against the released amount of Rs.469.00 crore. City Corporations have completed 1223 works as against the approved works of 1415.
- Rs. 100 crore Nagarothana phase-3 project: Rs.22.71 crore expenditure is incurred up to September 2015 as against the released amount of Rs.185.00 crore. City Corporations have completed 30 works as against the approved works of 1565.
- Mysuru, Tumakuru and Kalburgi City Corporation special grant: Rs.43.96 crore expenditure is incurred upto September 2015 as against the released amount of Rs.91.64 crore. City Corporations have completed 59 works as against the approved works of 235.

**Urban Infrastructure Development Scheme for Small and Medium Towns (UIDSSMT)**

Under Centrally Sponsored UIDSSMT (mission period) scheme, out of the 38 projects sanctioned for the State, 28 projects are completed. The central government has released an amount of Rs.534.97 crore for these projects till 31.3.2014. The State Government has released an amount of Rs.65.62 crore. An amount of Rs.10.61 crore has been spent during the year and Rs.532.76lakhs has been released by the Government during 2015-16. The 2<sup>nd</sup> ACA for the 3 projects of Mulbagalu, Vijayapura water supply and Soundatti-UGD, could not be claimed from the GoI, as there is a delay in implementation of the projects. The revised estimate cost of the Soundatti UGD project is four times the approved cost and it was decided in the 18<sup>th</sup> Empowered Committee held on 3.12.2015 that this scheme may be dropped. Now, the State Government has to bear this expenditure. The progress details of the projects are given below

Table 6.32: Progress under UIDSSMT

ULB Name	Project	Cost approved by SLSC	Releases to SLNA (GoI+GoK+ULB)	Releases to implementing Agencies (GOI+GOK)	Expenditure – Dec.2015 (Rs. in lakhs)		Completion status
					Physical (%)	Financial	
Birur (dovetailed with Kadur - Rs.3669.76lakhs)	Water Supply	1339.00	1339.01	1205.11	100%	4522.52	Completed (Aug.2014)
Siddapura	Water Supply	524.90	524.90	472.40	100%	648.18	Completed
Hirekerur	Water Supply	1617.00	1617.00	1455.30	100%	1669.03	Completed(2012)
Davanagere	Water Supply	355.80	355.80	320.23	100%	371.82	Completed(Dec.2013)
Davanagere	Sewerage	336.00	452.90	191.68	100%	681.86	Completed(March 2015)
Davanagere	SWD & Drains	5060.30	5060.30	3415.70	100%	4058.68	Foreclosed. Rs.1265.18 lakhs recovered from this project by GoI
Davanagere	Roads	3128.40	3128.40	2815.56	100%	3239.58	Completed
Pandavapura	Sewerage	602.09	602.04	541.88	70%	656.11	By March 2017
Srirangapatna	Sewerage	522.18	483.01	469.96	100%	1014.18	Completed(Feb. 2014)
Nanjangud	Sewerage	974.58	974.57	877.11	60%	1558.36	By Dec. 2016
Malavalli	Sewerage	730.41	730.40	657.36	100%	1390.65	Completed(March 2015)
Channapatna	Sewerage	1311.00	1189.90	1179.91	70%	812.39	By March 2017
Hubballi-Dharwad	Water Supply	990.21	990.20	891.19	97%	1213.51	Commissioned
Hubballi-Dharwad	Roads	414.00	413.99	371.82	100%	680.00	Completed (2011)
Ramanagara	Roads & Drains	1741.00	1740.97	1558.56	100%	1709.88	Completed(2012)
Ramanagara	Storm water drains	1460.00	1354.20	1171.28	86%	1213.19	By Jan. 2016
Shikaripura	Sewerage	1317.00	1317.02	1185.30	74%	1423.52	
Holenarsipura	Roads & Drains	2024.00	1959.18	1821.60	100%	1900.32	Completed (Dec.2014)
Holenarsipura	Sewerage	303.00	303.01	272.12	100%	696.29	Completed(March 2015)

Table 6.32: Progress under UIDSSMT

ULB Name	Project	Cost approved by SLSC	Releases to SLNA (GoI+GoK+ULB)	Releases to implementing Agencies (GOI+GOK)	Expenditure – Dec.2015 (Rs. in lakhs)		Completion status
					Physical (%)	Financial	
Holenarsipura	Water Supply	89.79	89.80	80.79	100%	112.49	Completed (2009)
Holenarsipura	Storm water drains	800.00	800.00	718.50	100%	880.31	Completed(2012)
Basavana Bagewadi	Sewerage	844.00	844.00	755.55	100%	921.17	Completed (2014)
Yargol (Kolar-Bangarpet-Malur) combined WSS	Water Supply	7992.00	7352.31	7177.80	80%	6654.72	By March 2017
Mulbagalu	Water Supply	1894.76	852.64	852.64	10%	311.70	By Dec. 2016
Kerur	Water Supply	1173.23	1172.90	1055.90	100%	1554.91	Completed (Jan.2013)
Soundatti	Sewerage	867.84	477.31	390.54	20%	171.74	Approval to RE awaited
Mundgod	Water Supply	376.58	376.58	338.92	100%	448.87	Completed(2012)
Bijapura	Water Supply	6277.57	6099.82	5649.81	100%	8210.82	Completed(2012)
Chikkodi	Water Supply	2039.91	1948.07	1835.92	100%	2701.75	Completed (May 2014)
Hunagunda-Ilkal-Kustagi (combined WSS)	Water Supply	5821.20	5577.45	5239.08	100%	6717.07	Completed
Mulki	Roads	213.98	213.97	192.57	100%	212.97	Completed (2010)
Gajendragad-Naregal (combined WSS)	Water Supply	3632.44	3552.18	3269.20	60%	2577.78	By May 2017
Vijayapura	Water Supply	1109.62	553.09	499.33	100%	1029.81	Completed(March 2015)
Shirahatti-Mulagunda (combined WSS)	Water Supply	2595.58	2564.51	2336.02	100%	3110.18	Commissioned (October 2014)
Shiggaon-Savanur-Bankapura (combined WSS)	Water Supply	3975.70	3814.26	3578.12	58%	4055.55	Commissioned
Harihara	Roads & SWD	2422.00	2230.00	2179.80	94%	2369.39	By Jan. 2016
Chennagiri	Roads & Drains	620.71	620.70	558.63	100%	621.65	Completed (2011)
Konnur	Roads & Drains	750.79	750.79	675.72	100%	747.47	Completed (20.3.2015)
Total		68248.57	64298.33	58258.91		72870.42	

**Table 6.33: Details of UGD Sanctioned under UIDSSMT, (Rs. in lakhs)**

Name of towns /cities	Name of Component	Approved cost sanctioned by SLSC	Releases made to SLNA			Releases to Implementing Agencies	Expenditure upto Dec. 2015.
			Gol Share	GoK Share	Total Amount Released to SLNA (Gol+GoK)		
2	3	4	5	6	7	8	
Hukkeri	Water Supply	2,301.73	920.70	115.08	1035.77	1035.78	995.24
Chikkodi	Water Supply	3,303.85	1321.54	165.19	1486.73	743.37	307.08
Bannur	Water Supply	1,736.12	694.45	86.80	781.25	390.62	1.94
Bantwal	Water Supply	4,204.35	1681.74	210.21	1891.95	1891.95	909.00
Ramdurga	Water Supply	3,471.30	1388.52	173.56	1562.08	1562.08	2467.44
Gurmitkal	Sewerage	1,842.75	737.10	92.13	829.23	829.23	688.06
Sadalga	Water Supply	2,457.77	983.11	122.89	1106.00	553.00	88.97
Sedam	Water Supply	2,464.19	985.67	123.21	1108.88	554.45	131.88
Doddaballapura	Water Supply	3,315.45	1326.18	165.77	1491.95	745.97	99.87
Srirangapatna	Water Supply	2,071.09	828.43	103.55	931.98	931.98	537.14
Birur	Sewerage	2,131.82	852.73	106.59	959.32	959.32	700.28
Sankeshwar	Water Supply	3,765.86	1506.34	188.29	1694.63	1694.63	1213.84
Yellapura	Water Supply	963.48	385.39	48.17	433.56	116.06	7.81
Thirthahalli	Water Supply	829.81	331.92	41.49	373.41	99.96	0.08
Sadalga	Sewerage	2406.05	962.42	120.30	1082.72	289.84	0.03
Tumkur	Water Supply	19898.00	7959.20	994.90	8954.10	2397.01	18.61
Kundapura	Sewerage	4736.79	1894.72	236.84	2131.56	570.62	200.04
Mundagod	Water Supply	1223.79	489.52	61.19	550.71	147.43	9.40
Muddebihal	Sewerage	3781.86	1512.74	189.09	1701.83	455.58	0.00
Kanakapura	Road	6,171.00	2468.40	308.55	2776.95		0.00
Ramdurga	Road	3,765.37	1506.15	188.27	1694.42		0.00
		76,842.43	30736.97	3842.07	34579.04	15968.88	8376.71

The extra expenditure under the scheme is met out from the IEBR fund of KUWS&DB.

### UIDSSMT – TRANSITION PHASE

Under the transition phase of UIDSSMT, 14 water supply, 5-UGD and 2-Roads & Drains projects totaling Rs.768.42 crore has been sanctioned by Government of India during 2013-14. The water supply and UGD projects are being implemented by KUWS&DB whereas the Roads & Drains projects are implemented by concerned ULBs. The central government has released its share of grants of Rs.307.36 crore to the state. The state government has released Rs.148.79 crore in 2013-14, Rs.52.72 crore in 2014-15 and Rs.144.25 crore in 2015-16, the total releases being Rs.345.76 crore. An amount of

Rs.50.99 crore has been spent during the year. The total cumulative expenditure is Rs.83.76 crore.

Out of 21 projects, 16 projects are been started by KUWS & DB. The remaining 5 projects are under tender process. For the 21 projects approved under transition phase, the Central Government has reduced its share from 80% to 50% of the project cost. Due to this, there is an additional burden of Rs.230.52 crore on State/ULB. Discussions are going on in FD regarding State bearing the addition cost of Rs.230.52 crore.

The cumulative expenditure upto December 2015 is Rs.83.76 crore. 16 projects are in progress and the remaining 5 are under tender process. The details of projects sanctioned are given in table 6.33.

**Table 6.34: SFC Untied- Programme Highlights**

Allocation:	Rs.812.56 crore for 2015-16 (Excluding BBMP)
Target ULBs	218 urban local bodies
Priority sectors	(a) compulsory allocation for spill-over works (b) 24.10% for SC/ST welfare (c) 7.25% for urban poor (d) 50% of balance grants for water supply, markets, modern toilets internal roads, cremation grounds and ULB loan repayment (e) 50% of balance grants for ULB share to central schemes, computer & internet facility and viability gap- funding
Works selection	Through Council Resolution and Action Plan approved by Deputy Commissioner of the District
Mode of execution:	Through open Tenders as per KPPP
Monitoring mechanism:	Third party inspection agency to inspect and certify the works
Fund release	In four installments from Government every year through Treasury Network Management Center (online transfer)

**Table 6.35: SFC Untied State Finance Commission Grants: Untied Grants, (Rs. in crore)**

Year	Allocation	Releases	Expenditure
2009-10	846.47	712.66	529.1
2010-11	685.42	601.19	462.75
2011-12	752.53	712.5	490.32
2012-13	783.15	468.65	403.25
2013-14	782.64	591.52	239.17
2014-15	811.47	202.87	4.13
Total	4661.68	3289.39	2128.72

Note: Excluding BBMP

**Table 6.36: 14<sup>th</sup> Finance Commission Grants (Centrally Sponsored Scheme) Programme Highlights.**

Allocation:	Rs.4685.51 crore (including BBMP)
Implementation period	2015-16 to 2019-20
Target ULBs	218 urban local bodies
Priority sectors	SWM (min.25%), Water supply (max. 20%), UGD (max.20%), SWD (max. 25%), Streetlights (min.10% - max.15%), Municipal buildings (max.5%) and Parks &Afforestation (min.5% - max.10%)
Works selection	Through Council Resolution and Action Plan approval by Deputy Commissioner.
Mode of execution:	Through open Tenders as per KPPP
Monitoring mechanism:	Third party inspection agency to inspect and certify the works
Fund release	In two installments from Government every year through Treasury Network Management Center (online transfer).

### 6.9.2 Tax Revenue:

Municipalities are empowered to levy taxes on i) buildings or lands or both (property tax), ii) advertisements, iii) toll on vehicles other than those taxed under Karnataka Motor Vehicles Taxation Act, 1957, and iv) water rate on water supplied by the Municipalities. Property tax is the major source of tax revenue for ULBs, an average of 53% of own revenues. The ARV system which was in vogue in the state has been replaced by the Capital Value System. The new system is more rational and has come to be accepted by all municipalities. It is, however, necessary to take measures to improve tax administration in terms of coverage of properties (a good percentage of properties escape taxation) and collection efficiency. At the end of March 2009, arrears to the tune of Rs.160 crores of property tax was outstanding, (excluding Bengaluru) the average collection percentage being 52. The performance of different classes of ULBs in tax collection.

The exemption granted to certain categories such as educational and charitable institutions needs to be reviewed to ensure that the exemptions are genuine. Properties belonging to State or Central government are exempted wherever they are not used for residential or commercial purposes. There is

no reason why government properties should be exempted from taxation. At present, a number of cesses or charges for other services are clubbed with property taxes. It stands to reason that the property tax is delinked from other levies which should be based on their own merit. Advertisement tax is a good source of revenue in larger cities but has not been exploited adequately.

### Pricing of Services – Tariff Policy:

A basic principle of local finance is, wherever possible, charge. Local taxes should be viewed as a form of benefit tax or user charge for services provided at the local level. In this premise, it is now being argued that services such as water supply, sanitation and solid waste management should be priced on the basis of the cost of provision. The aim is not just recovering the cost but to ensure that underpricing does not lead to over consumption. At the same time, it is important to remember that it is the State's responsibility to provide the minimum level of basic services for all sections of the population irrespective of their status and affordability. It must be borne in mind that traditionally property tax has been regarded as a general purpose tax to take care of the civic services to be provided by the municipalities.



There is, no doubt, a need for rationalization of tariff on services like water supply, sewerage and public transport considering the enormous increase in the capital and O&M costs of providing them. It is desirable to set up a Regulatory Authority for municipal services such as water supply, sewerage and public transport. Its functions will include determination of tariff from time to time based on rational criteria and giving due consideration to the principle of equity and such other regulatory matters as government may decide. Government's policy should be based on the principle of full cost recovery and compensating the service provider where the weaker sections are to be subsidized. To the extent possible, price adjustments could be made through a system of cross-subsidy. Shortfalls, if any should be made good by the Government through budgetary provision. There can also be a case where Government desires to consciously promote a cause such as public transport with a view to curb use of private transport as a part of urban transport policy. Here again, Government should compensate the losses to the Transport Corporation, if any, on account of a deliberate pricing policy. Correspondingly, it should be possible to adopt a suitable parking policy in cities to mobilize revenues by levy parking charges.

### **6.9.3 Funding Capital Expenditure:**

Capital expenditure is usually met through budget provision and institutional finance. Institutions such as HUDCO and multilateral agencies like ADB and World Bank have been extending financial assistance to ULBs and other urban development authorities to build infrastructure and housing. Alternative sources of financing that can be tapped are: Land as a resource Land is the most productive asset owned by Municipalities and UDAs. They can increase their revenues through:

- a) Betterment levies, impact charges, development charges etc.
- b) Transfer of Development Rights (TDR). In Bengaluru, TDR has been used to acquire land for the purpose of road widening;

c) Parking fee can be a very good source of revenue in cities where the number of vehicles on the streets is increasing.

d) Levy of a fee on tapping of ground water.

Access to capital markets: Cities like Bengaluru, Hyderabad, Ahmedabad etc. have raised funds through municipal bonds. It is essential to enhance credit worthiness of municipalities to raise funds from capital market. Multilateral institutions like the World Bank, ADB and JBIC provide long term debt with comfortable terms of repayment. Karnataka has been availing funds from this source during the last 10-12 years. Public-Private Partnership is being increasingly advocated for infrastructure development in recent years. Karnataka Government has issued policy guidelines on PPPs. Negotiating and operating PPPs require a professional approach and as such ULBs and urban authorities should equip themselves adequately for the implementation of PPP ventures. Private sector participation in delivery of municipal services is seen as contributing to efficiency and cost effectiveness. There are different options for private sector operations such as service contract, management contract, lease, concession and BOT/ BOO. Options must be exercised carefully depending on the nature of the project and expected outcomes. There is a view that business must be made to participate in the process of creating new social assets in the city as social wealth is created over generations and its exploitation for private profit without participation in its creation and upkeep is not fair. A system can be devised whereby businesses are given exemptions or incentives when they create assets such as housing and infrastructure.

### **6.9.4 Specific Challenges and the Future Outlook of the Department:**

#### **Department's objectives:**

To guide, control and supervise the affairs of the Urban Local Bodies in the State. The Urban Local Bodies have to provide basic services to the citizens. The Department guides the Urban Local Bodies in carrying out

**Table 6.37: approved 200 ULBs for Up-gradation of Local Bodies Based on 2011 census data**

Existing Category of ULBs	To be Upgraded as	No. of ULBs proposed
CMC	CC	3
TMC	CMC	15
TP	TMC	18
GP	TP	164
	Total	200

the duties like, construction of roads, bridges and beautification of traffic islands, maintenance of parks and play grounds, solid waste management and rain water harvesting etc., To provide required training to the personnel of the Urban Local Bodies.

To provide solutions to the service problems of the employees working in the Urban Local Bodies to bring up their morale and commitment in discharging their duties most effectively.

To have effective monitoring system over ULBs, the Directorate of Municipal Administration will be upgraded as Commissionerate of Urban Development Department. For this an expert committee is constituted and based on its recommendations, suitable will be taken. It is under progress.

The Urban Local Bodies have a vital role in the State's socio economic transformation. Most of the ULBs are severely stressed in terms of infrastructure and effective service delivery. The major challenges of the ULBs are indicated below.

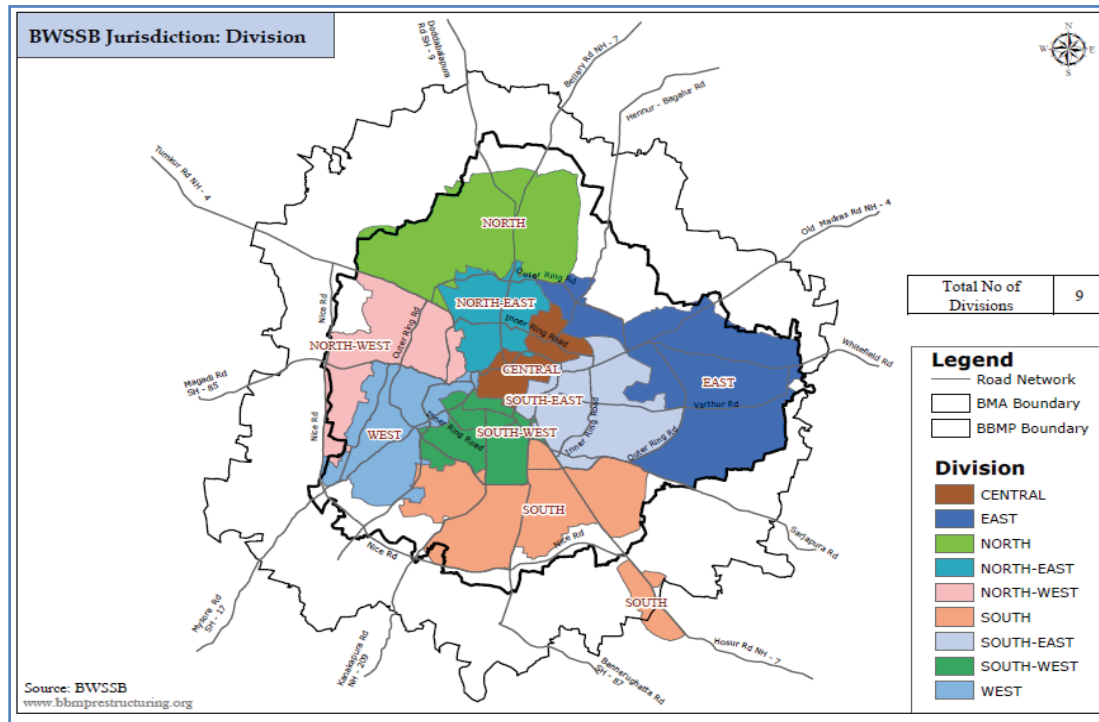
#### **Urban Challenges**

- Present Urban Population – 2.36 crore. The increase in the growth of urban population is 4% over the last decade (0.60 crore).
- Migration from Rural to Urban Areas.
- Growing population widens urban infrastructure deficit - Water Supply, UGD, Solid Waste Management, Roads and Power.
- Improving, Monitoring and Delivery of Public Services.
- Addressing Regional Imbalances.

#### **6.10 Bengaluru Water Supply and Sewerage Board (BWSSB):**

Bengaluru Water Supply and Sewerage Board is an autonomous body formed by the State legislature under Bengaluru Water supply and Sewerage Board Act on 10-09-1964 for Water Supply & Sewage disposal. It is one of the first Water supply & Sanitation Utilities in India with jurisdiction of entire Bruhath Bengaluru Mahanagara Palike Area of 800 Sqkms, (Bengaluru Core area of 245 Sqkm, 8 Urban Local Bodies of 330 Sqkm ( 7 City Municipal Corporation and 1 Town Municipal Corporation and 110 Villages of 225 Sq kms.) It has the following mandates: adequate water supply to meet demand; creation of sewerage network & safe disposal of sewage; Preparation, implementation of plans & schemes for augmenting water supply & safe disposal of sewage; Levy and collection of water charges on 'no loss no profit basis' for sustainability of the system.

Since its inception in the year 1964, BWSSB has executed several water supply and sewage schemes for the city, including the prestigious Cauvery Water Supply Scheme (CWSS) Stages - I, II, III & Stage IV Phase - I, Phase - II and sewerage system improvement projects concentrating on sewage collection, conveyance and treatment works. The existing sewerage system covers an area of 265 km<sup>2</sup> of core area of the city, in which three major Sewage Treatment Plants (STP) are constructed at Vrishabhavathi, K&C and Hebbal Valleys (major and minor). The sewerage system for newly added areas mainly the erstwhile CMC's is nearing completion.



### Overview of Water Supply and Sewerage System:

Bengaluru, the capital city of Karnataka is the third largest city and the fifth largest metropolitan area in India and is one of the fastest growing metropolitan cities. It is a centre for education, IT & BT industries, sophisticated high tech health care and many MNC industries which are attracting people to the city. As per Census 2011, the population of Bengaluru city was about 8.5 million. The Bengaluru Water Supply and Sewerage Board (BWSSB) is responsible for providing water supply to BBMP area of 800 sq. km.

Government of Karnataka allocated 19 TMC of water from Cauvery River for the water supply requirements of Bengaluru City. In the year 2012, with the commissioning of the CWSS Stage IV, Phase II, the allocated water from Cauvery River has been exhausted. At present BWSSB is supplying treated Cauvery Water to Bengaluru City under the Cauvery Water Supply Scheme (CWSS) Stage I, II, III & Stage IV Phase I & II with total installed capacity of 1310 MLD. This quantity of water provided to the core areas of BBMP including the erstwhile 7 CMC's and 1 TMC area covering total area of 575 sq.km but

excluding 110 village areas of BBMP covering 225 sq.km. In order to provide water supply to the newly added 110 villages which are part of BBMP, BWSSB is finding it difficult to meet the water requirements even after implementation of CWSS Stage IV, Phase II scheme.

Subsequently, the Urban Development Department, Govt. of Karnataka (GoK) allocated an additional 10 TMC (775 MLD) of Cauvery Water for Bengaluru city. It is now necessary to formulate the CWSS Stage V scheme for Bengaluru City and Detailed Project Report (DPR) has been prepared for getting the financial assistance from funding agencies, such as JICA (Japan International Co-operation Agency). Considering the technical aspects and water demand it is proposed to take up the Stage V Scheme in two Phases i.e., Phase I of 500 MLD (6.45 TMC) capacity and Phase II of 275 MLD (3.55 TMC) capacity.

### Existing Water Supply System Scenario

Till the year 1896, unfiltered water was supplied to Bengaluru city in the Kalyani system from a number of tanks such as Dharmambudhi, Sampangi, Ulsoor, Sankey

etc., supplemented by local wells and stepped ponds. The supply was inadequate from these tanks, hence, Arkavathi river was identified as the first large reliable source in the year 1884 and filtered water supply was started in the year 1896. Due to the continuous expansion of the city and the rapid growth of population, it became necessary to find and develop new sources. Cauvery River was identified for water supply and allocation of water from Cauvery river was done by Government of Karnataka (GoK). Since 1974, the Cauvery source has been developed in stages for water supply. This chapter discusses the schemes of river Arkavathi and River Cauvery which are the present sources of water.

To supply filtered water to Bengaluru City, Arkava thi source was identified in the year 1884. A reservoir was created at Hessarghatta about 18 kms to the North West of the city. An open masonry duct, 7 km long conveyed 29.5 Mld of raw water from source to Tarabanahalli and Soladevanahalli. From Tarabanahalli 7 Mld of water is supplied to Military. From Soladevanahalli 22.5 Mld water was pumped to city at a head of 125 m through, two 375 mm CI rising mains to Combined Jewel Filters (CJF), Malleshwaram where the water was treated. Treated water was first supplied after completing treatment plants at CJF on 7th August 1896.

Modification took place at Hessarghatta source by replacing masonry duct by 1050 mm diameter RCC Hume Pipe with a carrying capacity of about 36 Mld. One more rising main of 375 mm diameter was laid from Soladevanahalli. These three pipelines can carry 22.5 Mld water under normal conditions, out of which 13.5 Mld was supplied to the city and the balance water was supplied to enroute industries. Due to failure of monsoon, there is scarcity of water at source, only about 4 mld of water available was supplied to Military and Industries enroute in Peenya layout. This water is supplied as raw water because the treatment plant at CJF is not functioning and the receiving units such as HMT, Peenya layout and Defence establishments are having their own treatment facilities to treat this raw water.

However, no water is being drawn at present from this source.

### **Outcomes and Challenges**

The BWSSB future outlook covers several issues like:

1. The availability of dependable resources
2. Sustainable Water Quality and Quantity
3. Effective Wastewater collection, transmission and treatment for safe disposal
4. Water reuse for multipurpose usages with different modes and strategies
5. Water related disasters.

In order to tackle the above issues BWSSB is making efforts towards

1. Effective water demand management
2. Water loss reduction programme
3. Water Conservation programme
4. Rain Water Harnessing from Urban Catchment
5. Effective Public outreach programme to implement the above.

The challenges faced by BWSSB mainly being, supply management with fresh water resources, engineering solutions to fetch water from far off places, financial resource. Apart from these challenges following are also to be addressed immediately:

1. Condition of water/wastewater infrastructure
2. Lack of public appreciation for the value of water
3. Funding for capital improvement projects
4. Water scarcity/supply
5. Replacing a retiring workforce
6. Customer/community relations
7. Recovering costs for service/investment
8. Government regulations
9. Emergency planning and response
10. Energy usage/cost
11. Climate change
12. Utility security

### **Vision document up to 2050:**

In order to develop an effective road map BWSSB has envisioned a vision document with strategic Master plan to address the future outlook and challenges.

Outcome of this study will include a holistic and integrated evaluation of all available and current water resources, including recycled water, and identification of alternatives and strategies, which can be further developed as future water resources. It will result into a vision document which will have identified potential Water Supply and Sewerage Schemes along with their implementation framework that will serve as a guidance document for BWSSB. It can then later identify and select individual projects that may be considered for implementation based on assessment of needs, its feasibility and priority. The vision document will also include broad cost estimates and time frame for implementation of the preferred strategy and option, as well as suggested and recommended phasing and staged implementation of the preferred option with a breakdown of investments into Long Term, Medium Term and Short Term timeframes with relevant finances and other resources required.

### **Achievements during 2015-16**

#### **Rainwater harvesting:**

Rain water and ground water are important components of the hydrological cycle. At an average rainfall of 750mm per year the total available rain water will be 33TMC in 1250 sq.km. area of Greater Bengaluru. The Board can utilize 5 to 10 TMC of rain water that falls in and around the city by utilising the benefits of the complete remodelled storm water drains by BBMP, ensuring collection of all the sewage in the sewerage network so that all the sewage is taken to the treatment plants. The rain water collected in shafts, galleries and lakes through the storm water drain network will help in revival of the depleted groundwater level. About 30% of the treated effluent from the sewage treatment plants is led to the Lakes for dilution with rain water. Water that percolates into ground from these lakes increases the ground water level in

vadose and phreatic zones. For studying the feasibility a consultancy has been entrusted and by the end of 2016 the DPR will be ready.

### **Financial Position of the Board**

The major source of Revenue is from Water user Charges collected from the consumers. In addition to this, the Board generates revenue from other sources like Sanitary charges, prorata charges, borewell charges and bulk water supply to areas of Kanakapura Town and Tataguni gramapanchayat. The Board is executing some major capital intensive works like Cauvery Water Supply Scheme Stage IV Phase II, Greater Bengaluru Water Supply and Karnataka Municipal Reforms Works with the assistance of Japanese International Cooperation Agency (JICA) and World Bank. The capital source of funds for this project is from JICA, Govt. of Karnataka, World Bank and Beneficiaries of this project. Some of the major heads of expenditures of the Board are power charges payable to BESCO and CHESCO, maintenance of bore wells in the city, and debt servicing of the loans borrowed towards projects executed by the Board in addition to committed expenditure like Establishment charges and Operation and Maintenance charges of the assets of the Board.

#### **1. Revenue and Expenditure Position**

- a. The monthly Water Revenue Demand is about Rs.90.00 Crore during FY 2015-16
- b. The monthly Water Revenue Collection is about Rs.80.00 Crore during FY 2015-16 and the expected Annual Revenue from all sources is Rs.1228.21 Crore.
- c. The monthly Revenue Expenditure is Rs. 138.75 Crore towards all expenditures including repayment of Government Loan Principal and Interest components and the expected Annual Expenditure is Rs.1665.07 Crore.
- d. The Revenue gap is Rs.36.00 Cr per month and the Annual Revenue gap is Rs.436.00 Cr

- e. The gap is due to increase in power tariff, increase in maintenance costs and other administration costs.

## 2. Loan Position

The total loan sanctioned by Government of Karnataka for various projects including CWSS IV Stage, Phase I & CWSS Stage IV Phase II stands at Rs.3272.95 crore as at the end of 31st March 2014 (audited by AG). The total Outstanding Loans as at the end of 31st March 2015 is Rs.3597.36 Crore. The total interest payable on these loans is Rs.2085.72 Crore as at the end of 31st March 2015. The outstanding loans borrowed from institutions like LIC and KUIDFC is to the extent of Rs.155.87 Crore at the end of 31st March 2015.

3. Due to financial constraints and accumulated deficit coupled with subsidized water being supplied to the economically vulnerable sections of the society, which is a major strain on the finances, the Board could not discharge the loan liability of the Government. The existing tariff is able to recover only O&M cost. Unless tariff recovers the cost of

debt from the general public, the Board will not be in a position to repay the loan, as BWSSB is not receiving any budgetary support from GoK.

4. BWSSB is also supplying water through public taps. No revenue is generated out of Public Taps. The Board has not received the water dues to the extent of Rs.207.64 crores out of which Rs.8.00 core is due from BDA and Rs.154.00 Crores is due from BBMP on account of public taps. In spite of efforts the revenue dues have not been realized from BDA and BBMP.
5. Further, the Board is entrusted with maintenance of bore well's in the city. The bore well's hitherto maintained by BBMP/ CMC's are now handed over to BWSSB. The total Power Charges for pumping water to the city including energisation of these bore wells works out to Rs.394.97 Crore per annum which consumes half of the Revenue Income of the Board.
6. The present revenue of the Board is insufficient to meet the debt servicing. However the Board is discharging all institutional debts out of Board revenue itself.

**Table 6.38: Income and Expenditure Statement**

Sl. No	Details	2013-14 (Rs. in Lakh)	2014-15 (Rs. in Lakh)
	Income		
a	Water Revenue including Meter Hire	59199.2	81103.9
b	Other Income	14906.1	6711.6
	TOTAL	74105.2	87815.5
	Expenditure		
a	Establishment	15282.2	16303.9
b	Power Charges	35650.0	39497.7
c	Repairs and Maintenance	9544.0	10509.5
d	Cost of General Administration	8653.6	7933.1
e	Depreciation	16330.6	16612.7
f	Write off	0.0	0.0
g	Interest Payment on Loans	29985.3	30890.0
h	Provisions	77.1	73.6
	TOTAL	115522.7	121820.4
	SURPLUS / DEFICIT	-41417.4	-34004.9
	Previous Year Adjustments Credit / Debit Balance	0.0	0.0
	NET SURPLUS / DEFICIT	-41417.4	-34004.9

\*\*\*\*\*



## AGRICULTURE AND ALLIED ACTIVITIES

# 7

### 7.1 Agriculture:

The Department of Agriculture implements various schemes and programmes of the Central and State Government for the overall welfare of the farming community and ensures timely supply of essential inputs i.e. seeds, fertilizers, plant protection chemicals, farm equipments along with effective transfer of technology through demonstrations to achieve maximum output from the available natural resources viz. soil, water etc. This in turn leads to improvement in the economic status of the farming community and food grain needs of the people. Though the contribution of agricultural sector in the Gross State Domestic Product is declining, agriculture continues to be the largest employment generating activity.

#### Vision:

Ensure food security and make agriculture a sustainable and economically viable vocation with emphasis on small farmers.

#### Mission:

1. To achieve the targeted growth rate of 4.5% in the agriculture sector by enhancing agriculture production and productivity.
2. To evolve and implement various State and Central Schemes for improving the income level and livelihood of small, marginal and women farmers.
3. To devise and implement specific schemes for drought prone areas.
4. To offer quality educational opportunities, promote research, generate appropriate technologies to address the relevant challenges faced by agriculture and allied areas.

5. To improve human resource including all stakeholders to promote sustainable agriculture development.
6. To effectively conserve, develop and utilize natural resources in a sustainable manner.
7. To ensure proper disaster and risk management in agriculture including climate resilient agriculture.

#### RFD 2014-15 Results:

Department of Agriculture has secured the total composite score of 85.05 and stands in the good category. 2015-16 RFD targets have been uploaded on August 14<sup>th</sup> 2015 in the RFMS website.

#### Budgets for Agriculture:

For the year 2015-16, an amount of Rs.2881.41 crores has been earmarked for Agriculture Department, out of which Rs.2560.10 crores has been provided under Plan scheme and Rs. 321.31 crores for Non-Plan schemes. In view of comprehensive development of agriculture, thrust has been given on department flagship programmes viz., "Krishi Bhagya", "Bhoochetana", Organic farming, Farm mechanization, Custom Hiring Centers and Micro-irrigation. During the current year emphasis is given more on soil health management and distribution of Soil health cards to farmers. The budget allocation for the department from 2013-14 to 2015-16 are as follows.

**Table 7.1: The budget allocation for Agricultural department from 2013-14 to 2015-16, (Rs in lakh)**

Year	2013-14	2014-15	2015-16
Allocation	169255.73	214425.05	288141.00



## 7.2 Monsoon in 2015:

### Pre-monsoon Rainfall:

Timely pre-monsoon rainfall in parts of Mysore, Chamarajanagar, Mandya, Chitradurga, Tumakuru, Hassan and Chikkamagaluru districts helped to commence land preparation and sowing of early kharif crops in these districts.

### Southwest monsoon:

Southwest monsoon commenced in parts of South Interior and Coastal parts on 5<sup>th</sup> June, its' normal date of onset and covered all parts of the State by 13<sup>th</sup> June. Deficit rainfall during June in major parts of North Interior Karnataka (7 out of 12 districts) hampered normal sowing progress of rain fed kharif sowings.

Rainfall during July was deficit/scanty in all the districts except Udupi. The percentage of deficit Rainfall in: South Interior Karnataka was -47%, North Interior Karnataka was -71%, Malnad region -53% and Coastal region was -34%. This situation resulted in severe setback in the sowing of rain fed kharif crops in major parts of the State and the early sown rainfed crops suffered severe moisture stress.

During August also, rainfall continued to be deficit in North Interior Karnataka (except Ballari, Koppal and Gadag districts), Malnad (except Hassan district) and Coastal region. This situation further affected the prospects of kharif crops in Northern districts of the State. Monsoon remained weak in many parts of North Interior Karnataka and Coastal region during September. Cumulative rainfall from 1<sup>st</sup> June to 30<sup>th</sup> September was 652.5 mm as against a normal of 838.7 mm, thus deficit by 22%.

### Northeast monsoon:

Northeast monsoon rain commenced from 28<sup>th</sup> October in the State, but only south interior, coastal and malnad regions received widespread rainfall. Rainfall during October was deficit by 32% in the state and in North Interior Karnataka it was deficit by 48%.

During November the State witnessed a very unusual rainfall scenario, the South Interior districts received 2 to 5 fold excess rainfall and the North Interior districts received  $\frac{1}{4}$  of the normal rainfall, thus deficit by 76%. Excess rainfall during November caused damage to Ragi crop at harvesting stage in some parts of southern districts. Rainfall continued to be deficit/scanty in North Interior districts during December also (-74%). Cumulative rainfall in the State from 1<sup>st</sup> October to 31<sup>st</sup> December was 178 mm as against a normal of 187.50 mm (-5%), but it was deficit by 55% in North Interior Karnataka districts which account for 90% of the total area under rabi crops in the State; this affected the prospects of rabi crops.

The low water storage in majority of the reservoirs and minor irrigation tanks along with depleted ground water Table on account of deficit/scanty rainfall is likely to affect the summer crop production programme.

District-wise and Month-wise rainfall received during pre-monsoon, southwest monsoon and northeast monsoon during the year 2015 is given in **Appendix- 7.1 (a), 7.1(b) and 7.1(c) respectively.**

Overall, the State witnessed another drought situation during 2015 due to erratic and poor rains in major parts of North Interior regions and some parts of South Interior region. Failure of rains and long dry spell during July, August and first fortnight of September affected kharif crops in an area of about 33.10 lakh hectares. Rabi crops have also suffered due to deficit/scanty rains and long dry spell during October, November and December in the Northern districts in an area of about 24.61 lakh hectares.

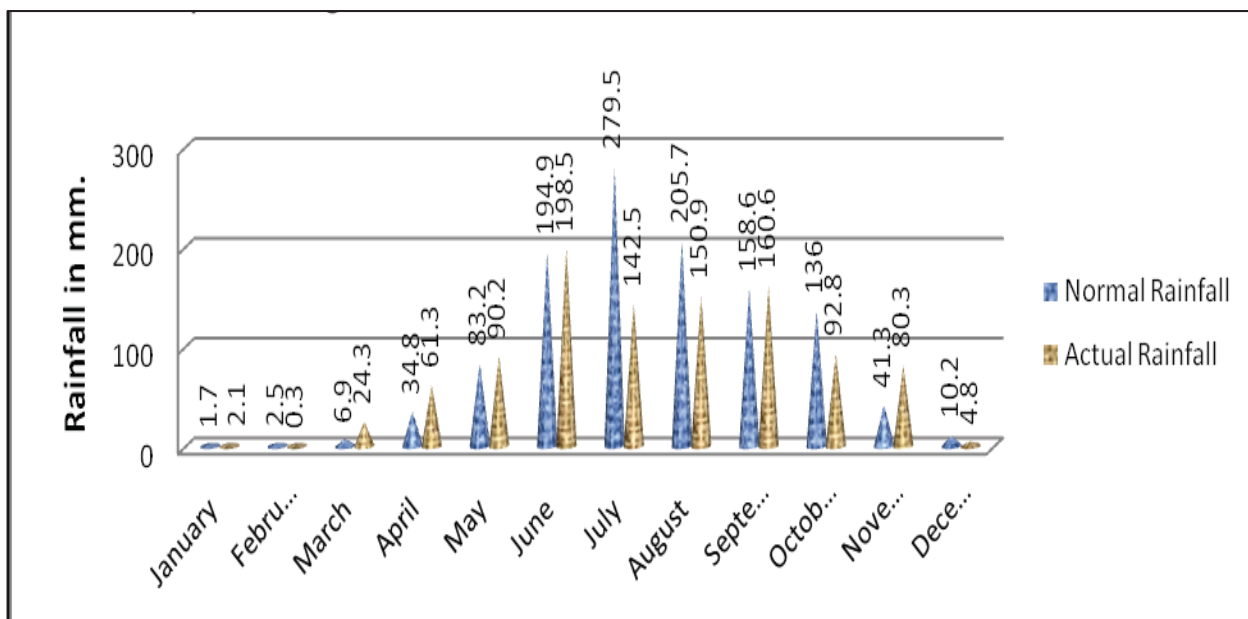
## 7.3 Agricultural Production- Performance and Prospects:

Advanced estimates of agricultural production are worked out considering the progress in area coverage under various kharif and Rabi crops, likely coverage during summer, and likely loss in yield on account of failure of rains and long dry spell in major parts of the State.

The estimates indicate production of 97.50 lakh tonnes Cereals and 12.50 lakh tonnes of Pulses against the target of 124 and 16 lakh tonnes respectively. Oilseeds production is estimated to be 9.60 lakh tonnes against the target of 15 lakh tonnes. Production of cotton

is likely to be 14.04 lakh bales against the target of 18.54 lakh bales. The short fall in production can be attributed to decline in area coverage and drought situation in major parts of the State. Area and Production of Major crops are given in **Table 7.2**.

**Figure 7.1 Monthwise Normal & Actual Rainfall of the State in 2016**



**Table 7.2: Area and Production of Major Crops in the State, (Area in lakh hectares, Production in lakh tonnes)**

Crop / Group	2015-16 *		2014-15**		Average growth over previous year (%)	
	Area	Prod.	Area	Prod.	Area	Prod.
Cereals	45.58	97.50	48.73	112.32	-0.06	-0.13
Pulses	29.92	12.50	23.16	13.90	0.29	-0.10
Total food grains	75.50	110.00	71.89	126.22	0.05	-0.13
Oilseeds	13.54	9.60	13.73	9.59	-0.01	0.00
Cotton #	6.13	14.04	8.75	23.11	-0.30	-0.39
Sugarcane>	6.34	405.00	6.91	437.76	-0.08	-0.07
Tobacco	0.99	0.82	0.94	0.67	0.05	0.22

# Lakh bales of 170 Kg. lint, \*\* Final Estimates of DE&S, \* Revised Advance Estimates of Agriculture Dept. >

**Table 7.3: Area coverage: kharif, rabi and summer, (Lakh hectares)**

Crop/Groups	Kharif			Rabi			Summer *		
	Normal	2015-16	2014-15	Normal	2015-16	2014-15	Normal	2015-16	2014-15
Cereals	34.25	30.34	32.50	14.32	13.08	13.10	2.94	2.15	3.13
Pulses	13.58	13.31	12.20	11.85	16.48	10.93	0.15	0.13	0.07
Total food grains	47.83	43.65	44.70	26.17	29.56	24.03	3.09	2.28	3.20
Oilseeds	10.26	8.46	9.59	2.88	3.17	2.27	2.33	1.91	1.87
Cotton	5.33	5.79	8.08	0.77	0.33	0.65	0.01	0.01	0.02
Sugarcane	4.70	5.24	5.91	0.45	0.60	0.69	0.47	0.50	0.31
Tobacco	1.08	0.85	0.94	0.03	0.14	-	-	-	-
Aggregate	69.20	64.00	69.22	30.30	33.80	27.64	5.90	4.70	5.40

Source: Agriculture Department.\*Anticipated

Sugarcane production for harvest area of 4.80 lakh hectares in 2014-15 and probable of 4.50 lakh hectares in 2015-16. The projected production of principal crops in Karnataka for Kharif, Rabi and Summer crops of 2015-16 are given in **Appendix 7.2. Table 7.3** and **Appendix 7.3** provide details of area coverage under kharif, rabi and summer crops during the current and previous year.

Index numbers of area, production and yield of agricultural commodities over the years are given in **Appendix 7.4**. Area under principal crops in Karnataka over the years is given in **Appendix 7.5**. Details of production of principal crops in Karnataka over the years are given in **Appendix 7.6**. Average yield of selected crops in India and Karnataka are given in **Appendix 7.7**. Area irrigated by various sources in the State is shown in **Appendix 7.8**.

## 7.4 Land Utilization and Operational Holdings:

### 7.4.1 Land Utilization:

As per the land utilization statistics of 2013-14, out of the total 190.50 lakh hectares geographical area of the State, the net cropped area was 99.23 lakh hectares accounting to 52% of the total geographical area. Gross cropped area was 122.67 lakh hectares including 23.44 lakh hectares area sown more than once, this works out to 124% cropping intensity. Around 16% of the area was covered under forests, 8% area was under non-agricultural uses, 4% land was barren and uncultivable land and 2% land was cultivable waste.

Permanent pastures, grazing land and miscellaneous tree crops constituted 6% of the total geographical area. About 12% of the total area falls under current fallow and other fallow land. The decrease in current fallow over the previous year was on account of better rainfall distribution. The details of Land Utilization situation are presented in **Appendix 7.9(a) and 7.9(b)**.

**Table 7.4: Classification of Total Geographical Area-2013-14**

Sl. No.	Classification	Area (lakh ha.)
	Total Geographical Area	190.50
1	Forest	30.73
	Not available for cultivation:	
2	a) Land put to non-agri. uses	14.44
3	b) Barren & uncultivable land	7.87
4	Cultivable waste	4.11
	Uncultivated land excluding fallow land:	
5	a) Permanent pastures & other grazing land	9.06
6	b) Misc. Tree crops, Groves	2.81
	Fallow Land	
7	a) Current fallow	17.00
8	b) Other fallow land	5.25
9	Net Area Sown	99.23
	<b>Total (Gross) Cropped Area</b>	<b>122.67</b>
	Area sown more than once	23.44
	<b>Cropping Intensity - %</b>	<b>124</b>

Source: Annual Season & Crop Reports of DE&S, Bangalore.

#### 7.4.2 Agriculture Land Holdings:

2010-11 Agriculture Census shows 78.32 lakh farm holdings operating 121.61 lakh hectares. Small and marginal holdings account for 76.44% of total holdings and operate only 40.05% of the total operated area, while semi-medium, medium and large holdings account for 23.57% of the total holdings and their operational land holding is 59.95% out of the total operational area. A detail of Agricultural Land Holdings in Karnataka is given in **Table 7.5**.

#### 7.5. Cropping Pattern:

Karnataka State falls in Zone X (Southern Plateau and Hilly region) and Zone XII (West Coast Plains and Ghats region) as per the Agro-climatic Regional Planning of Planning Commission. The State is divided into 10

Agro-climatic zones on the basis of distribution and percentage of Rain fall, soil quality, height from the sea and on the basis of major crops.

On account of this varied agro-climatic features almost all cereals, pulses, oilseeds and commercial crops are cultivated in different parts of the State. Farmers in Karnataka are very innovative and take lead in diversification as per the market trends. The average area under agricultural crops grown in three seasons viz. Kharif (69.20 lakh ha.), Rabi (30.30 lakh ha.) & summer (5.90 lakh ha.) is 105.40 lakh hectares. Cereals, Pulses, Oilseeds, Cotton, Sugarcane and Tobacco account for 49%, 24%, 15%, 6%, 5% and 1% respectively of the total agricultural cropped area.

**Table 7.5 Land Holdings in Karnataka**

<b>I .Number of Operational Holdings ('000)</b>				
<b>Size Class</b>	<b>1995-96</b>	<b>2000-01</b>	<b>2005-06</b>	<b>2010-11</b>
Marginal (Below 1 ha.)	2610	3252	3655	3849
Small (1 to 2 ha.)	1707	1909	2014	2138
Semi Medium (2 to 4 ha.)	1204	1259	1278	1267
Medium (4 to 10 ha.)	594	569	555	511
Large (Above 10 ha.)	106	90	79	68
<b>Total</b>	<b>6221</b>	<b>7079</b>	<b>7581</b>	<b>7832</b>
<b>II .Area of Operational Holdings ('000 hectares)</b>				
Marginal	1248	1492	1651	1851
Small	2480	2742	2876	3020
Semi Medium	3298	3429	3468	3393
Medium	3490	3317	3206	2904
Large	1593	1327	1184	994
<b>Total</b>	<b>12109</b>	<b>12307</b>	<b>12385</b>	<b>12161</b>
<b>III. Average Size of Operational Holdings (hectares)</b>				
Marginal	0.48	0.46	0.45	0.48
Small	1.45	1.44	1.43	1.41
Semi Medium	2.74	2.72	2.71	2.68
Medium	5.88	5.83	5.78	5.69
Large	15.02	14.74	14.99	14.71
<b>Total</b>	<b>1.95</b>	<b>1.74</b>	<b>1.63</b>	<b>1.55</b>

Source: Karnataka Agricultural Census Reports and Agriculture Census 2010-11

Maize, Tur, Bengal gram, Cotton and Soya bean are witnessing higher trend in recent years, whereas crops like Sunflower, Jowar, Ragi etc. are witnessing declining trend. The details on cropping pattern are given in **Appendix - 7.10**.

### **7.6 Distribution of Inputs:**

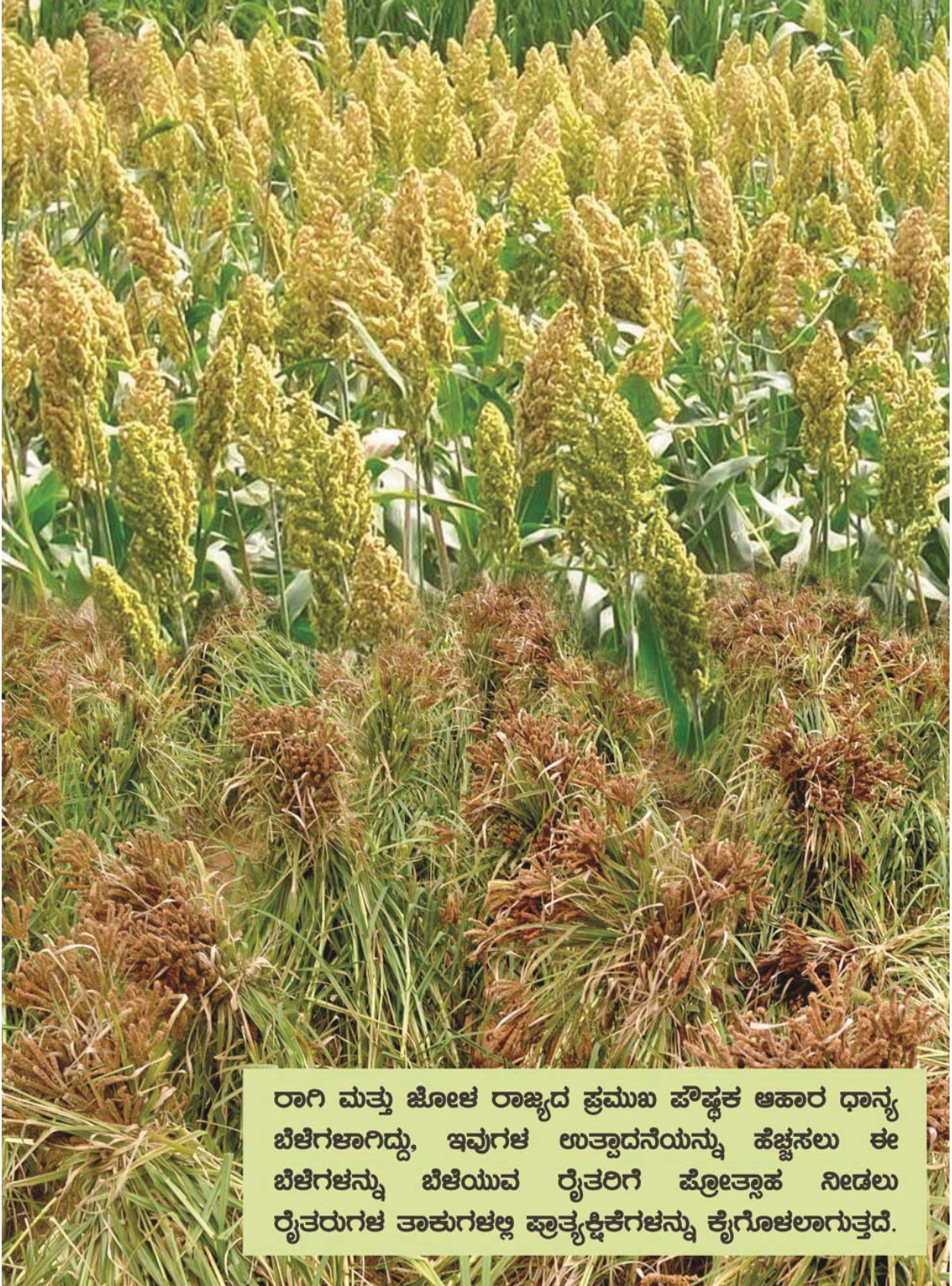
#### **a) Distribution of Fertilizers:**

For Kharif 2015, the State Government has projected a requirement of 22.70 lakh tonnes of different grades of fertilizers consisting DAP 4.00 lakh tonnes, MOP 2.50 lakh tonnes, NPK 6.50 lakh tonnes, Urea 8.50 lakh tonnes and SSP 1.20 lakh tonnes. At the end of Kharif season 22.45 Lakh tonnes of Fertilizer has been distributed consisting DAP 3.68 lakh tonnes, MOP 1.62 lakh tonnes, NPK 6.72 lakh

tonnes, Urea 8.62 lakh tonnes and others 1.81 lakh tonnes fertilizers has been utilized.

For Rabi 2015-16, the State Government has projected a requirement of 15 lakh tonnes of different fertilizers consisting of DAP 2.00 lakh tonnes, MOP 1.50 lakh tonnes, NPK 5.50 lakh tonnes, Urea 5.50 lakh tonnes and SSP 0.50 lakh tonnes. At the end of Rabi season (up to Dec. 2015), 6.60 lakh tonnes of fertilizer has been distributed and utilized consisting of DAP 0.60 lakh tonnes, MOP 0.34 lakh tonnes, NPK 2.02 lakh tonnes, Urea 3.44 lakh tonnes and SSP 0.52 lakh tonnes.

Trends in fertilizer consumption in terms of NPK nutrients are furnished in **Table 7.6** and **Appendix 7.11**.



ರಾಗಿ ಮತ್ತು ಜೋಳ ರಾಜ್ಯದ ಪ್ರಮುಖ ಪೌಷ್ಟಕ ಆಹಾರ ಧಾನ್ಯ ಬೆಳೆಗಳಾಗಿದ್ದು, ಇವುಗಳ ಉತ್ಪಾದನೆಯನ್ನು ಹೆಚ್ಚಿಸಲು ಈ ಬೆಳೆಗಳನ್ನು ಬೆಳೆಯುವ ರೈತರಿಗೆ ಪ್ರೋತ್ಸಾಹ ನೀಡಲು ರೈತರುಗಳ ತಾಕುಗಳಲ್ಲಿ ಪ್ರಾತ್ಯಕ್ಷಿಕೆಗಳನ್ನು ಕೈಗೊಳ್ಳಲಾಗುತ್ತದೆ.

**Table -7.6: Consumption of NPK during last three years**

Year	N	P	K	TOTAL
	(Tonnes)			
2012-13	891691	389638	249869	1531198
2013-14	963987	491283	301729	1756999
2014-15	1001708	498069	332320	1832097
2015-16(Achievement up to Dec'2015)	753061	380486	209207	1342754

**b) Buffer Stock of Fertilizer for Kharif 2015:**

To overcome the scarcity of fertilizers at critical period during the kharif season, the State Government has operated the buffer stocking of fertilizers. For kharif 2015, a sum of Rs. 3900/- crores loan has been extended from State Bank of Mysore to Karnataka State Co-operative Marketing Federation of Bangalore MARKFED has been instructed to stock required fertilizers at district and taluk levels. Under the scheme, it has been planned to stock different grades of fertilizers month wise. Federation has stocked DAP-20,063 Metric tonnes, MOP - 13,192 Metric tonnes, Complex - 39,031 Metric tonnes, Urea-74,514 Metric tonnes others- 1,689 Metric tonnes, total of 1,48,489 Metric tonnes of fertilizers has been stocked at the end of December 2015. This arrangement in turn helped to manage the fertilizer in demand situation smoothly in the State and there was no problem with respect to availability of fertilizers.

**7.6.2 Seeds Distribution:****a) Production and distribution of Seeds:**

As per the Seed Replacement Norms, Seed Replacement Rates fixed for different Agricultural Crops for 2015-16 is as follows:

1. Cereals : 33 to 38 percent
2. Pulses : 33 percent

3. Oilseeds : 33 to 89 percent
4. Cotton : 33 percent
5. All Hybrids : 100 percent

Production and supply of Breeder Seeds of different crops is being done by the State Agricultural Universities and Indian Council of Agricultural Research Institutes (ICAR). These organizations produce and supply Breeder Seeds required for the State based on the advance indents placed by the Department of Agriculture. The Seed Association of India is the Nodal agency for supply of breeder seeds to the private seed producing agencies. Certified Seed production and distribution in the State is being done by Karnataka State Seeds Corporation, National Seeds Corporation, Karnataka Co-operative Oilseed Growers Federation, State Agricultural Universities and number of private seed supplying agencies.

Seed producing and supplying agencies fix the procurement and selling rates of various seeds taking into account, procurement rates, production costs, certification, processing, packaging and other overhead charges.

Production and distribution of Certified: Quality seeds in the State from 2012-13 to 2015-16 are given in **Table-7.7**.

**Table 7.7: Production and distribution of Certified: Quality seeds, (Quantity in quintals)**

Particulars	2012-13	2013-14	2014-15	2015-16(Target)
Production	1023172	1055650	1071450	1165250
Distribution	1270340	1260990	1280720	1575320

### **b) Distribution of seeds at subsidized rates to Farmers:**

During Kharif 2015, it was programmed to distribute 12 crop seeds viz., Paddy, Ragi, Jowar, Maize, Bajra, Cowpea, Green gram, Black gram, Red gram, Groundnut, Sunflower, and Soybean crops at subsidised rates to farmers under State sectors Seeds Supply and other investments Scheme. Totally 4.36 lakh quintal seeds have been distributed and Rs. 7420.46 lakhs subsidy amount is utilized for this purpose. Totally 17.53 lakh farmers have been benefited.

During Rabi/Summer 2015-16, it was programmed to distribute seeds of 12 crop seeds under subsidy. Up to the end of Dec.-2015, totally 3.24 lakh quintals seeds have been distributed and Rs. 7722.51 lakhs subsidy amount is utilized for this purpose and 6.81 lakh farmers have been benefited.

### **7.6.3 Plant Protection**

#### **Objectives of the scheme:**

1. To provide necessary techniques and technology alongwith distribution of bio-pesticides which reduce environmental pollution, under subsidy to farmers to control insects, diseases and weeds of crops effectively. Bio-pesticides are distributed to the farmers at 50% subsidy.
2. Similarly, produce of the crops must be scientifically stored in order to reduce the wastage from rats, bandicoots, insects and diseases. To reduce the storage loses,

scientific storage bins are distributed to farmers under subsidy.

3. Pesticides are supplied to farmers under subsidy to control endemic and epidemic pests of important agricultural crops.
4. In order to protect the crops from seed and soil borne diseases and also to get higher yields, seed treatment campaigns are conducted.
5. To create awareness among farmers regarding the safe and judicious use of pesticides, training programmes were conducted with the available funds under this scheme.
6. The Composite Inspectors of seed, fertiliser and pesticides and Dealers are given training on the various input regulation act. Amount is also earmarked for meeting expenditure for drawl of act samples.

To create awareness among farmers regarding the safe and better use of pesticides, training programmes were conducted. Under this programme allocation, releases and expenditure details are given in table 7.8.

#### **Scope of the Scheme:**

1. Use of Bio pesticides and bio control agents by the farmers for eco-friendly measures to control outbreak of insect, pests and diseases.
2. Prevention of environmental pollution.
3. Reduction in loss of grains due to rodents, insects, diseases and moisture.
4. Availability of quality inputs to the farmers.
5. Effective management of crop pests.
6. Increase in yield of crops.



**Table 7.8: Expenditure Details of Plant Protection Scheme, (Rs. in lakhs)**

		2012-13	2013-14	2014-15	2015-16
Allocation/Releases		344.38	700.00	757.80	775.43
Expenditure		332.80	577.14	637.18	420.24*

\*upto end of December 2015.

**Table 7.9: Progress achieved under Farm Mechanization for the year 2015-16, (Physical in Numbers, Financial in Rs. in Lakhs)**

Scheme	Programme	Releases	Progress	
			Phy (No.)	Fin (Rs. in Lakhs)
Farm Mechanization – State Sector	14315.94	10795.49	50469	9661.38
RKVY	7401.50	1944.62	1142	1630.25
Total	21717.44	12740.11	51611	11292.63

\*end of Dec-2015.

**Table 7.10: Farm Mechanization Programme in Karnataka, (Rs. in Lakh)**

Scheme	2012-13	2013-14	2014-15
Farm Mechanization (All Schemes)	11871.74	26703.02	22209.79

#### 7.6.4 Agricultural implements - Farm Mechanization:

Mechanization of Farm Operations helps to reduce drudgery of farm operations, saves time, and improves efficiency and farm productivity. Farm Mechanization Programme is being implemented both under State and Central Sector. Under this scheme, agriculture inputs to help farmers from sowing to harvesting are distributed at subsidized rates. The general farmers are provided with a subsidy of 50%. About 90% subsidy or maximum Rs.1.00 lakh is provided to the farmers belonging to Schedule Caste/Schedule Tribe. The amount provided under Rashtriya Krishi Vikas Yojane is used as matching grants with the State Fund to provide the subsidy. The details of expenditure incurred during the last three years under Farm Mechanization programme are given in table 7.10.

#### A) Agro-Processing:

Department of Agriculture is implementing the Agro-Processing scheme under which various agro processing equipments are made

available to farmers, Self Help Groups and Farm Women at subsidized rates. This encourages value addition of the farm produce and increase the income of the beneficiary.

Under SCP and TSP agro processing units to SC/ST farmer groups, women SHG's and individual farmers will be provided with an assistance of 90% or maximum subsidy of Rs.1.00 lakh. To protect the agriculture produce/ food grains from rain, wind and other unnatural weather conditions and to maintain quality. The five layered 250 GSM-HDPE black colour tarpaulin with different sizes (8mx6m & 10mx10m) is made available to farmers at 50% subsidy. Under SCP and TSP tarpaulins are distributed to SC/ST farmers with an assistance of 90%.

Agricultural equipments like Multi crop threshers, Dal processors, Mini Rice Mill, Mini Oil Expeller, Ragi polishing machine, Ragi cleaning machine, Sugarcane crushing units, sugarcane juice making machine, flour mill, cattle feed machine, Chilly pounding machine, Vermicelli machine, Wheat polisher etc. are also being distributed at 50% subsidy under this scheme.

**Table 7.11: Progress achieved under Agro Processing for 2015-16**

Scheme	Programme	Releases	Progress	
			Phy(nos.)	Fin (in Rs. lakhs)
Agro-processing	2600.31	1950.23	69981	1549.42

End of dec-2015.

**Table 7.12: Details of allocation, releases and expenditure during 2014-15, Rs. in lakhs**

Agro-Processing	2014-15
Allocation	6000.00
Releases	6000.00
Expenditure	5082.96

**Table 7.13: Details of programme, releases and progress of Custom Hire and Service Centers**

Custom Hire Service Centers	Programme	Releases	Progress	
			Physical (No.)	Financial (Rs. in lakhs)
State	3225.00	3225.00	86	3141.71
RKVY	3637.50	3637.50	89	3235.78
Total	6862.50	6862.50	175	6377.49

**b) Custom Hire and Service Centers:  
Krishi Yantradhare-Farm Machinery  
Custom Hire and Service Centers:**

During 2014-15, in order to facilitate farmers to avail timely the farm machinery on custom hiring basis at the hobble level 175 Farm Machinery Custom Hiring Service Centers have been established through Charitable trusts/Non government Organizations via I) Sri Kshethra Dharmasthala Graminabhivridhi Samsthae, Dharmasthala, ii) Indian Society of Agribusiness Professionals, New Delhi, iii) Bijou District

**7.7: Programmes And Schemes Implemented By The State Government Centrally Sponsored Schemes:**

**7.7.1 National Food Security Mission (NFSM):**

National Food Security Mission, which was started during 11th Five Year Plan, has been continued for the 12th Five year plan also. During 12th Plan, In the State, it has been programmed to achieve higher production

Minority National Education Society, Bijou and iv) Gram Karana Sava Samsthae, Kalaburagi with an allocation of Rs.7000.00 lakhs and 95,760 farmers have been benefited so far.

It is proposed to establish 278 Farm Machinery Custom Hire and Service Centre (CHSC)-“Krishi Yantra Dhare centers” during 2015-16 with the budget allocation of 127.00 Crores. Out of 278 Krishi Yantra Dhare Kendra’s work order has been issued to establish 24 centers at Bidar.

and productivity of coarse cereals and commercial crops (Cotton & Sugarcane) in addition to rice and pulses for which NFSM-Rice, NFSM-Pulses, NFSM-Coarse Cereals and NFSM-Commercial crops schemes are being implemented in the State during 2015-16 also. For the year 2015-16, an amount of Rs.17287.491 lakhs has been provided.

**1. NFSM-Rice:** Under this scheme provision has been made for 100 hectare area cluster demonstrations on Rice production

technologies (Direct Seeded Rice, Line sowing, SRI Method etc.) and Cropping Systems, distribution of improved varieties/hybrid seeds, inputs for Integrated Nutrient and Pest Management, Agricultural machinery, Pump sets, Drip irrigation sets and pipes for carrying water, post harvest equipments under subsidy and organization of trainings.

**2. NFSM-Pulses:** Under this scheme provision has been made for 100 hectare area cluster demonstrations on improved production technologies and Cropping Systems, distribution of improved varieties seeds, inputs for Integrated Nutrient and Pest Management, Agricultural machinery, Pump sets, Drip irrigation sets and pipes for carrying water, post harvest equipments under subsidy and organization of trainings and farmer's tour to other states.

**3. Additional Rabi Pulses Production Programme:** Under this scheme provision has been made for distribution of improved varieties/hybrid seeds, inputs for Integrated Nutrient and Pest Management, Agricultural

machinery, Pump sets, Drip irrigation sets and pipes for carrying water under subsidy.

**4. NFSM-Coarse Cereals:** Under this scheme provision has been made for 100 hectare. Area demonstrations on improved production technologies (Varieties and Hybrids), Ridge Furrow Method of Sowing and Cropping system based demonstrations on inter cropping with pulses.

**5. NFSM-Commercial Crops:**

**Cotton:** Under this scheme provision has been made for Front Line Demonstrations on Integrated Crop Management (ICM) and Desi and ELS Cotton /ELS Cotton seed production, trials to promote High Density Planting System and Front Line Demonstrations on intercropping systems.

**Sugarcane:** Under this scheme provision has been made for demonstrations on intercropping and single bud chip technology with sugarcane, distribution of tissue culture plantlets and to organize a state level training.

**Table 7.14: NFSM Programme progress for the year 2015-16, (Rs. in lakhs)**

Sl. No.	Programme	Budget Allocated as per Annual Action plan*	Grants Released by GoI	Grants Released by GoK	Total Grants Available	Expenditure (committed) up to end of '2015
1	NFSM -Rice	1435.995	359.000	0.00	359.000	394.390
2	NFSM -Pulses	11509.496	2877.370	0.00	2877.370	4650.214
3	Additional Rabi Area Pulse Production Programme	1300.000	0.000	0.00	0.000	273.311
4	NFSM -Coarse Cereals	2876.000	719.000	0.00	719.000	1333.404
5	NFSM - Commercial Crop (Cotton& Sugarcane)	166.000	41.500	0.00	41.500	44.52
<b>Grand Total</b>		<b>17287.491</b>	<b>3996.87</b>	<b>0.00</b>	<b>3996.87</b>	<b>6695.839</b>

\* At 50:50 pattern between Centre and State Govt.

### 7.7.2 Rashtriya Krishi Vikas Yojana (RKVY):

"Rashtriya Krishi Vikas Yojana", Special Additional Central Assistance Scheme is being implemented from 2007-08 by Government of India order to reorient the Agriculture Development strategies for rejuvenation of agriculture to meet the needs/demands of farmers. It incentivizes the States to increase public investment in Agriculture and allied sectors and aims at achieving the goal of reducing the yield gaps in important crops and thus maximizes returns to the farmers.

Agriculture Department is nodal Department for Implementation of RKVY Schemes of Agriculture and Agri-allied Departments. For the year 2014-15, an amount of Rs.632.23 crore was released and funds were utilized for implementation of the schemes related to Agriculture, Horticulture, Animal Husbandry, Fisheries, Agricultural Marketing, Sericulture, University of Agricultural Sciences (Bangalore, Dharwad, Raichur) UAHS, Shivamogga, Bagalkote, Karnataka State Seeds Corporation and other Departments/Institution.

During 2015-16 an amount of Rs.1089.63 crores has been sanctioned in the 13<sup>th</sup> SLSC meeting for implementation of various schemes of RKVY as mentioned below. Up to

end of December 2015, Government of India has released an amount of Rs.161.42 crores as first installment under sharing pattern and the matching share of Rs.161.42 crores has been met by the state. Out of the total released amount of Rs.322.84 crores, an amount of Rs.252.85 crore has been utilized for various schemes up to December 2015.

An amount of Rs.115.61 crore has been earmarked to Agriculture Department for implementation of the following schemes in the year 2015-16 is given in **Table 7.15**.

### 7.7.3 National Mission of Oilseeds and Oil Palm:

NMOOP, a Centrally Sponsored Scheme for the development of Oilseeds and Oil Palm is continued from 2014-15 with an objective of increasing production and productivity of these crops and to attain sustainability in agriculture. The scheme is being implemented in all the 30 districts of the state. The programme is being implemented with 50% of Central and 50% of State share. Govt. of India has accorded the action plan approval for Rs.2916.78 lakhs with central share of Rs.1458.39 lakhs and State share of Rs.1458.39 lakhs for the year 2015-16.

Govt. of India also approved action plan for Rs.1029.53 lakhs for Rabi/Summer Additional Area Coverage under oilseeds for increasing oilseeds production.

**Table 7.15. Allocation and releases under RKVY for the Projects implemented by the Department of Agriculture for the year 2015-16, (Rs. in crores)**

Sl. No	Name of Project	Funds Approved	Revised allocation	Release till Dec. 2015	Progress till Dec. 2015
1	Karnataka Farm Mechanization Mission	126.14	70.79	19.44	8.27
2	Micro Irrigation	105.60	69.05	65.62	60.56
3	Bhoochetana	20.00	20.00	10.00	7.00
4	Bhoosamrudhi	25.00	18.00	18.00	8.00
5	Krishi Abhiyaana	3.00	2.55	2.55	1.61
	Total	279.74	180.39	115.61	85.44

**RKVY Releases and Expenditure of other departments:****Table 7.16: Department/Institution wise release and expenditure for the year 2015-16 under RKVY (Dec 2015 end) (Rs.in crores)**

Sl. No.	Department/ Institution	Funds Approved	Revised allocation	Total release	Progress Achieved
1	Agriculture	350.24	183.09	115.61	85.44
2	Horticulture	100.00	52.2	30.00	18.01
3	Animal Husbandry	165.00	86.13	42.00	39.99
4	Sericulture	25.00	13.05	8.00	7.99
5	Fisheries	10.00	5.22	3.20	0.91
6	Agricultural Marketing	236.06	123.22	65.00	65.00
7	UAS Bangalore	2.50	1.31	1.00	0.80
8	UAS Dharwad	4.00	2.09	1.00	0.95
9	UAS, Raichur	3.00	1.57	1.00	0.89
10	UAHS, Shivamogga	3.50	1.81	1.00	0.87
11	UHS, Bagalkote	2.50	1.31	1.00	1.00
12	KSSC	3.50	1.83	1.00	1.00
13	KSSOCA	0.04	0.04	0.04	0.00
14	KWC	150.00	78.3	42.00	22.00
15	KAPPEC	10.00	5.22	3.00	0.00
16	KCDC	24.29	12.68	8.00	8.00
	<b>Total</b>	<b>1089.63</b>	<b>569.07</b>	<b>322.84</b>	<b>252.85</b>

**Table 7.17: Target and Achievement under NMOOP, (Rs. in Lakhs)**

Sl. No.	Programme 2015-16	Target	Expenditure (Dec. 2015)
1	NMOOP	2916.78	1007.52
2	NMOOP -Rabi/Summer- (Additional Programme)	1029.53	638.14
	<b>Total</b>	<b>3946.31</b>	<b>1645.66</b>

**7.7.4 Soil Health Mission:**

Sustaining agricultural productivity depends on quality and availability of natural resources like soil and water. Agricultural growth can be sustained by promoting conservation and sustainable use of these scarce natural resources through appropriate location specific measures. The components of soils are mineral, organic matter, water and air, the proportions of which vary and together form a system for plant growth. Soils are studied and classified according to their use. Soil Testing is a part of the discipline of Fertilizer Use and Management.

In Karnataka 78, 32,189 farm holdings exist. At present, 29 SHC are catering to the needs of state farmers in respect of soil testing. On an average 1.30 to 1.35 lakh soil samples are analysed annually. Soil test values will remain varied for a period of three years. Hence, soil testing has to be done at least once in three years. Realizing this difficulty, it is proposed to implement the soil testing programme on a mission mode for two years in the form of Soil Health Mission with the objective of analyzing the samples from all the farm holdings and issue soil health cards. Karnataka State Department of Agriculture (KSDA) has prepared elaborate plan to issue soil health cards to all the farmers in the state in the next two years.

**Table 7.18: Progress of NMOOP Scheme, (Rs. in Lakhs)**

Sl. No.	Item/Component	Unit	Target		Progress(Dec.2015)	
			Phy	Fin	Phy	Fin
1	Purchase of Breeder seed	Qtls	5005	500.56	2756	311.97
2	Production of Certified Seeds	Qtls	15000	150.00	800	3.60
3	Distribution of Certified Seeds	Qtls	19166	230.00	4086	79.37
4	Block Demonstration	Ha	10736	681.00	2424	218.68
5	FFS Demonstration	Nos.	18	4.82	5	0.81
6	Farmers Training	Nos.	30	7.20	5	0.72
7	Mission Management expenses			29.00	0	0.00
8	Distribution of Gypsum/pyrites	Ha	12666	95.00	7986	59.89
9	Rhizobium/PSB distribution	Ha	13333	40.00	4002	12.00
10	Distribution of PP chemicals	Ha	30000	150.00	14700	73.50
11	Micronutrients Distribution	Ha	14000	70.00	5300	26.50
12	Nuclear Polyhedrosis Virus(NPV)	Ha	2000	10.00	200	1.00
13	Distribution of PP Equipment (Manual)	Nos.	16000	108.00	3923	31.38
14	Distribution of PP Equipment (Power operated)	Nos.	2500	80.00	702	35.10
15	Distribution of Agri Implements(Manual)	Nos.	15552	210.00	3606	82.00
16	Distribution of Agri Implements (Power operated)	Nos.	230	80.00	58	29.00
17	Sprinkler sets	Nos.	2257	221.20	700	42.00
18	Provision for flexi funds (Krishi Abhiyan Exposure visit)			250.00		0.00
<b>Total</b>				<b>2916.78</b>		<b>1007.52</b>

**Table 7.19: Allocation, releases and expenditure For Oilseeds Development Programmes, (Rs. in lakhs)**

Oilseeds Development programmes	2012-13 (ISOPOM)	2013-14 (ISOPOM)	2014-15 (NMOOP)
Allocation	4049.98	2867.28	2264.73
Releases	2999.46	2489.22	2181.12
Expenditure	2977.49	2385.33	1829.11

**Objectives:**

1. To issue soil health cards to all farmers of the Karnataka in a span of three years, so as to provide a basis to include nutrient deficiencies in fertilization practices.
2. To diagnose soil fertility related constraints with standardized procedures for sampling and analysis and design taluka/block level

fertilizer recommendations in targeted districts.

3. To develop crops specific nutrient management in the districts for enhancing nutrient use efficiency.
4. To promote soil test based balancing of nutrients to manage fertility related risks for higher production.
5. To conduct demonstrations with diversified crops to quantify benefits of improved

nutrient management practices in terms of increased crop yields and economic viability of farmers.

The sharing pattern for the implementation of this Scheme is 50:50 by State and Central Government. It is planned to issue soil health cards to all the 78, 32,189 farm holdings after collection and analysis of the soil in a phased manner within two years. The implementation of this scheme is being done by Department of Agriculture itself from December 2015.

#### **Expected Outcome:**

- It will promote balanced and judicious use of plant nutrients.
- Promotion of integrated nutrient system is expected to reduce the consumption of chemical fertilizers by 20%.
- The productivity of selected crops is expected to increase about 20%.
- The demand for organic sources of plant nutrient like bio-fertilizers, organic manure, vermi-compost, slow release nitrogenous fertilizer like Neem/sulphur coated urea will increase, which in turn improve the soil fertility as well nutrient use efficiency.

Up to the end of December 2015, 30,660 soil samples have been collected and 13,897 analyzed and 5,176 Soil Health Cards have been distributed.

#### **7.7.5 National Mission on Food Processing (NMFP):**

Ministry of Food Processing Industries (MoFPI), Government of India has launched a new centrally sponsored scheme (CSS) – National Mission on Food Processing (NMFP) during the 12<sup>th</sup> Five Year plan to be implemented through States. The proposed NMFP contemplates establishment of a National Mission as well as corresponding Missions in the State and District level. This scheme is proposed to be implemented as a new centrally sponsored scheme in the ratio 75:25. This Centrally sponsored scheme can be effectively used to manage some of the crisis in the field of agriculture like fall of price

due to glut in the market, severe wastages of some of the perishable agricultural produce, low economic returns due to severe interference of middlemen, unplanned crop production etc.

#### **7.7.6 National Mission for Sustainable Agriculture (NMSA):**

The Government of India, Ministry of Agriculture has formulated new scheme by name “National Mission for Sustainable Agriculture (NMSA)” from the financial year 2014-15 for enhancing agricultural productivity especially in rain fed areas. NMSA is one of the restructured schemes subsuming the four schemes namely National Mission on Micro Irrigation (NMMI), National project on Organic Farming (NPOF), Soil Health & Fertility (NPMSH&F) and Rainfed Area Development (RAD) to focus on climate change adoption in the areas of resource conservation, water use efficiency enhancement, soil health management, integrated farming system and mainstreaming rain fed technologies.

#### **Objectives:**

- To make agriculture more productive, sustainable, remunerative and climate resilient by promoting location specific Integrated/Composite Farming Systems;
- To conserve natural resources through appropriate soil and moisture conservation measures;
- To adopt comprehensive soil health management practices based on soil fertility maps, soil test based application of macro & micro nutrients, judicious use of fertilizers etc.;
- To optimize utilization of water resources through efficient water management to expand coverage for achieving ‘more crop per drop’.

#### **Mode of Implementation:**

##### **1. Rainfed Area Development (RAD):**

RAD scheme is tentatively proposed to be implemented in 24 Districts of the State (Arid, Semi Arid & Sub humid Districts) through District Joint Director of Agricultures and Taluka Asst. Directors of Agriculture by following Government of India Operational Guidelines for National Mission on

Sustainable Agriculture (NMSA) 2014 for Rainfed Area Development (RAD).

## 2. NMSA -On Farm Water Management (OFWM):

In order to promote efficient use of water in the State, Micro Irrigation programme is being implemented since the year 2003-04. Under this programme, drip and sprinkler irrigation systems are being distributed to the farmers on subsidy. Government of India is also providing funds for implementation of micro irrigation programme from the year 2006-07.

As per the GO F.No.11-42/2015-Hort. Dtd: 10th November, 2015 by Government of India, the subsidy sharing pattern has been revised (Table 7.20).

## 3. NMSA- Soil Health Management (SHM):

Under Soil Health Management the sub components are: i) Soil Health Cards, ii) Soil

Health Management and iii) Organic farming (PKVY)

### i) Soil Health Cards:

It requires long period to analyze the soil samples from all the farm holdings and issue soil health cards. Soil test values will remain varied for a period of three years. So, for at least 3 years once soil analysis should be done. Government of India has launched soil health card scheme under National Mission for sustainable Agriculture to issue soil health cards to all the farm holdings once in every 3 years. So State Government has proposed to implement the soil testing programme on a mission mode for two years in the form of Soil Health Mission with the objective of analyzing the samples from all the farm holdings and issue soil health cards. Sharing pattern for this programme is 50:50(Central: State).

**Table 7.20: Subsidy Sharing Pattern for Micro Irrigation Programme**

Category	GOI share (%)	GOK share (%)	Total Subsidy %
<b>DPAP/DDP</b>			
SF&MF	36	54	90
Other than SF&MF	27	63	90
<b>NON DPAP</b>			
SF&MF	27	63	90
Other than SF & MF	21	69	90

**Table 7.21: Details of On Farm Water Management, (Rs. Lakhs)**

Scheme	Allocation	Releases	Expenditure (Financial)	Physical Progress (Ha.)
1. PMKSY-NMSA- On Farm Water Management	10950.60	4868.92	2056.05	12000
2. RKVY- Micro Irrigation	6895.88	6895.88	6056.36	26521
3. RIDF- XXI	7500.00	0.00	0.00	0
TOTAL	25346.48	11764.80	8112.41	38521

Progress up to Dec.2015.

**Table 7.22: Allocation, releases and expenditure for Micro irrigation programme, (Rs. in lakhs)**

Micro Irrigation Programme	2012-13 (NMMI)	2013-14 (NMMI/ NMSA)	2014-15 (NMSA)
Allocation	16438.75	15249.00	8479.00
Releases	16438.75	15249.00	8479.00
Expenditure	11061.54	15313.64	5889.67*

\* Except RKVY funds



Year	Target	Allotted grants	Remarks
2015-16	5.55 lakh soil samples	Rs.1294.92 lakhs	The programme has been reduced to 2 years instead of 3years. The soil samples analyzed would be 8.33 lakhs instead of 5.55 lakhs

Up to end of December 2015, 30,660 soil samples have been collected and 13,897 analyzed and 5,176 Soil Health Cards have been distributed.

**Table 7.23: Details of Soil Health Management, (Rs. in lakhs)**

Sl. No.	Year	Particulars	Target (No.)	Allotted Grants	Expenditure (Dec.2015)
1	2015-16	Setting up of referral soil testing labs	2	150.00	75.00
2.	2015-16	Strengthening of soil testing labs	34	1020.00	185.00
		Total	36	1170.00	260.00

#### ii) Soil Health Management:

The components in this programme are setting up of new soil testing labs, strengthening of existing soil testing labs, setting up of new fertilizer Control labs, strengthening of existing fertilizer control

labs, promotion and distribution of micronutrients etc.,. Sanction has been granted to establish 2 referral soil testing labs and strengthening 34 soil testing labs for 2015-16. Sharing pattern for this programme is 50:50( Central: State)

#### iii) Organic farming(PKVY):

The State has submitted an action plan for Rs.38.90 crores to implement the new scheme of Government of India i.e., Paramparagat Krishi Vikas Yojana (PKVY) during the year 2015-16 on 50:50(Central: State) share basis.

villages/Sansad Adarsh Gram Yojana villages in the rain fed areas of districts where traditional agriculture is followed with minimal fertilizer usage as per the guidelines of PKVY.

The project will be implemented in all the districts & taluks of Karnataka in project areas of 50 acres (clusters) each. Clusters are selected adjacent to savayava bhagya

A total of 545 crops specific organic clusters at the rate of 3 clusters per taluk throughout the state as per Geographical Indications/major crops/demand based crops will be selected for each cluster

#### 4. Climate Change and Sustainable Agriculture: Monitoring, Modeling and Networking (CCSAMMN):

CCSAMMN will provide creation and bidirectional (land/farmers to research/scientific establishments and vice versa) dissemination of climate change related information and knowledge by way of piloting climate change adaptation, mitigation research, model projects in the domain of climate smart sustainable

management practices and integrated farming system suitable to local agro-climatic conditions. A consortium approach will be evolved with various stake holders including knowledge partners like State Agricultural Universities (SAUs), Krishi Vigyan Kendras (KVKs), Indian Council of Agricultural Research (ICAR) Institutes etc. by the State Government to provide single window service/knowledge provider system for the benefit of farming community.

**Table 7.24: Budget Provision made for the year 2015-16**

Year	No. of Districts	No. of Taluks	Total No. of Clusters	Budget allocation (Rs. Crores)			Budget Releases (Rs. Crores)		
				GoI Share	GoK Share	Total	GOI	GOK	Total
2015-16	30	174	545	19.45	19.45	38.90	14.59	14.59	Proposal has been submitted for release of Rs.29.18 crores, 1st installment for the year 2015-16

#### **7.7.7 Support to State Extension Programmes for Extension Reforms (ATMA Scheme):**

The 12th Plan Approach Paper identifies several challenges faced by the agricultural extension and also gives suggestions to deal with the same. Some of these include integrating Krishi Vigyan Kendra's (KVKs), problem solving skills and the feed-back they provide to State Agriculture Universities (SAUs) and National Agriculture Research System (NARS) with ATMA and to strengthen district plan schemes.

The aim of the Mission is capacity building and institution strengthening to promote mechanisation, make available of quality seeds, plant protection etc. and encourage the aggregation of Farmers into Interest Groups (FIGs) to form Farmer Producer Organizations (FPOs).

Use of interactive and innovative methods of information dissemination will be used and convergence brought under different programmes and schemes at village level through the institution of ATMA (Agriculture Technology Management Agency) and Block Technology Teams (BTTs).

#### **Scheme focuses on the following key extension reforms:**

- Encouraging multi-agency extension strategies involving Public/ Private Extension Service Providers.

- Ensuring an integrated, broad-based extension delivery mechanism consistent with farming system approach with a focus on bottom up planning process.
- Adopting group approach to extension in line with the identified needs and requirements of the farmers in the form of CIGs & FIGs and consolidate them as Farmers Producer Organizations.
- Facilitating convergence of farmer centric programmes in planning, execution and implementation.
- Addressing gender concerns by mobilizing farm women into groups and providing training to them.

In addition, the scheme provides innovative technology dissemination component in which the extension personnel can make use of hand held devices and Pico-projector for the benefit of farm information extension.

#### **7.7.8. Crop Insurance Scheme:**

##### **a) National Agricultural Insurance Scheme (NAIS):**

National Agricultural Insurance Scheme (NAIS) is being implemented in the State since Kharif 2000 to Kharif 2013 and continued during 2015-16.

The financial allocation for the year 2015-16 is Rs.9880.00 lakhs and expenditure is Rs.890.00 lakhs till end of December 2015.

**Table 7.25: Details of National Agricultural Insurance Scheme**

Season / Year	No. of farmers Enrolled (lakhs)	Premium collected (Rs. in lakhs)	Area covered (lakh Hectares)	Sum insured (Rs. in lakhs)	No. of farmers Benefitted (lakhs)	Claims settled (Rs. in lakhs)
Kharif-2011	4.92	1988.00	5.80	76821.86	0.66	3989.60
Rabi/Summer 2011-12	8.76	1560.78	21.73	113639.93	4.64	10001.00
TOTAL 2011-12	13.68	3548.78	27.53	190461.79	5.30	13990.60
Kharif-2012	4.21	1947.06	4.72	75068.42	1.82	12686.00
Rabi/Summer 2012-13	1.24	443.80	1.84	-	0.66	2911.39
TOTAL 2012-13	5.45	2390.86	4.72	75068.42	2.49	15855.73
Kharif-2013	2.36	1523.54	2.95	58192.47	0.22	1310.23
TOTAL 2013-14	2.36	1523.54	2.95	58192.47	0.22	1310.23

### **b. Weather Based Crop Insurance Scheme (WBCIS):**

This is an alternative scheme for NAIS framed by Government of India and was launched in the country during kharif 2007. The scheme compensates the insured farmers against the likelihood of financial loss on account of anticipated loss in crop yield resulting from incidence of adverse weather conditions and will cover the risk of weather parameters like rainfall, relative humidity, temperature, wind velocity etc., The scheme is compulsory for loanee farmers and voluntary for non-loanee farmers. All the payable claims shall be the responsibility of the Insurance Companies.

The scheme is continued during kharif 2014 covering 11 Annual Commercial and Horticulture crops viz., Cotton (I), Cotton (RF), Onion(I), Onion(RF), Chilly(I), Chilly(RF), Potato(I), Potato (RF), Grapes, Banana and Pomegranate in 464 reference unit areas (hoblis) of all the Districts except Udupi by 5 insurance companies (AIC of India Ltd., ICICI Lombard GIC Ltd., HDFC ERGO GIC Ltd., Cholamandalam MS GIC Ltd. and IFFCO Tokio GIC Ltd).

The actuarial premium rates are charged under the scheme, but capped at 12%. Farmers would pay concessional rates of

premium i.e.6%. The difference in the premium i.e.6% will be borne by State and Central Governments on 50: 50 basis. During Rabi 2014-15, 10 Horticulture crops viz., Potato (I), Onion (I), Chilly (I), Grapes, Mango, Sweet Orange, Pomegranate, Cashew, Tomato and Garlic were notified in 717 reference unit areas (hoblis) of 29 Districts. During 2015-16, action is taken to implement WBCIS for Mango and Grapes.

### **C. Modified National Agricultural Insurance Scheme (MNAIS):**

Government of India modified the present NAIS and implemented the MNAIS for the first time in the country during Rabi & Summer 2010-11. The modifications made by GOI are as follows;

1. Bringing unit of Insurance to Grama Panchayath level for major crops.
2. Indemnity level will be 80 & 90%.
3. Excluding 2 calamity years' data out of 7 years yield data for calculation of threshold yield.
4. Claim liability will be on insurance companies and Government will provide only premium subsidy.
5. Covering pre sowing and post harvest risk.

**Table 7.26: Details of Weather Based Crop Insurance Scheme**

Season/year	No. of farmers participated	Premium paid by farmers (Rs. in lakhs)	No. of Beneficiaries	Claims (Rs. in lakhs)
Kharif-2012	210125	1766.68	204783	4270.68
2012-13 Rabi	2063	40.65	1145	83.92
Total 2012-13	212188	1807.33	205928	4354.60
Kharif-2013	209405	1596.26	188888	3842.02
2013-14 Rabi	4170	63.48	2591	153.97
Total 2013-14	213575	1659.74	191479	3995.99
2014 Kharif	169015	5534.16	118827	5475.55
2014-15 Rabi	5746	293.39	5256	1028.58
Total 2014-15	174761	5827.55	124083	6504.13

**Table 7.27: Details of Modified National Agriculture Insurance Scheme**

Season/year	No. of farmers participated	Premium paid by farmers (Rs. in lakhs)	No. of Beneficiaries	Claims (Rs. in lakhs)
2010-11 Rabi& Summer	8743	20.40	2735	242.08
Total 2010-11	8743	20.40	2735	242.08
2011 Kharif	152571	1557.31	38941	1737.64
2011-12 Rabi& Summer	22994	86.34	17055	978.81
Total 2011-12	175565	1643.65	55996	2716.45
2012 Kharif	226736	2970.07	51383	5003.51
2012-13 Rabi& Summer	2084	30.82	154	5.02
Total 2012-13	228820	3000.92	51537	5008.31
2013 Kharif	162390	2747.30	8733	608.19
2013-14 Rabi& Summer	51135	422.44	15968	346.40
Total 2013-14	213525	3169.74	24701	954.59
2014 Kharif	908683	9036.34	316768	14711.61
2014-15 Rabi& Summer	31953	338.67	5962	541.82
Total 2014-15	940636	9375.01	322730	15253.43

During kharif 2014 NCIP-MNAIS is implemented in all Districts in Karnataka by 4 insurance company's viz., AIC of India Ltd., ICICI Lombard GIC Ltd., HDFC ERGO GIC Ltd., and IFFCO Tokio GIC Ltd. are participating.

25 crops were notified viz., Paddy(I), Paddy(RF), Maize(I), Maize(RF), Jowar (I), Jowar (RF), Ragi (I), Ragi (RF), Bajra (I), Bajra (RF), Navane (RF), Save (RF), Black gram (RF), Tur (I), Tur (RF), Green gram (RF), Horse gram (RF), Soyabean (I), Soyabean (RF), Sesamum (RF), Castor (RF), Sunflower (I), Sunflower

(RF), Groundnut (I) and Groundnut (RF). Taluk-wise major crops were notified at Grama Panchayath level and other crops were notified at Hobli level during kharif 2014. During Rabi & Summer 2014-15 this scheme is implemented in all the Districts except Bangalore (Rural) and implemented by AIC of India Ltd., Taluk-wise major crops were notified at Grama Panchayath level and other crops were notified at Hobli level.

19 crops are being notified during Rabi viz., Paddy(I), Maize(I), Maize(RF), Jowar (I), Jowar (RF), Ragi (I), Ragi (RF), Wheat(I), Wheat (RF), Bengal gram (I), Bengal gram (RF), Black

gram (RF), Green gram (RF), Horse gram (RF), Linseed(RF), Safflower(RF), Sunflower (I), Sunflower (RF) and Groundnut (RF).5 crops are being notified during summer viz., Paddy (I), Ragi (I), Groundnut (I), Groundnut (RF) and Sunflower (I). Taluk-wise major crops were notified at Gram Panchayath level and other crops were notified at hobli level. During 2015-16, MNAIS was not implemented.

#### **7.7.9 Minimum Support Price:**

Commission for Agricultural Costs and Prices, Government of India collects the information and views from all State Governments/Stake holders and recommends Minimum Support Prices for various crops to the Union Cabinet for fixing the MSP of various crops. Procurement of commodities is undertaken by Food Corporation of India, NAFED, KOF and other State Agencies in the event of market price falling below MSP. Details of Minimum Support Prices fixed for the year 2015-16 is furnished in **Appendix-7.12**

#### **7.7.10 Minimum Floor Price Scheme:**

Minimum Floor Price Scheme is operated in Karnataka for perishable commodities like onion, potato, tomato and green chilies. The Agricultural Marketing Department arranges for the procurement on these commodities through HOPCOMS in the districts/taluks after the sanction of cabinet sub-committee.

### **7.8 Flagship Programmes:**

#### **7.8.1 Bhoochetana:**

Karnataka State has initiated a novel mission mode project 'Bhoochetana' from the year

2009-10 with the mission goal of increasing average productivity of selected rain fed crops by 20%. Project implementation was planned in a phased manner from 2009-10 to 2012-13. Based on the success of the 'Bhoochetana' first phase, extension of project from 2013-14 to 2016-17 has been approved for 2<sup>nd</sup> phase. The consortium partners of the project are Karnataka State Department of Agriculture, UAS, Bangalore/ Dharwad/Raichur and ICRISAT, Hyderabad.

#### **Main strategies:**

Soil test based nutrient management with a major thrust to micronutrients, distribution of inputs @ 50% subsidy at cluster village level, services of farmer facilitators for transfer of technology, wide publicity through wall writings, posters, village meetings and mass media, effective project monitoring and feedback.

Bhoochetana programme is being implemented in all 30 districts, for the year 2015-16 to cover a targeted area of 47.0 lakh hectares in rain fed area and 6 lakh hectares in irrigated area. During kharif 44.30 lakh hectares progress has been achieved. The budget for 2015-16 is Rs.50.00 crore. Along with technical message, required inputs are made available to farmers at cluster village level at 50% subsidy in 747 RSKs, 3440 cluster villages with the services of 4707 farmer facilitators. 1356 Farmer Field Schools were conducted successfully for transfer of production technology to farmers. The targeted area for 2015 rabi is 27.15 lakh hectares.

**Table 7.28: Allocation, Releases and Expenditure under Bhoochetana programme,**

<b>Bhoochetana</b>	<b>(Rs. in lakhs)</b>			
	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>	<b>2015-16</b>
Allocation	107.50	105.00	102.20	50.00
Releases	107.50	86.75	65.28	32.50
Expenditure	107.40	85.13	63.89	13.88*

\*up to December end.

### 7.8.2 GOK-CGIAR” Initiative for improving the Rural Livelihoods in Karnataka” - Bhoosamrudhi scheme:

Bhoosamrudhi programme was initiated from 2013-14 to improve the livelihood of rural people. This programme was taken up on a pilot basis from 2013-14 to 2016-17 for a period of four years in one district (Tumkur, Raichur, Chikkamagalur and Bijapur) of the each revenue division. Agriculture Department was designated as Nodal Department to chalk out new strategies and formulate programmes from the existing schemes of Agriculture and allied departments. “International Crops Research Institute for the Semi-Arid Tropics” (ICRISAT) has been designated as nodal agency on behalf of C.G.I.A.R institutions to implement the programme. Further, during 2015-16 additional four districts viz. Bidar, Chikkaballapur, Dharwad and Udupi from each Revenue division have been included.

#### Objectives:

- To increase crop yields by 20%
- To increase farmers income by 25% over a period of four years.
- To increase the skill of agriculture – allied Departments officers and research scientists and farmers capacity.

#### Implementation:

- The Scheme implementation is planned for a period of four years (2013-14 to 2016-17) in 2 lakh ha.
- The scheme is in implementation where Agriculture and allied sectors on-going

schemes are converged and innovative technologies are adopted in the pilot area.

- The budget allotted for 2015-16 is Rs 32.50 crore

### 7.8.3 Krishi Bhagya:

70% of the cultivated area in the State is under rain fed agriculture. Despite of this limitation, 55% of food grain production and 75% of oilseed production is contributed by the rain fed areas. Thus, conservation of high quality natural resources like soil and water, enhancement of agriculture productivity and income levels of farmers/ agriculture labourers needs to be ensured. “**Krishi Bhagya**” scheme is being implemented for improving livelihood of rain dependent farming community.

“Krishi Bhagya” scheme is being implemented initially in 5 major dry land zones in 23 districts covering 107 taluks. Through conservation, storage and efficient use of rain water, adoption of profitable cropping systems, cultivation of high income earning horticultural crops, promotion of animal husbandry activities and promotion of infrastructure creation for agriculture, the scheme aims to achieve sustainable growth in agriculture. It is planned to implement the scheme in a Mission Mode in a phased manner over five years. Further, 22 taluks with less than 850 mm rainfall are added in 2015-16. Budgetary provision of Rs.500.00 crore is made during 2015-16.

**Table 7.29: Allocation, Releases and Expenditure under Bhoosamrudhi programme, (Rs. In lakhs)**

Bhoosamrudhi	2013-14	2014-15	2015-16
Allocation	2550.00	1400.00	3250.00
Releases	650.00	1021.99	3250.00
Expenditure	650.00	978.00	589.56*

\*up to end of Dec.

**Table 7.30: Allocation, Releases and Expenditure under Krishi Bhagya programme, (Rs. in lakhs)**

Krishi Bhagya	2014-15	2015-16
Allocation	50000.00	50000.00
Releases	50000.00	37500.00
Expenditure	48417.00	-

During 2015-16, an amount of Rs.375.00 crore has been released out of which Rs.24.00 crore has been re-appropriated to pay compensation for farmer's suicide cases.

#### 7.8.4 Savayava Bhagya Yojane:

This mega programme initiated during the later part of 2013-14 is an extension of the earlier Organic village/site programme to hobli level with few modifications in its implementation viz. developing good marketing linkages and market development to the organic produce of the state.

The programme is being implemented in association with the 79 NGOs selected for each taluk. NGO selected for the taluka has been entrusted with responsibility of bringing around 100 ha under organic farming in each hobli of the taluka.

#### Important features of the programme:

- Programme implemented in 566 hoblis of the state.
- Programme implemented in association with the NGO's.
- In the implementation area (100 ha), the beneficiary farmers will be organized into an association and this association will be registered.
- Constitution of Site Committee comprising representatives from farmers associations, NGO representative and Department officer to prepare action plan for implementation of the Programme. Action plans are prepared every year by the committee and approved by the District Steering Committee..
- District organic farming steering committee under the chairmanship of Joint director of Agriculture to approve action plans, inspection & monitoring.
- Constitutions High level committee under the chairmanship of Hon'ble Minister for Agriculture for monitoring and implementation of the Programme.

#### Components carried out in each 100 ha. Block under Savayava Bhagya Yojane:

- Identification of the project area 100 ha contiguous block
- Bench Mark survey of Project area.
- The farmers of the area organized to form association & registration of farmers groups.
- Site committee constitution comprising representatives from farmers associations, NGO representative and Department officer to prepare action plan for implementation of the programme in that block.
- Training, Capacity Building, Study Tours & Field days.
- Publicity – Pamphlets, Folders, Posters, Wall Paintings, C.D, Exhibition, Booklets.
- Value addition, Processing, Packing, Marketing.
- Consumer Awareness programme.
- Photo Documentation.
- Internal Control System & Group Certification.
- Documentation of Traditional Practices, Success Stories.

#### Apart from hobli level Savayava Bhagya Yojane, other organic farming promotional programmes being implemented during the current year are:

- Market Development for Organic Produce including Certification
- Evaluation and monitoring of the programme
- Publicity and Awareness programmes
- Research in Organic Farming and innovative projects
- Components/Units prerequisite to Organic farming at 90% subsidy to Scheduled Caste and Scheduled Tribe farmers.

**Table 7.31 : Progress made under Savayava Bhagya Yojane, (Rs. in lakhs)**

Savayava Bhagya Yojane	2013-14	2014-15	2015-16
Allocation	4480.54	900.00	4002.00
Releases	3360.40	900.00	3001.50*
Expenditure	3359.47	830.12	2312.13*

\*up to Dec.2015.

**7.8.5 Raitha Samparka Kendra:**

The Department of Agriculture under “Raitha Mitra Yojane” established 740 Raitha Samparka Kendra’s (RSKs), one per Hobli to provide services and information at single point required by the farmers. Based on the various agro climatic zones of the state, the new food production technologies and skills are being implemented in the farmers’ field aiming to increase the state food production levels under this scheme.

Bimonthly and Fortnightly training programmes are being conducted at district

**7.8.6 Scheme to provide relief to the families of the farmers who have committed suicide:**

This scheme was launched during 2003-04 to provide Rs. One lakh as a relief to families of farmers committing suicide on account of the heavy burden of loans borrowed from the institutional agencies. This relief amount has been enhanced to Rs.5.00 lakhs for each of the deceased family with effect from 01.04.2015.

A budget provision of Rs. 200.00 lakhs has been made for the scheme during 2015-16 and additional grants of Rs.2600.00 lakhs have been released from Government out of the savings from Krishi Bhagya Scheme.

An amount of Rs1800.00 lakhs has been utilised up to end of December 2015 for providing relief to the 360 families of the farmers who have committed suicide.

**7.8.7 Relief to farmers/agricultural laborers for accidental death from snake bites, fall from trees and other accidental death occurred while carrying out agricultural activities and also compensation for loss of fodder/hay from fire accidents:**

level and taluk level respectively, to continuously upgrade and update the latest agricultural technologies and also the professional teaching skills of the Extension workers and Department Officers.

To strengthen the Raitha Samparka Kendras for effective implementation of Department programmes and technology transfer, the students graduating from Agriculture and Horticulture Universities are deputed at least for 3 months to Raitha Samparka Kendras for acquiring minimum practical skills, field experience and knowledge.

This scheme was launched during 2010-11 to provide Rs. One lakh as a relief to farmers/agricultural laborers due to accidental death from snake bites, fall from trees and other accidental death occurred while carryout agricultural activities and compensation for loss of fodder/hay from fire accidents up to maximum of Rs. 10,000.

A budget provision of Rs. 1000.00 lakhs has been made during 2015-16. Rs.423.66 lakhs has been utilized up to end of December 2015 and relief has been provided for 978 cases.

**7.8.8 Sanction of Crop loans to the farmers through Commercial banks and Regional Rural Banks (RRBs) at 3%.**

This scheme was launched during 2009-10 to provide interest subsidy of 1% for short term agricultural crop loans through commercial banks and Regional Rural Banks up to Rs.1,00,000 for the farmers who will repay the principal amount along with the interest before due date fixed by the banks, so that those farmers will get crop loan at 3% interest.

A budget provision of Rs.500.00 lakhs has been made during 2015-16. An amount of Rs.321.75 lakhs has been credited to SLBC up to end of December 2015.

**Table 7.32: Details of allocation, releases and expenditure, Rs. in lakhs**

Raitha Samparka Kendra	2013-14	2014-15	2015-16
Allocation	79.11	180.00	180.00
Releases	79.11	168.00	180.00
Expenditure	79.11	162.05	98.215*

\* up to Dec. end



### 7.8.9 Trainings in Agricultural Technology:

Training programmes (3/5/6 days) are being conducted for farmers/farm women and extension workers to train them in advanced agricultural technology adoption and agricultural extension skills. Farmers study tour is also being conducted for farmers and farm women at the DATCs. Funds are also provided for strengthening basic infrastructure and up-gradation of DATCs.

### 7.9 Initiatives Taken Up by the Department:

#### a) Karnataka Agriculture Price Commission:

Karnataka Agricultural Price Commission was established in June 2014. The Commission is an advisory body to the Government of Karnataka in the issues of policies and programmes related to remunerative prices for Agriculture and Horticultural commodities. It will advise the State Government on the price policy of major agricultural and horticultural produce of the State as the Government may indicate from time to time with a view to evolve a balanced and integrated price structure with the perspective of the overall short and long term needs of the State's economy and with due regard to the interests of the producer and the consumer.

This commission consists of Agricultural economist, farmer representative and secretaries of Government. The Government will fix suitable prices based on the scientifically worked out recommendations of the Commission.

The Commission has submitted the following reports to the State Government:

**Table 7.33: Number of trainings conducted, budget and expenditure on agricultural Technology, (Rs. in lakhs)**

Trainings in Agricultural Technology	2013-14	2014-15	2015-16
No. of Training conducted	517	658	364 *
Allocation	400.00	248.77	230.65
Releases	400.00	248.77	182.25*
Expenditure	387.26	231.46	141.00*

\*up to end of Dec. 2015

1. Production and procurement of ragi and Rabi jowar crops under the State Government's "Annabhagya Scheme".
2. Price recommendation to 11 important agricultural and horticultural crops in the State-Paddy, ragi, Maize, Rabi jowar, tur, groundnut, cotton, arecanut, tomato, onion, coconut & copra during 2014-15.

The commission has estimated Cost of Cultivation of 15 Agricultural and Horticultural crops spread over 55 taluks of 17 districts of the state for 2014-15 and submitted a report to government.

#### b) Raitha Sahayavani Kendra (Farmers helpline centre):

The State Department of Agriculture has farmers help line called "Raitha Sahayavanni Kendra" to provide information pertaining to agriculture and allied subjects for farming community in local language. Farmers are facilitated to make toll free call on Phone No. 1800 425 3553. The center functions from 7.00 am to 7.00 pm on all days. Two subject matter specialists are entrusted to receive the calls and provide information to the farmers. On an average 75-100 calls are received per day.

#### c) Kisan Call Centre:

Kisan call centers are set up in the country by Central Government to make agriculture knowledge available at free of cost to the farmers as and when desired. The Call Centres can be accessed by farmers all over the country on common Toll Free Number 1800 425 1551.

**d) The e-Governance initiatives undertaken by the Department:**

Department has taken steps to strengthen the extension system by greater use of modern Information and Communication Technology (ICT) applications from RSK to Secretariat (Agriculture) to meet the core functions of the Department viz., service delivery, information dissemination, public grievances and redressal, schemes/programme implementation and to have interfaces with other Departments through implementation of K-KISAN (Karnataka – Krishi Information Services and Networking) Project.

Department has obtained KSWAN (Karnataka State Wide Area Network) connectivity for 771 offices of the department from e-Governance Department. In future, the facility shall be extended by the e-Governance Department to all the offices of the Department of Agriculture.

Department of Agriculture has redesigned the existing “Raitha Mitra” website (bilingual) so as to provide timely information on various schemes, Rate Contracts of the inputs, Market Information, Weather forecast, Tender Notification etc., Further, for the first time in the State, the Department has developed and provided a interactive platform, “Raitha Snehi – Interaction”- in order to address the queries of the farmers / public. The farmers / public can send queries related to agriculture either in Kannada or English to the Department through this platform and receive solutions to their mobiles and e-mails. In addition, the farmers can share audio or videos in this website with respect to innovative agriculture practice for all others to view and follow.

**e) Telemetric Rain gauge Stations:**

Drought assessment basically starts with rainfall measurement. The spatial and

temporal variability of rainfall is very high in the semi-arid and arid areas prone to drought. So to capture the realistic and location specific weather parameters like rainfall, relative humidity, temperature, wind velocity etc. and to assess the impact of such weather on agricultural and horticultural crops the State had taken up establishment of Telemetric Rain Gauges from 2007.

Agriculture Department has allotted grants under RKVY to Karnataka State Natural Disaster Monitoring Centre (KSNDMC) for establishing GPRS enabled solar powered Telemetric Rain Gauges at Gram Panchayath level. So far, KSNDMC has installed 5928 Telemetric Rain Gauges which include Pattana Panchayaths, Hobli headquarters and Gram Panchayath in the State. Telemetric Weather Stations have been installed in all the 747 hobli headquarters.

The data received is being used in the master control centre which is operational 24 hours x 7 days x 365 days and the “VARUNA MITRA” farmers helpdesk provides alerts, early warnings and advisories related to weather.

**7.10 Outcome of various Development Programmes:**

Growth in agriculture production is the net result of efforts put in for implementation of various programmes and schemes of the State’s Agriculture Department. In the last five years the State has maintained a sustained level of food grain production in spite of consecutive drought situation for four years (2001-12 to 2014-15).

The growth rate of the Agriculture sector continues to be positive in the past five years, except during 2011-12. The details are as follows:

**Table 7.33: Growth Rates of Agriculture Sector**

Year	Drought affected taluks	Foodgrain Production (lakh Tonnes)	Growth Rate of Agriculture sector(Over previous year)
2010-11	Nil	137.91	16.2%
2011-12	123	117.38	-6.6%
2012-13	157	109.64	2.4%
2013-14	125	133.10	9.4%
2014-15	35	126.22	4.5%

### Major constraints confronting Agriculture Sector-

- Predominantly rain fed agriculture,
- Sub-division and fragmentation of land holdings,
- Inadequate and inefficient use of irrigation facilities,
- Low level of public investment,
- Exhaustion of the yield potential of new high yielding varieties,
- Technological & Extension Constraints,
- Environmental degradation and impaired soil fertility,
- Depleting water resources,
- Adverse impacts of climate change,
- Rising cost of production,
- Diminishing agricultural labour availability,
- Inadequate post harvest value addition,
- Inadequate infrastructure facilities (lack of proper storage and transportation facilities warehouses, cold and dry storage facilities for perishable goods) &
- Farmers' reduced interest in agriculture.

### 7.11 WATERSHED DEVELOPMENT DEPARTMENT

The productivity of any crop mainly depends on crucial natural resources namely, land

and water, in addition to management practices. Therefore, conservation, up-gradation and utilization of these natural resources on scientific principles are essential for the sustainability of rain fed agriculture. The watershed concept for development of rain fed area is gaining importance over the years and it has amply demonstrated that watershed developmental tools are very effective in meeting the objectives with a mission approach.

The geographical area of the State is 190.50 lakh hectares, out of which 129.70 lakh hectares are available for watershed development. 75% of the cultivable land in Karnataka is dependent on low and indefinite rainfall. 65.49 lakh hectares of area has already been treated under different watershed projects by the end of March-2015 and remaining 64.21 lakh hectares of land is to be treated stage by stage in future years.

As a result of implementation of watershed development projects, farmers have realized several benefits compared to non watershed project areas and have diversified their activities from Agriculture to agro-horticulture and agro-forestry in order to better their income. Implementation of soil and water conservation programmes in watershed areas has resulted in the significance increase in the underground level of water through recharge.

**Table 7.34: budget allocation for Watershed Development Department, (Rs in lakhs)**

Year	2013-14	2014-15	2015-16
Budget	64682.96	83927.54	29260.00

The area covered by soil conservation measures from 2009-10 to 2014-15 (A) is depicted in the **Table 7.35**.

**Table-7.35: Area covered under Watershed Development, (lakh hectares)**

Year	During the year	Cumulative
2010-11	2.93	52.20
2011-12	2.39	54.59
2012-13	4.01	58.60
2013-14	4.67	63.27
2014-15	2.22	65.49
2015-16 (Anticipated)	1.58	67.07

### 7.11.1 Externally Aided Project

#### (SUJALA-III):

##### Introduction:

Karnataka Watershed Development Project-II (SUJALA-III) is not a standalone project but links with the centrally financed IWMP which was started in the year 2012-13 and to be implemented over five years in the selected project districts and presently included in Prime Ministers Krishi Sinchayi Yojana. The project is innovative and science based approach aiming to generate and concurrently provide scientific planning tools and enabling institutions leading to development of participatory micro watershed plans to ensure more accurate and effective implementation of Integrated Watershed Management Programme (IWMP). World Bank Funded activities would focus on project resources on improved planning, R&D and institutional strengthening to promote better integration between agriculture and watershed management, and convergence with NREGS.

The project intends to support institutional capacities, use of new and innovative technology for watershed planning, training and capacity building of stakeholders. Knowledge will be shared among line departments to increase environmental sustainability of watershed investments, Horticulture productivity improvement and market linkage activities. The project also has greater attention to hydrological assessment and monitoring in the project area. As part of the project design, new decision-support tools would be developed and piloted to improve selection of priority watershed sites that combine biophysical, hydrological, socio-economic and environmental criteria. Accordingly 4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup> batch of IWMP areas in 11 districts (Chamarajanagar, Tumakuru, Davanagere, Chickmagalur, Gadag, Koppala, Raichuru, Yadagiri, Kalaburagi, Bidar & Vijayapura) of the state were selected to cover under SUJALA-III project with the project allocation of Rs. 514.40 crores.

##### Project Objectives:

The objectives of the project is to demonstrate more effective Watershed Management through greater integration of programmes

related to rain fed agriculture, innovative and science based approach and strengthened institution and capacities.

##### Method of Implementation:

There are 12 Project Partners and NBSS & LUP as lead partner institutes who will undertake research in watershed areas and develop technologies for better planning of integrate Watershed Management Programme in the state. The following are project partners who are implementing the project.

1. National Bureau of Soil Survey & Land use planning, Bengaluru.
2. University of Agriculture Science- Bengaluru
3. University of Agriculture Science- Dharwad
4. University of Agriculture Science- Raichuru
5. University of Agriculture & Horticulture Science- Shivamogga
6. University of Horticulture Science- Bagalkote
7. Karnataka Veterinary Animals & Fisheries Science University- Bidar
8. Indian Institute of science- Bengaluru
9. Bengaluru University, Bengaluru
10. International Crop Research Institute for semi-arid tropics (ICRISAT)- Hyderabad
11. Karnataka State Remote Sensing Application Centre- Bengaluru
12. Karnataka State Natural Disaster Monitoring Cell- Bengaluru

##### Project stakeholders:

The project stakeholders include farmers in the rain fed area, including small and marginal farmers, women self help groups, water user associations, watershed committees, Panchayat Raj Institutions (PRIs), Non Government Organizations (NGOs) and government line departments and agencies.

**Project components:** The project has five components.

**Component 1:** To support for Improved Program Integration in Rainfed Areas. This unit demonstrates the successful integration of programs in watershed development, using a science-based approach in project areas.

**Component 2:** To support development, innovation and research to enhance practical knowledge in integrated watershed management.

**Component 3:** Strengthening of the institutions and human resources are key stakeholders to improve effective delivery of services for integrated watershed management.

**Component 4:** Strengthening Horticulture in Rainfed Areas would improve the knowledge base regarding horticulture potential in rain fed areas, demonstrate and build the capacity of institutions and communities to improve production and value addition of horticulture in project areas.

**Component 5:** Project Management and Co-ordination would ensure effective and efficient project Management and would provide incremental support to Watershed Development Department to strengthen the IWMP coordination and management systems already in place, and ensure that the additional activities would make the projects effective.

For the year 2014-15, Rs. 8652.00 lakhs were allocated in the budget. Rs. 2663.00 lakhs has been released. Out of which an amount of Rs. 2600.23 lakhs was spent to take up land resource inventory (LRI) in 30 micro watersheds along with institutional strengthening, technical strengthening in increasing the productivity of agriculture and horticulture crops.

For the year 2015-16 Rs.9770.00 lakhs is allocated in budget and Rs.2442.50 lakhs has been released. By the end of December-2015 an amount of Rs. 1155.63 lakhs has been spent. Procurement of equipments required for the project is under progress. So far, Land Resources Inventory (LRI) is completed in 226 micro watersheds. Area coming under SUJALA-III is being treated under Integrated Watershed Management Programme. Under SUJALA-III Institutional strengthening, Monitoring & Evaluation, to make watershed programmes more effective adoption of technology in increasing the productivity of Agriculture & Horticulture crops.

**Impact:** Though no potential large scale, significant, irreversible impacts are anticipated but, following are likely benefits:

1. The tools developed under the project are likely to facilitate sustainable harnessing of natural resources, accurate investment plans to improve the natural resource base.
2. Incremental change in agricultural and horticultural productivity in project areas
3. Measures to enhance the potential positive environmental impacts
4. Improved M&E capability in Watershed Development Department

#### **7.11.2 Pradhan Mantri Krishi Sinchayi Yojana-Watershed Development-(PMKSY-WD) (erstwhile IWMP):**

PMKSY-WD is being implemented in the state since 2009-10 as per the common guidelines-2008 issued by Government of India. Desert Development Programme, Drought Prone Area Development Programme and Integrated Wasteland Development Programme have been brought under one umbrella with the nomenclature of Integrated Watershed Management Programme. It is implemented as per common guidelines-2008 (Revised edition-2011).It is a Centrally Sponsored Scheme with the sharing pattern of centre and state in the ratio of 90:10 up to 2014-15.From 2015-16 onwards IWMP is renamed as Pradhan Manthri Krishi Sinchayee Yojana-Watershed Development (PMKSY-WD) and sharing pattern of Centre and State will be in the ratio of 60:40.

#### **The main objectives of PMKSY are:**

1. To achieve convergence of investments in irrigation at the field level.
2. Enhance the physical access of water on the farm and expand cultivable area under assured irrigation. Improve on-farm water use efficiency to reduce wastage and increase availability, both in duration and extent.
3. Enhance the adoption of precision-irrigation and other water saving technologies.
4. Ensure the integrated development of rain fed areas using the watershed approach
5. Explore the feasibility of reusing treated municipal waste water for semi-urban agriculture.
6. Attract greater private investments in irrigation.

7. Effective management of runoff water and improved soil & moisture conservation activities such as ridge area treatment, drainage line treatment.
8. Rain water harvesting, In-situ moisture conservation and other allied activities on watershed basis.
9. Converging with MGNREGS for creation of water source to full potential in identified backward rain fed blocks including renovation of traditional water bodies.

#### **Components of PMKSY:**

1. Water harvesting structures such as check dams, nalabund, ponds, tanks etc.,
2. Capacity building, entry point activities, ridge area treatment, drainage line treatment, soil and moisture conservation, nursery raising, afforestation, horticulture, pasture development, lively hood activities for the asset-less persons and production system and micro enterprises for small and marginal farmers etc.,
3. Effective rainfall management like field bunding, contour bunding/trenching, staggered trenching, land leveling, mulching etc.,

**Method of Implementation:** Before implementing the watershed activities in the field the area for the watershed treatment will be selected based on the following criteria.

1. Acute Shortage of drinking water in that area
2. Severe exploitation of ground water
3. More degraded/barren land area
4. Contiguity to another watershed that has already been developed/ treated
5. Ability of the people to provide contribution and interest of village community for Sustainable utilization of developed natural resources
6. SC/ST Population
7. Area should not be under assured irrigation
8. Productivity Potential of the land

After selecting the area for the treatment with the above criteria, the project activities will be implemented in 3 different phases.

#### **A) Preparatory Phase activities:**

Preparatory Phase activities are implemented to gain the confidence of the rural community before implementing the project activities in the project area. Entry point activities which are related to Natural Resources Management are implemented. Apart from this awareness programme regarding the projects will be implemented. Net planning of the activities are done by involving the executive committee (GP) and preparation and approval of detailed project reports by Grama sabha to implement the activities.

**B) Work Phase activities:** Year wise action plan are prepared for the activities which are approved in the Grama sabha. To harvest and percolate the rainwater, the soil conservation activities like bund formation, Farm ponds, Check dam, Nala-bund and Percolation tanks are constructed in the project area. Apart from this dry-land horticulture, Agro-Forestry, Animal husbandry and fisheries activities were also implemented in the project area. Activities under production system and microenterprises were also implemented apart from encouraging the Self Help Groups to take up the income generating activities.

#### **c) Consolidation and withdrawal phase:**

This phase includes Sustainable management of (developed) natural resources and up-scaling of successful experiences regarding farm production systems /off-farm livelihoods and documentation of successful experiences as well as lessons learnt for future use. Usage tax will be collected from users for utilizing the sustainable natural resources.

An amount of Rs. 71,111.11 lakh has been allocated for the year 2014-15, Out of this Rs. 32537.59 lakh has been spent to develop an area of 222773 hectares through implementation of bunding, water harvesting structures like check dam, vented dam, farm pond, percolation tank and nalabund etc. Agro-forestry and dry land horticulture programmes have been implemented in the developed area.

An amount of Rs. 18902.00 lakh has been allocated for the year 2015-16. It is targeted to treat and develop 157517 hectares of land. An



amount of Rs. 8353.72 lakhs have been spent from opening balance up to December-2015 to develop an area of 60622 hectares through implementation of bunding, water harvesting structures like check dam, vented dam, farm pond, percolation tank and nalabund etc. Agro-forestry and dry land horticulture programmes have been implemented in the developed area.

Out of the same IWMP scheme Rs. 2359.00 lakhs have been earmarked for Special Component Plan. An amount of Rs. 322.50 lakhs have been spent from opening balance up to the end of December-2015 and 4555 hectares of land belonging to SC families have been developed. Similarly under Tribal Sub Plan Rs.1073.00 lakhs have been earmarked. An amount of Rs. 150.23 lakhs have been spent from opening balance up to the end of December-2015 and 2242 hectares of land belonging to ST families have been developed.

**Impact of the Programme:** Pradhan Manthi Krishi Sinchayii Yojana (erstwhile IWMP): The programme is being implemented in the state from 2009-10. Training programmes were given to Community based organizations like Self Help Groups and User Groups. So that they will be strengthened to a maximum extent. Through soil & water conservation activities like construction of water harvesting structures, the soil, nutrients and water is being conserved. This leads to increase in the underground water. The "green cover" is increased through agro-forestry and dry-land horticulture. It supports for the landless people in the project area to take up income generating activities.

### 7.12 Agricultural Marketing:

The Department of Agricultural Marketing is working under the Karnataka Agricultural Produce Marketing (Regulation and Development) Act, 1966 and Rules 1968. The state has 157 Agricultural Produce Market Committees (APMC's) to facilitate and regulate the marketing of agricultural commodities. The Department of Agricultural Marketing supervises and guides the working of APMCs to implement the provisions of the Act and Rules. The APMCs are managed by an elected Managing Committee. The Secretary and supporting staff are Government servants working in the APMCs.

The aim of the department is to develop and regulate participative, transparent and scientific agricultural marketing system with adequate infrastructure and user friendly e-initiatives in the state. To promote and encourage participatory and equitable socio-economic development of people of Karnataka and specially farmer from Karnataka through a vibrant agricultural marketing system.

The challenges of the Department are to provide additional required infrastructure for trade in the markets, to ensure transparency in the markets, to modernize the markets, and to ensure competitive price to the farmers produce. In this regard, action has been taken to implement online trading system in all the APMCs of the state in phased manner. The budget allocation for the department from the year 2013-14 to 2015-16 is as follows.

**Table 7.36: Budget Allocation for Agricultural Marketing department, (Rs in lakhs)**

Year	2013-14	2014-15	2015-16
Allocation	12250.00	17210.00	12218.00

### a) Karnataka Agricultural Marketing Policy 2013 and Implementation of online trading system

In order to improve the agricultural marketing system in the state the Government had appointed a Committee under the Chairmanship of Additional Secretary to Government, Department of Co-operation. The Agricultural Marketing Reforms Committee appointed by the State Government in March, 2013 submitted its report in May, 2013. The State Government has accepted the recommendations of the Reforms Committee and came out with the **Karnataka State Agricultural Marketing Policy- 2013** on 4<sup>th</sup> September, 2013. A SPV (Special Purpose Vehicle) has been established on 6-11-2013 for the implementation of reforms measures. Implementation of Agricultural Marketing Policy will help the farmers to get competitive prices for their commodities, bring transparency in the system and facilitate simplification of various activities in the market yards.



On line trading system is being implemented to sell the agricultural produce of the farmers in the markets through electronic trading system. Actions are being taken to ensure transparency, simplify the marketing procedures, ensure competitive price for farmers' produce by introducing technology in all market activities including auction system, price discovery and payment of sale proceeds to farmers on line. Arrangement is being made to link different markets in the state by introduction of technology and facilitating the traders of different markets in the state to participate in buying of commodities on line from any of the markets of the state where the farmers have offered for sale. During 2014-15, budgetary provision of Rs.250.00 lakhs has been made under this scheme. Action has been taken to utilise the amount for the establishment of primary level grading laboratory & orientation centers in the selected 55 APMCs. From the budgetary provision of Rs. 1000 lakhs for the year 2015-16, the necessary computer hardware/peripherals have been supplied to 55 APMCs for introduction of on line trading system.

On line trading system is introduced in 103 markets during 2015-16 up to December. 908507 farmers have registered their names so far to participating at Unified Marketing Platform (UMP).42 Assaying Laboratories has been established in the state to assaying farmers and traders agricultural produces.34.68 lakh lots valued Rs. 15000 crore transacted till December 2015.From 184 farmers Rs. 1.26 crore amount has been transferred to farmers savings bank account at UMP.A National level seminar on Agriculture Marketing Reforms was organized in 2015 July at Hubli, Hon'ble Agricultural Minister of Government of India participated.26 States Ministers and Dignitaries of state and central Government officers also participated. Unanimous decision has been taken to adopt "Karnataka Model" on Agricultural Marketing Reforms in

the country. Action has been taken to implement the online trading system in the remaining APMCs through the financial assistance of Rs.2000.00 lakhs under Rastriya Krishi Vikas Yojana.

**b) Minimum Floor Price scheme:**

To ensure sustainable development and stability in agricultural sector and to protect the interests of the farmers against distress sale of agricultural commodities, whenever the rates of such commodities go down, the **Floor Price Scheme** for Agricultural/Horticultural commodities in Karnataka is being implemented. The scheme is applicable to all the notified Agricultural & Horticultural commodities as per Karnataka Agricultural Produce Marketing (Regulation &Development) Act 1966.In addition to this Scheme, the Price Support Scheme of Government of India is also being implemented. By implementing this scheme it is possible to stabilize the agricultural prices in the markets and ensure better price for farmers' produce by avoiding distress sale of commodities.

The Scheme has come into effect from 24.11.1999.For the successful implementation of the said scheme a corpus of **Revolving Fund** was created. As per Karnataka Agricultural Produce Marketing (R&D) act 1966, and as per the decision taken by the Agriculture/Horticulture Commodities Price Stabilization Cabinet Sub-Committee, the Karnataka State Agricultural Marketing Board is authorized to operate the Revolving Fund.

During the year 2014-15 the budgetary grant was Rs.15, 000.00 lakhs and the contribution received from the APMCs was Rs.11, 283.00 lakhs. Totally Rs.26, 283.00 lakhs was received to the Revolving Fund. During the year 2014-15 an amount of Rs.30, 450.00 lakhs was spent for procurement of different commodities from 49897 farmers. The details of amount spent for purchase of various commodities during 2014-15 is given below:



**Table 7.37: Details of amount spent for purchase of various commodities, through minimum floor price scheme**

Name of the Commodity	Quantity purchased (lakh Qtls)	Value (Rs.lakhs)	Incentive by State Govt (Rs.lakhs).	Total value of commodities purchased (Rs.lakhs).	Amount released from the Revolving Fund (Rs.lakhs)
Paddy	12.43	16946	-	16946	29300
Maize	0.22	239	-	239	
Ragi	13.59	21073	6118	27191	
Jowar (white)	0.68	1060	513	1573	
summer paddy	0.35	473	-	473	1150
Total	27.27	39791	6631	46422	30450

During the year 2015-16 budgetary allocation of Rs.5000.00 lakhs has been made. Since the procurement of commodities starts from January, procurement of commodities from farmers is under progress.

#### **7.12.1:Rural Infrastructure Development Fund (RIDF):**

Rural markets are the places where large number of small and marginal farmers sells their agricultural produce. These markets are being developed by providing infrastructure for the benefit of farmers and traders. The National Agriculture and Rural Development Bank of Government of India provide partial financial assistance for providing infrastructure facilities for rural markets. Remaining financial requirements are provided by the APMCs for the development of infrastructure facilities. The Department of

Agricultural Marketing gets the information from the APMCs, prepares the project report, submits the proposal to NABARD and after sanction supervises the implementation of the project. The facilities provided in the rural markets like godowns, roads, sanitary, auction platforms, drinking water, etc will help the sellers and buyers.

During 2014-15 Rs. 1160.00 lakhs of budgetary allocation is made and this amount has been spent for completion of 21 works in 22 APMC's and one work is under progress.

During 2015-16 a budgetary allocation of Rs. 5,600.00 lakhs has been provided for this scheme. Out of this Rs.2, 800.00 lakhs is spent up to December for infrastructure works in 30 APMCs. Out of this 28 works are completed and the remaining 2 works are in progress.

**Table 7.38: details of Godown and Shop-cum-Godowns Constructed in APMC's in the State**

Sl. No.	PLAN	Completed				Total	
		Godowns		Shop-cum-godowns		No's	Capacity (In M.T.)
		No's	Capacity (In M.T.)	No's	Capacity (In M.T.)		
1	Annual Action Plan	1539	205335	2939	212811	4478	418146
2	R.K.V.Y	112	189950	104	10400	216	200350
3	Gramina Bhandara	534	71680	0	0	534	71680
4	R.I.D.F	53	19670	0	0	53	19670
<b>Total</b>		<b>2238</b>	<b>486635</b>	<b>3043</b>	<b>223211</b>	<b>5281</b>	<b>509496</b>

### 7.12.2: Rural Godown Scheme/Grameena Bhandar Yojana (Central and State Sector)

This scheme has been introduced in 2006-07 to help the farmers to store their commodities scientifically in godowns and to sell the same when the prices are high. Farmers can also get pledge loan on the basis of the commodities stored in the godowns. The APMCs are implementing the rural godown scheme by getting 25% subsidy from Government of India. The assistance given by Government of India is going directly to APMCs account.

Under the scheme, construction of 545 godowns in the rural areas coming under 14 APMC's jurisdiction has been taken up. Out of this 537 works have been completed.

### 7.12.3:Rice Technology Park – Karatagi:

Rice Technology Park in Karatagi of Gangavati Taluk is being developed in order to provide state of the art technology facilities for cleaning, grading, processing, packing, selling, branding, export, etc for paddy/rice. During 2014-15 an amount of Rs. 150.00 lakhs budget allocation is made. An amount of Rs. 75.00 lakhs has been utilized for purchase of land required for the rice technology park. During 2015-16 an amount of Rs. 100.00 lakhs budget allocation is made. An amount of Rs. 50.00 lakhs has been utilized for purchase of land required for the rice technology park.

### 7.12.4:Establishment of Coconut processing unit at Konehalli of Tiptur:

The objective of this project is to provide infrastructure facilities for value addition of

coconut and copra. During the year 2014-15 budgetary allocation of Rs. 250.00 lakhs was made for this project. Out of this Rs. 25.00 lakhs has been utilized for the construction of buildings in Konehalli sub market of Tiptur APMC.

### 7.12.5:Creation of infrastructural facilities in the APMC's coming under backward areas:

The objective of this project is to provide infrastructure facilities like auction platforms, godowns, roads, drinking water and sanitary facilities, etc., in the markets coming under the backward areas. During the year 2014-15, budgetary provision of Rs.50.00 lakhs has been provided. Out of this, Rs. 50.00 lakhs has been utilized for providing infrastructure facilities in Jagalur APMC works has been completed. During the year 2015-16 Rs.1351.00 budgetary allocation was made and 25 developmental works has been taken in 22 APMCs. The work is under progress. Implementation of this scheme will help the farmers in the backward areas to market their produce for a better price.

### 7.12.6:Rashtiya Krishi Vikas Yojana (RKVY):

Construction of godowns under RKVY scheme will help to promote scientific storage of commodities there by reducing storage losses. Further, these scientifically constructed godowns will also help to take up online trading through godown based sales thereby helping the farmers to get better price for their commodities and reduce transportation charges to the distance markets. Under the centrally sponsored RKVY Scheme, 25% subsidy is given for providing infrastructure

facilities like scientific godowns etc., remaining 75% amount required for the project will be borne by the concerned APMCs. During the year 2014-15 a budgetary allocation of Rs.2530.00 lakhs has been made under this scheme. This amount is being utilized to construct each godown of 5000 MTs capacity in 8 APMCs and work is under progress. During the year 2015-16 the budgetary allocation of Rs.23,600.00 lakhs has been made under this scheme. An additional grant of Rs. 60.00 crores has been sanctioned by which 45 no's of various capacity godown are being constructing to a total capacity of 273000 M.T. The development works has been taken the work is under tender process.

#### **7.12.7:Establishment of Tur Technology Park at Kalaburagi:**

Development of Tur Technology Park in Kalaburagi will help to take up value addition activities for Tur and other pulses produced in the area. This also helps to create better infrastructure for cleaning, grading, sorting, processing, branding, marketing and export of tur and its products. This in turn helps farmers to get better price for their commodities and overall economic development of the area.

During 2014-15, budgetary provision of Rs.100.00 lakhs has been made for this project. An amount of Rs.100 lakhs has been released and action is being taken to acquire land for the project.

During 2015-16, budgetary provision of Rs.100.00 lakhs has been made for this project. An amount of Rs.50.00 lakhs has been released and action is being taken to acquire land for the project.

#### **7.12.8:Establishment of Maize Technology Park at Ranebennur:**

Development of Maize Technology Park in Ranebennur will help to take up value addition activities for Maize and other commodities produced in the area. This also helps to create better infrastructure for cleaning, grading, sorting, processing,

branding, marketing and export of maize and its products.

During 2014-15 the budgetary provision of Rs.100.00 lakhs has been made and during 2015-16 also budgetary provision of Rs.100.00 lakhs has been made for this project. An amount of Rs. 50.00 lakhs has been released. The process of appointing the technical advisor is under progress.

#### **7.12.9:Establishment of Coconut Technology Park at Tiptur:**

Coconut Technology Park including coconut products research and development unit at Tiptur will help to take up value addition activities for Coconut/Copra produced in the area. Through this better infrastructure for cleaning, grading, sorting, processing, branding, marketing and export of coconut/copra and its products are provided.

During 2014-15 the budgetary allocation of Rs.100.00 lakh has been made for this project and the action is being taken to acquire land for the project. During 2015-16 the budgetary allocation has not been made.

#### **7.12.10:Kayaka Nidhi:**

Implementation of Kayaka Nidhi Scheme will help about 32,000 licensed hamals working in APMCs who are under below poverty line.

The amount to be released from the Government under this scheme will be utilized to meet the medical expenses of surgical operation upto Rs.1.00 lakh & Rs.10,000.00 to meet expenses related to cremation in case of death of Hamals working in the market area. This scheme is a new scheme announced in the 2014-15 budget.

For 2015-16 Budgetary provision of Rs.50.00 lakhs has been made under this scheme. Rs. 3.36 lakhs spent for medical expenses and funeral assistance for 28 Hamals Upto to the end of December-2015.

### **7.12.11: Establishment of Irradiation unit at Dasanapura:**

Action has been taken to implement the project. Project report has been obtained from Infrastructure Development Corporation. It is proposed to implement the project under Public-Private-Partnership model. The project will be implemented from the APMCs fund.

### **7.12.13: Raitha Sanjeevini:**

This is an insurance scheme for farmers being implemented by the Karnataka State Agricultural Marketing Board. Under this scheme, farmers who meet with an accidental death or permanently disabled while being involved in farming/marketing activities are provided a compensation ranging from Rs.5000.00 to Rs.75,000.00. During 2014-15 311 farmers were given compensation of Rs.140.00 lakhs. During 2015-16 up to December, 144 farmers were given compensation of Rs.93.26 lakhs.

### **7.12.14: Aam Admi Bima Yojane:**

The Aam Admi Bima Yojane is an insurance scheme implemented with the help of Life Insurance Corporation of India for the welfare of licensed weighmen, hamals and cartmen working in AMPCs. The Karnataka State Agricultural Marketing Board is the nodal agency for implementing the scheme. Under the Scheme, for accidental death or permanent disability, an amount for Rs.75,000.00 and for natural death Rs.30,000.00 is given as compensation to his family. In addition, the Government of India pays scholarship of Rs. 100.00 per month for students of 9<sup>th</sup> to 12<sup>th</sup> standard whose parents have registered under this scheme. During the year 2014-15, an amount of Rs.26.00 lakhs was paid as compensation to 88 families. Rs.17.38 lakhs has been released as scholarship amount from the LIC to 1456 students. During the year 2015-16, an amount of Rs.5.70 lakhs was paid as compensation to 19 families upto to end of December 2015.

### **7.12.15: Achievements of the Department:**

- In 157 APMCs of the state totally Rs.33,16,500.00 lakhs of agricultural commodities transaction has been made.
- Karnataka Agricultural Marketing Policy-2013 has been brought in to force and implemented.
- Since department has provided infrastructure facilities for better marketing of the commodities, the value of total arrivals in the regulated markets in the state has increased from Rs.33,165.00 Crores during 2013-14 to Rs. 34,115.59 Crores during 2014-15.
- Online trading system has been implemented in 98 APMCs.
- Rural Scheme implemented in 22 APMCs. Out of this 21 Infrastructure Development works have been completed at an amount of Rs.1160.00 lakhs.
- Under Raitha Sanjeevini Scheme Rs. 140.00 lakhs was given as compensation to 311 farmers.
- Under Aam Admi Bhima Yojane Rs.26.00 lakhs was given to 88 families as compensation.

### **7.12.16: Global Investors' Meet - 2016**

#### **Two important areas are to be placed in Global Investors Meet Karnataka-2016**

#### **1. Development Of Rice Technology Park At Navali-Somnal Village, Near Karatagi, Koppal District:**

The project of development of Rice Technology Park near Karatagi (Navali-Somnal village) in the jurisdiction of Rice & Paddy Special Commodity Agricultural Produce Market Committee (APMC). Karatagi, Koppal District, Karnataka is proposed to be implemented under a public private partnership (PPP) model. The APMC has acquired 300 Ares of land at Navali-Somnal Village for the project. The Phase-I of project has development of basic infrastructure components such as compound wall, roads, drainage, water supply, landscaping and common amenities.

Total cost of the project is Rs.122.00 crores. It is aimed at boosting paddy processing and production in the state. It is also expected to serve as a main marketing point for both farmers and trader from Bellary, Koppal and Raichur districts where paddy is largely cultivated.

## 2. Development Of Maize Technology Park At Ranebennur, District Haveri:

A Maize Technology Park is proposed to be implemented under a Public Private Partnership (PPP) model at Agricultural Produce Market Committee (APMC) yard at Ranebennur, District Haveri on BOT framework. The park is proposed to be established in 60 acres of land. The project components are development of basic infrastructure such as compound wall, drainage, road, weighbridge, sewage treatment plant, water treatment plant, street lighting, D.G sets and civil works. Maize flour, maize flakes, poultry feed, dry maize, maize and chips popcorn mills would be developed in the park. The project cost is Rs.111.00 crores. It is aimed at boosting Maize processing and production in the State. It is also expected to serve as a main marketing point for both farmers and traders from Haveri, Koppal and Dharwad districts where maize is largely cultivated.

### 7.13:Horticulture:

Horticulture sector has emerged as an important component of the economy of our State and has contributed more than one third share to the economy of agriculture and allied sectors. In many dry regions of the State, Horticultural crops have evolved as an alternative crop to agricultural crops. Currently, Horticulture crops covers an area of 19.22 lakh Hectares and the annual production is 162.57 lakh Metric Tons. The average Productivity of Horticultural crops in the state is 8.46 Metric Tons per Hectare. The annual value of Horticultural products produced in the state is Rs.35307.00 crores and constitutes 40.25% of the total income from entire agriculture sector. The share of Horticultural produces in total GSDP of the state is 5.74%.

**Table 7.39: budget allocation for Horticulture department, (Rs. in lakhs)**

Year	2013-14	2014-15	2015-16
Plan	80261.45	76570.84	66776.81
Non-Plan	8612.10	9781.39	11331.00

**Vision:** To increase Horticulture and horti-business for increasing the income, livelihood and nutritional security of stakeholders with emphasis on rain fed area.

**Mission:** To achieve an annual growth rate of 6% in the Horticulture sector by enhancing area, production and productivity of Horticulture crops.

#### Objectives:

- To increase Horticulture production.
- To improve post-harvest management and market linkages.
- To strengthen Horticulture research, extension and Human Resource Development.
- To formulate schemes for Development of Horticulture in specific regions and implement them.
- To encourage conservation of natural resources
- To provide infrastructure and essential services

The State Government has undertaken several initiatives to boost the growth in this sector. The major initiatives include 1) Area expansion programme 2) Providing micro irrigation under Pradhana Mantri Krishi Sinchayi Yojane 3) Horticulture extension and training 4) Disease and pest management 5) Rashtriya Krishi Vikas Yojane (RKVY) 6) Comprehensive Horticulture Development 7) Wine policy 8) Assistance to Horticulture Boards and Corporations 9) Biotechnology 10) Apiculture 12) Karnataka water shed development project (Sujala-III) 13) Integrated productivity for farming in Coconut.

Category wise Area under Horticultural crops in the state for the period 2009-10 to 2014-15 is given in Table 7.40.A comparative statement of area and production of selected fruit crops is given in Appendix- 7.14.



**Table 7.40: Category wise Area under Horticultural crops in Karnataka, (lakh Ha.)**

Year	Fruits	Vegetables	Spice Crops	Garden / Plantation	Commercial Flowers	Medicinal Plants	Aromatic Plants	Total
2009-10	3.60	4.37	2.66	8.05	0.27	0.02	0.02	18.99
2010-11	3.54	4.38	2.57	8.21	0.28	0.02	0.02	19.02
2011-12	3.69	4.20	2.29	8.35	0.29	0.02	0.01	18.85
2012-13	3.77	4.03	1.71	8.51	0.30	0.02	0.02	18.36
2013-14	3.87	4.46	2.00	8.56	0.30	0.02	0.01	19.22
2014-15 (Estimated)	4.00	4.86	2.21	8.69	0.29	0.02	0.02	20.09

Source: Directorate of Horticulture

### 7.13.1 Area Expansion Programme:

The area expansion programme is being taken up under different schemes. Among those, important ones are National Horticulture Mission and National Mission for Oil seeds and Oil Palm. The details of these schemes and progress in implementation are as below.

#### a) National Horticulture Mission (NHM):

For overall development of horticulture, the Government of India started National Horticulture Mission (NHM) Scheme in Karnataka since 2005-06. The scheme is being implemented in all 30 districts of the state. At present, this scheme is a sub scheme of Mission for Integrated Development of Horticulture (MIDH).

#### Objectives:

- Enhancing quality and productivity of major Horticultural crops adopting new innovative technology
- To develop horticulture in clusters approach
- To improve standard of living of farmers by increasing their income.
- To provide employment opportunities to unemployed youths.

#### Major strategies:

Inculcation of protected cultivation method, rejuvenation of the unproductive orchards, rain water harvesting, organic farming, induction of Integrated Nutrition Management (INM) and Integrated Pest Management (IPM), providing post harvest support, improving marketing, enhancing the technical knowledge and skills of farmers, extension officials and entrepreneurs through an array of training programmes.

During the year 2014-15, an amount of Rs. 147.00 crores was allocated. Out of this, Rs. 124.08 crore was spent. The financial progress achieved under NHM is given in **Appendix 7.15**.

During 2015-16, the annual physical & financial targets for area expansion of major categories of horticulture crops like fruits, plantation crops, spices, flowers and aromatic crops are 8278 ha. and Rs. 1531.76 lakhs respectively. Financial assistance of Rs. 1159.58 lakhs has been provided for area expansion of 6447.53 ha upto the end of December-2015.

The total approved Annual Action Plan for the year 2015-16 is Rs.163.00 crore. During 2015-16 more emphasis is given for providing infrastructure, protected cultivation and Post Harvest Management. The details are given in **Table. 7.41**



**Table 7.41: Progress of programme implementation during 2015-16 Under NHM**

Programme	(Units)	Annual Target		Achievement (upto Dec. 2015)	
		Physical	Financial (Rs. in lakh)	Physical	Financial (Rs. in lakh)
Nursery	(Nos.)	8	110.00	1	7.50
Tissue Culture Lab	(Nos.)	1	60.00	0	0.00
Vegetable seed Production	(Ha.)	95.00	11.63	0	0.00
Import of Planting Material (District)	(Nos.)	0	0.00	0	0.00
New Area Expansion	(Ha)	8278	1531.76	6447.53	1159.58
I & II year Maintenance	(Ha.)	9452.67	566.45	8556.04	509.06
Mushrooms	(Nos)	0	0.00	0	0.00
Rejuvenation of Old/Senile Orchards	(Ha.)	1894.00	378.80	1412.99	267.43
Creation of Water Storage Structures	(No.)	477	640.25	198	162.60
Protected Cultivation	(Ha.)	1700.59	3625.26	1047.04	703.21
Integrated Nutrient / Pest & Disease Management.	(Ha.)	33694.00	419.19	26481.56	332.61
Organic Farming					
Adoption of Organic Farming	(Ha.)	1500	48.50	201.00	5.80
Vermi compost / Bio- digester units	(No.)	800	240.00	385.00	121.76
Pollination support through bee keeping	(No.)	7694	65.37	2716	23.42
Mechanization	(No.)	1165.30	504.17	178	97.35
Front Line Demonstration (FLD)	(No)	0	0.00	0	0.00
Human Resource Development	(No.)	8360	472.80	4566	81.09
Integrated Post Harvest Management.					
Pack Houses	(No.)	653	1306.00	242	466.00
Reefer Vans	(No.)	4	36.40	1	8.56
Primary/Mobile Processing	(No.)	85	850.00	76	268.90
Cold Storage Units	(No.)	2	254.60	0	0.00
Ripening Chamber	(No.)	10	129.48	4	23.52
Onion Storage Structures	(No.)	270	236.50	107.50	82.68
Establishments of Marketing Infrastructures	(No.)	154	251.00	57	16.40

#### **Planned activities for Implementation of NHM Scheme for 2016-17:**

The Mission has planned to prepare the draft annual action plan for an amount of Rs. 200.00 crore for the year 2016-17. Emphasis will be given on the following programmes.

- Post Harvest Management
- Protected cultivation
- Rejuvenation programmes

- Integrated pest /disease and Nutrient management
- Mechanization.
- Marketing Infrastructure Programmes.

#### **b) National Mission On Oil Seeds And Oil Palm (NMOOP):**

In India, every year about 90 lakh tons of edible oil is being imported at a total cost of Rs.65,000 crores per annum. Therefore, in

order to decrease National foreign exchange and achieve self sufficiency in edible oil production, both Central and State Govt. are encouraging oil palm cultivation since 1990-91. The financial sharing pattern between Central and State Governments is in the ratio of 50:50.

**Objectives of the scheme:**

- To increase area and productivity of oil palm crop in the state
- To bring about crop diversity in the state.
- To improve the economic status of farmers through oil palm cultivation.
- To bridge the existing gap between demand and supply of edible oil in the country.
- To achieve self sustainability in edible oil production and save foreign exchange involved in importing edible oil.

It is known from the survey that in Karnataka, an area of about 2.60 lakh ha. has potential for oil palm cultivation. Since, Oil Palm is a water loving palm, its cultivation is being taken up by farmers in the districts which come under Command areas of Cauvery, Bhadra, Thungabhadra, Krishna, Malaprabha and Ghattaprabha through Government approved oil palm entrepreneurs.

For integrated oil palm development, the responsibility of nursery raising, area expansion, distribution of inputs, procurement of Fresh Fruit Bunches (FFBs) and establishment of processing mill has been entrusted to Private partners. Hence, this programme is being implemented in a Public Private Participation (PPP) module. Currently, 5 entrepreneurs are operating in Karnataka. In order to protect the interest of oil palm farmers, oil palm entrepreneurs and oil palm industry as a whole, the State Government has passed the "Oil Palm Cultivation, Production and Processing regulation Bill" during the year 2013. Currently in the State, around 10000 farmers are cultivating oil palm in an area of about 11000 ha. The annual production of oil palm FFBs is about 14500 M.T, out of which

about 2497 M.T of Crude Palm Oil (CPO) is being extracted.

In order to encourage the farmers to take up oil palm cultivation, the farmers are being provided with various kinds of assistance. To establish oil palm plantations, farmers are given input assistance at the rate of Rs.16,000/- per hectare in the form of inorganic fertilizers for an initial period of four years or pre-bearing period and planting material subsidy at Rs.8,000/- per hectare. Subsidies are also extended for the purchase of various implements, to adopt drip irrigation, inter cropping, borewell, water harvesting structures and diesel pumpset. Farmers are also taken on exposure visits and imparted training on advanced cultivation practices. As on December-2015, 134849 seedlings have been distributed to the farmers for area expansion.

**Well-Organized Marketing Facility:**

Under Oil Palm Development Programme, in order to purchase the produce of farmers, there is a well organized buy-back arrangement. The oil palm entrepreneurs, to whom specific areas have been allotted, procure the FFBs from the farmers at a price declared by the Government. The prices are decided based on scientific formula approved by Price Fixation Committee, in which the oil palm farmers, oil palm entrepreneurs are the members. The Committee is headed by Principal Secretary to Government, Horticulture Department. The entrepreneurs make payment to the farmers once in a month directly to their bank account through Esther FFBs price for the month of December-2015 has been fixed at Rs.5291/- per ton of FFBs.

The Central Govt. has allocated an amount of Rs.5.56 crores for the year 2015-16. Under State Sector an amount of Rs.461.46 lakhs and under District Sector program an amount of Rs.95.00 lakhs has been allocated. The physical and financial achievements of the oil palm development program are given in **Table 7.42.**

**c) Pradhan Mantri Krishi Sinchayee Yojana (PMKSY):**

During 2014-15 the assistance for Micro Irrigation was a part of On Farm Water Management (OFWM) under the new scheme National Mission on Sustainable Agriculture (NMSA). The Govt. of India has instructed to implement the micro irrigation

(NMSA/OFWM) under Pradhan Mantri Krishi Sinchai Yojana (PMKSY) from 2015-16. The Govt. of India has allocated Rs. 7040.25 lakhs to implement the scheme in Karnataka on the basis of 50:50 sharing pattern between central and state Governments. The sharing pattern in DPAP (Drought Prone Area Programme) and Non DPAP for different categories of farmers is presented in table 7.43

**Table 7.42: Physical and Financial progress under Oil Palm Development programme**

Year	Physical(Area Expansion) (ha)		Financial (Rs. In lakhs)	
	Target	Achievement	Target	Achievement
2014-15	3000	1991	1013.49	678.06
2015-16 (as on Dec-2015)	2000	943	559.462	466.61

**Table 7.43: Details of sharing pattern in DPAP and Non DPAP for different categories of farmers**

Category of farmers	DPAP/DDP (%)			Non DPAP(%)		
	Central Share	State Share	Total	Central Share	State Share	Total
SF/MF	30	30	60	22.50	22.50	45
Others	22.50	22.50	45	17.50	17.50	35

The Government of India has reallocated the sharing pattern between central and state Government as 60:40, the details of which are as follows:

**Table 7.44: Sharing Pattern Between Central and State Government of DPAP and Non DPAP**

Category of farmers	DPAP/DDP (%)		Non DPAP (%)	
	Central share	State share	Central share	State share
Small and Marginal	36	24	27	18
Others	27	18	21	14

The State Government is providing 90% subsidy to all categories of farmers. Now, the sharing pattern is as follows.

**Table 7.44a: Sharing pattern between Central and State Government of DPAP and Non DPAP**

Category of farmers	DPAP/DDP (%)			Non DPAP (%)		
	Central Share	State Share	Total	Central Share	State Share	Total
Small and Marginal	36	54	90	27	63	90
Others	27	63	90	21	69	90

**Table 7.45 : progress under Micro irrigation**

Period	Physical (In. L.Ha.)		Financial (Rs. in Crores)	
	Target	Achievement	Target	Achievement
During 11 <sup>th</sup> 5 year Plan	1.93	1.57	570.89	444.87
2012-13	0.65	0.52	194.60	193.23
2013-14	0.56	0.50	225.65	214.53
2014-15	0.67	0.46	255.22	249.28
*2015-16	0.39	0.04	225.10	20.45

(\* upto the end of December 2015)

**7.13 Objectives of the scheme:**

- Conservation of water by adopting micro irrigation.
- To save 50 to 70 percent water, electricity and labour cost by encouraging by giving subsidy of 90% to the farmers to adopt micro irrigation.
- To save 30-40 % chemical fertilizers by providing fertilizers to the crops through irrigation under micro irrigation.
- Increase in the yield and productivity by 30-100%.

Since inception of the scheme, an area of 4.62 lakh hectares has been brought under Micro Irrigation by providing subsidy of Rs.1,31,783.95 lakhs to the farmers who have installed Drip/ Sprinkler for Horticulture, Agriculture and Sericulture crops. The progress achieved under Micro irrigation scheme is given in the **Table 7.45**.

**Programme Guidelines:**

1. During 2015-16 the assistance for Micro Irrigation is a part of Centrally Sponsored Micro Irrigation under Pradhan Mantri Krishi Sinchayee Yojana (PMKSY).
2. Under the scheme, subsidy is provided for installation of drip irrigation for all Horticulture crops except Coffee, Tea and Rubber.

3. The assistance is extended up to 5.00 hectares per beneficiary family. In case of Vegetables and Flowers the subsidy is given upto maximum of 2.00ha.
4. Assistance for installation of drip/Sprinkler irrigation is provided under centrally sponsored scheme to each beneficiary family up to 90% of cost of installation for first 2.00 ha. and 35% to 60% as per Government of India norms for subsequent 3.00 ha. limited to the upper limit, the details are as follows

Category of farmers	DPAP/DDP (%)	Non DPAP (%)
Small Farmer/Marginal Farmer (SF/MF)	60	45
Others	45	35

\*DPAP- Drought Prone Area Development Programme, DDP- Desert Development Program

Preference is given to those farmers who have installed drip irrigation to mixed crop grown in areca/coconut plantations..**2: Horticulture Extension and Training:**

Various media are functioning to give information about the new technologies and improved hybrid varieties of crops to farmers. To conduct these programmes effectively, Horticulture Extension and Training scheme is being implemented. The following main activities are being taken up under this programme.

### **Activities Horticulture Information Center:**

1. Participating in National and International Flower/Horticulture Shows, Mango and Jackfruit mela, Independence Day and Republic Day flower show, Dasara Exhibitions, Krishi Mela etc.
2. Organising Trainings, Horticulture Day, Seminars, Workshops
3. Printing and distribution of Brochure /Technical Bulletin/ Manuals/Calendars, Blowups, Charts, CDs Advertisement expenses, Department publications, etc.
4. Purchasing and distribution of books, magazines / Journals of Horticulture published by the Universities /Research centers.
5. Preparation of documentary films about development in horticulture and implementation of departmental schemes.

### **Horticulture Training Programmes:**

In order to enrich theoretical, practical and creative knowledge among the rural youth, a training Institute was established in 1995-96 in Lalbagh, Bengaluru. Currently, there are 10 training centers functioning. Every year, about 360 farmer's children are being trained through these centers.

#### **(a) Horti-clinic Activities:**

Horticulture information and consultancy center, Horti-clinic was established during the year 2010-11. At present, 1 State level horti-clinic, 26 district level horti clinics and 2 mobile units are working.

#### **Activities of the Scheme:**

- Collecting and publishing recent information about new technologies for Development of Horticulture.
- To Prepare Horticulture Projects for adoption of horticulture schemes

and to prepare projects proposal for bank loan

- Giving information about horticulture schemes.
- Conducting training to farmers in Horti-clinic centers.
- Organizing training programs, study tour to the Farmers / officers of Horticulture Department and to organize tri-monthly workshop for the officers in co-ordination with University of Horticultural Sciences.

#### **(b) Flower Shows:**

Conducting District / State level trainings and flower show programmes to provide information about recent developments in horticulture to interested farmers and public.

During the year 2014-15, an amount of Rs. 350.00 lakhs has been allocated, of which Rs. 327.31 lakhs has been spent. During the year 2015-16, Rs.355.00 lakh has been allocated out of which, Rs. 183.33 lakhs has been released of which Rs. 91.60 lakhs were spent till the end of December-2015.

### **7.13.3 Integrated Pest and Disease Management in Horticultural Crops:**

To increase the yield of Horticultural crops by protecting them from pests and diseases, Integrated Management of Pests and Disease Programme is being implemented by the department. To control pests and diseases in Horticultural crops, subsidy is being provided to the farmers for purchase of Bio-pesticide, plant based pesticide, chemical pesticides. In addition, pest surveillance is undertaken in different districts to predict the outbreak of pest and diseases and create awareness in the management of pests and diseases like eriophyidmite, black-headed caterpillar, stem bleeding, tomato leaf curl virus, bacterial blight and koleroga of arecanut.

**Objectives:**

- Production of parasites in Department laboratories and release them free of cost in the affected Coconut gardens for the control of Black headed caterpillar.
- Assistance to farmers for purchase of plant protection chemicals to control the pest and diseases of Horticulture crops.

During 2014-15, Rs.213.91 lakhs has been spent as against release of Rs.218.12 lakhs. During 2015-16, Rs.253.00 lakhs has been allocated for parasite production, brachymeria production, assistance for chemicals purchase, staff salary, tour allowance and others, special component programme and tribal sub plan. As on December 2015, Rs.189.75 lakhs has been released, out of which Rs. 94.48 lakhs has been spent. There are 26 parasite laboratories in the department where in 278 lakh Goniozus parasites and 1.00 lakh Brachymeria parasites were produced and released during 2014-15. During 2015-16, Rs.124.419 lakh Goniozus parasites were produced up to end of December-2015 and distributed to the beneficiaries for releasing in coconut garden. Details of the programmes progress are given in **Table. 7.46.**

**7.13.4:Rashtriya Krishi Vikas Yojane (RKVY):**

Rashtriya Krishi Vikas Yojana (RKVY) is a Centrally Sponsored Scheme which is focused to reorient the development strategies for rejuvenation of agriculture and allied sectors and to meet the needs/demands of farmers.

This scheme is being implemented since 2007-08 in all the 30 districts of the State.

**Objective:**

- To provide help to gear up productivity.
- To streamline the distribution of Horticulture produce and strengthen the marketing network.
- To encourage rural employment and prevent the migration of farming community to urban areas.
- To promote value addition in Horticulture
- To encourage the development of farming community by formation of Farmer Producer Organization.

**Various important programmes implemented under RKVY are,****(a) Precision Farming in Banana:**

There is scope to increase the yield of banana up to 40-50% by application of necessary inputs and adoption of improved cultivation practices. Precision Farming in banana programme was taken up under RKVY in all the 30 districts from 2011-12 onwards.

**Objectives:**

The main objective of the programme is to raise the productivity levels by educating the farmers about scientific cultivation, using tissue culture plants, drip irrigation, fertigation, mulching, integrated nutrition and appropriate plant protection measures.

**Table 7.46: Details of Disease and Pest Management Programme, (Rs. in lakhs)**

Sl. No	Programme Name	During 11 <sup>th</sup> Five Year Plan Period		2014-15		2015-16	
		Target	Achievement	Target	Achievement	Target	Achievement (upto December)
1	Integrated Pest and Disease Management Programme for Horticulture crops	1229.11	885.02	250.84	213.91	253.00	94.48

During the year 2014-15, an amount of Rs.406.28 lakhs was released with a financial achievement of Rs.406.28 lakhs covering about 2028.83 acres. In 2015-16, the scheme is being implemented with a financial target of Rs. 200.00 lakhs and physical target of 1000 acres. As on December 2015, an amount Rs.200.00 lakhs has been released and Rs.150.00 lakh has been spent to encourage Banana farming in an area of 870.25 acres.

**(b). Mechanization:**

It has become very essential to encourage production and post harvest activities in horticulture because of high increase in the value of horticulture production in the state. Horticultural Mechanization is a solution for the problems like severe shortage of agricultural labourers and sharp increase in labour cost.

**Objectives:**

- To reduce the investment cost in horticulture.
- To decrease the cost of cultivation by reducing dependence on labour

"Mechanization in Horticulture" is being implemented under Rashtriya Krishi Vikas Yojana (RKVY). Only those farmers purchasing equipments /machineries from the companies/ suppliers empanelled by the Horticulture Department will be assisted in the form of subsidy. During the year 2014-15, an allocation of Rs.2542.45 lakhs was made, out of which Rs. 2542.45 lakhs have been spent and subsidy is given for 14,884 equipments. During the year 2015-16, a budgetary provision of Rs.615.36 lakhs has been made for this programme and at the end of December-2015, an amount of Rs. 298.43 lakhs has been released and Rs. 37.81 lakh has been spent giving subsidy for 93 equipments.

**(c). Establishment of Flower Auction Centers:**

To streamline the marketing system for flower crops and to provide scientific infrastructure facilities in the market, the Government approved a budget outlay of Rs.15.00 crores for establishment of 6 Flower Auction Centers in Tumkur, Davangere, Udupi, Sirsi (UK),

Madikeri and Belgaum Districts. The project is being implemented from 2008-09.

**(d) Vegetable Initiatives for Urban Cluster:**

This scheme is being implemented to address all problems in the value chain, right from the stage of pre-production to the consumers Table through appropriate interventions and to ensure supply of safe, good quality fresh as well as processed vegetable produce at competitive price to urban consumers.

**Objectives:**

1. To promote economically viable farmers and self governing farmer producer organizations.
2. To provide complete assistance to Farmers Producers Organizations (FPO's) for acquiring technical, financial, administrative and infrastructure facilities.
3. Overall strengthening of FPO's by engaging qualified and experienced Resource Institutions (RI).
4. Enhancing vegetable production and productivity improve nutritional security and suggest means to increase income of farmers.
5. To provide safe, good quality vegetables at competitive price to urban consumers and increase employment opportunities by strengthening supply chain of fresh as well as processed vegetables.
6. To develop and promote technologies for enhancing production and productivity of vegetables.
7. To address all problems in the value chain, right from the stage of pre-production to the consumers Table through appropriate interventions.
8. Employment generation for skilled and unskilled persons, especially for unemployed youth.

During the year 2014-15, an allocation of Rs.769.13 lakhs was made, out of which Rs.676.03 lakhs have been spent for encouraging vegetable cultivation under open and protected conditions in a total area of 290.77 hectares and emphasis is given for urban clusters. During the year 2015-16, a budgetary provision of Rs.174.62 lakhs has been made for this programme and the programme is being implemented. An amount of Rs.147.50 lakhs has been released upto the end of December-2015 and Rs.100.00 lakh

has been spent to produce vegetables in an area of 30 hectares under and protected conditions.

**(e) Protected Cultivation of Flowers and Vegetables:**

**Objectives:**

1. To increase the profit of small land holders, by encouraging them to grow short term, profitable flower and vegetables crops by adopting technology.
2. A large Variety of seasonal crops can be grown throughout the year under protected cultivation.
3. The liberalization of industrial and trade policies paved the way for smooth export of cut flowers under protected cover.
4. Generate self- employment opportunities for skilled and partially skilled labourers.
5. To increase the social and financial status of the farmers.
6. To reduce the usage of plant protection chemicals through protected cultivation.

During the year 2014-15, an allocation of Rs.2827.32 lakhs was made, out of which Rs. 2827.32 lakhs have been spent for encouraging the farmers to grow flowers and vegetables under protected cultivation structures in a total area of 72 hectares. During the year 2015-16, a budgetary provision of Rs.882.58 lakhs has been made for this programme and the programme is being implemented. An amount of Rs.277.74 lakhs has been released during the end of December-2015 and 195.00 lakh has been spent to encourage cultivation of flowers and vegetables under protected cultivation structures in a total area of 4.60 hectares.

**(f) Rejuvenation of drought affected Coconut gardens in Karnataka State:**

The State Technical Committee constituted by the State Government under the leadership of Dr. Narayanagouda, Vice Chancellor, UAS, Bangalore to recommend suitable packages for the drought affected Coconut gardens has recommended the following two packages.

- 1) Alternate cropping with cashew, mango, sapota, guava, etc in completely dried coconut areas and
- 2) Rejuvenation of partially affected coconut gardens.

Based on the above recommendations, under RKVY scheme assistance is being provided for rejuvenation and replanting of drought affected Coconut gardens.

During 2014-15, an amount of Rs.1007.72 lakhs has been released under RKVY out of which Rs.998.68 lakhs financial progress has been achieved. Further, during 2015-16, an allocation has been revised to Rs.653.05 lakhs and up to the end of December-2015, an assistance of Rs.460.83 has been provided to review drought affected coconut gardens in an area of 2301 hectares.

**(g) Rejuvenation of Betelvine:**

Betelvine being a very sensitive crop, the creepers are getting affected due to changing climatic conditions, nutrition deficiencies, improper cultivation and many types of pests and diseases. Hence, undertaking rejuvenation of Betelvine and adoption of improved cultivation practices to prevent crop loss has become essential. In this context, during 2014-15 under RKVY scheme, Rejuvenation of Betelvine is being implemented. Under this scheme, assistance is being provided for rejuvenating, replanting and for adoption of GMP in the unproductive/ senile betelvine orchards. During 2014-15, an amount of Rs.98.57 lakhs was released out of which Rs.97.60 lakhs was spent for rejuvenation of 509.81 hectares of betelvine gardens. During 2015-16, an amount of Rs.80.00 lakhs has been earmarked out of which Rs.80.00 lakhs has been released upto the end of December 2015, an assistance of Rs.60.00 lakh has been provided for rejuvenation of 347 hectares of betelvine gardens.

**(h) Production and supply of planting materials in Departmental Farms & Nurseries:**

Horticultural seed and planting materials produced in 410 Horticultural farms and nurseries spread across the State are being supplied to farmers at affordable rates. During 2014-15, 31.59 lakhs of various Horticultural planting materials have been propagated. 41.76 hectares of progeny orchards have been established. Various infrastructure facilities like green house, Shade net and irrigation structures have



been established in Departmental farms and nurseries. During the year 2015-16, this programme is being implemented to strengthen the Departmental farms and nurseries by producing grafts and seedlings of various horticultural crops, progeny orchards, insect proof net house, irrigation facilities and to strengthen the Departmental farms and nurseries by constructing compound and fencing.

### 7.13.5: Comprehensive Horticulture Development (CHD):

There is an urgent need to bring about changes in the following aspects to set right drawbacks in the chain of Horticulture development in the State.

- Adopting precision farming in the field of production.
- Scientific and effective management of water.
- Post harvest management.
- Processing, value addition, market and export management.

To achieve this, a new programme Comprehensive Horticulture Development scheme is being implemented since 2012-13.

#### Objectives:

- To increase the production and productivity of horticultural crops by 60% by establishing state horticulture on the basis of comprehensive scientific development.

- To encourage farmers to grow profitable Horticultural crops instead of traditional agriculture crops.
- To decrease the post harvest loss from 25% to 10% by correcting the defects in post harvest chain and increasing the quality of horticulture produce.
- To expand the horticulture crop area by about 25,000 Ha through establishment of around 850 cluster villages covering all taluks within a period of 3 years.
- Adopting improvements in new innovations like drip irrigation, fertigation, precision farming and pest and disease management in Horticulture sector.
- Better marketing management of horticulture produce.
- To strengthen the socio-economic status of the farmers by providing employment opportunity to around 50,000 farmers families depending on horticulture directly and to around 2 lakh people indirectly.

The scheme has been implemented on cluster mode by grouping the farmers from 2-3 neighboring villages willing to grow Horticulture crops. Training and exposure visits were conducted for interested registered cluster members to enhance their knowledge regarding the new technologies and marketing strategies to be adopted in the field. The total achievement is as follows in **Table 7.47.**

**Table 7.47: The progress achieved under Comprehensive Horticulture Development Programme, (Rs. In lakhs)**

Year	Budged earmarked	Financial allocation	Budget released	Achievement	% achieved to the released budget
2012-13	15000.00	26000.00	18789.65	17155.40	91.30 %
2013-14	17500.00	14550.00	12686.89	12202.66	96.18 %
2014-15	20000.00	9693.00	9387.14	9249.18	98.53%
2015-16*	10501.00	10501.00	7875.75	3125.38	39.68%

(\*Up to end of December 2015)

**(a) Farmer Producers Organizations (FPO's):**

Collectivization of producers, especially small and marginal farmers, into producer organizations has emerged as one of the most effective pathways to address the many challenges faced by farmers. Most importantly, this provides improved access to investments, technology and inputs and markets. Department of Agriculture and Cooperation, Ministry of Agriculture, Govt. of India has identified farmer producers organizations registered under the special provisions of the Companies Act, 1956 as the most appropriate institutional form to mobilize farmers and build their capacity to collectively leverage their production and marketing strength.

**Objectives:**

1. Mobilizing farmers into groups of between 15- 20 members at the village level (called Farmer Interest Groups or FIGs) and building up their associations to an appropriate federating point i.e., Farmer Producer Organizations (FPOs) consisting of 1000 members from 50 FIGs so as to plan and implement product-specific cluster/commercial crop cycles.
2. Enhancing productivity through best agricultural practices.
3. Ensuring usage of quality inputs and services for intensive agriculture production and enhancing cluster competitiveness.

4. Facilitating access to fair and remunerative markets by linking producer groups to marketing opportunities through market aggregators.

The Department of Horticulture, Govt. of Karnataka in association with Small Farmers Agri-business Consortium (SFAC), New Delhi, a Nodal Agency for FPO, Govt. of India has established 58 Farmers Producer Organizations (FPO's) during the year 2014-15 and planned to establish 34 new Farmers Producer Organizations (FPO's) for the year 2015-16.

**(b) Post Harvest Management:**

During 2014-15, post harvest management is a component under CHD scheme. It includes activities related to grape dehydration, red chilli powdering, vanilla processing, wine making unit and desiccated coconut powder units etc. Since, Horticulture produce like fruits, vegetables and flower are perishable, it is important to provide proper post harvest management practices for these produces. Karnataka has 99 cold storages, of which 91 are in private, 4 are in co-operative and 4 are in public sector. To make the existing storage facilities economical and to encourage establishment of new cold storages in private /co-operative sector, electricity subsidy of Rs.1/-is provided for every unit of electricity consumed by the cold storage units. Details of progress of activities for post harvest management are given in **Table 7.48**.

**Table 7.48: Physical and financial achievement under postharvest management**

Year	Physical (No. of processing units)		Financial (Rs. in lakhs)	
	Target	Achievement	Target	Achievement
2011-12	12	13	500.00	299.58
2012-13	19	19	150.00	145.93
2013-14	28	28	200.00	197.23
2014-15	96	96	250.00	184.62
2015-16*	115	35	300.00	124.15

\*(up to December 15)

**Table 7.49: Progress of Potato Special Package under CHD**

Year	Annual Physical (in ha.)		Annual Financial (Rs in Lakhs)	
	Target	Achievement	Target	Achievement
2012-13	35000	22319.96	1750.00	941.006
2013-14	18306	23383.66	915.34	830.36
2014-15	15000	19235.90	750.00	733.43
2015-16*	14000	12207	753.00	444.08

(upto the end of December)

**(c) Potato Special Package Under CHD:**

With the main objective of providing subsidy to potato growing farmers for purchase of Bio-fertilizers, Plant Protection Chemicals and Organic manures to prevent Late Blight of

**7.13.6:Karnataka Wine Policy:**

Karnataka Grape Wine Board has been set up to formulate wine policy and implement the programmes that encourage Grape production and processing, production and marketing of wine and help the grape growers to overcome the market uncertainties by linking grape production with wine processing.

During the year 2014-15, a budgetary provision of Rs.350.00 lakhs has been allocated out of which Rs.147.50 lakhs has been released as share capital and Rs.202.50 lakhs for developmental activities.

During the year 2015-16, a budgetary provision of Rs.350.00 lakhs has been for the developmental activities of the Board. A budget of Rs. 262.50 lakhs has been released up to December 2015 and Rs. 175.00 has been spent for developmental activities.

**7.13.7: Karnataka State Spices Development Board:**

To increase spice production by area expansion, improvement of productivity, to improve quality, marketing facilities and to enhance the skills of farmers by imparting knowledge about spices production and processing and for value addition, Karnataka State Spices Development Board has been established at Hubli.

**Objectives:**

- To achieve good progress in this sector by giving emphasis for

potato and for potato crop insurance, the scheme Potato Special Package is being implemented from the year 2012-13.The annual targets and achievements for the period 2012-13 to 2015-16 are given below.

comprehensive development of spice crops.

- To institutionalize the production, marketing and processing spice crops in the state through the establishment of a statutory board.
- To promote the cultivation of suitable quality spice crops in the state to suit both domestic and international markets.
- To improve professional skill and efficiency of the farmers by providing scientific information.

During 2014-15, Rs.707.94 lakhs has been released and this amount is being utilizing for spice crops development programmes. During 2015-16, an amount of Rs.758.00 lakhs is earmarked and Out of this Rs. 568.50 lakhs has been released upto the end of December-2015, out of this Rs. 189.50 lakh is being used for developmental activities.

**7.13.8: Assistance to Boards and Corporations:**

With an intention of providing comprehensive marketing facility to horticultural produce, the State government is giving assistance to Horticulture boards and corporation.

**Objectives:**

- To create infrastructure facilities in district HOPCOMS for Fruit and Vegetables growers and to assure fair price for the crops.
- To provide corpus fund to Karnataka State Mango Development and

Marketing Corporation or organizing developmental programmes.

- To Provide Financial Assistance to Karnataka State Wine Board for organizing developmental programmes.
- To provide advanced technical information regarding Horticulture.

**(a). Karnataka State Mango Development and Marketing Corporation Ltd.,:**

Karnataka State Mango Development and Marketing Corporation Ltd. came into existence under the Companies Act 1956 on 19-01-2011. Its Head Office is located in Lalbagh, Bengaluru.

**Vision:** Formulating schemes related to cultivation aspects, Post-harvest Management, Mango Mela and Export Oriented activities on scientific basis for comprehensive development of the Mango crop and prosperity of mango growers.

**Mission:** To increase production, productivity and to improve the quality of mango crop on scientific basis by dissemination of excellent technology through training and demonstrations.

**Objectives:**

1. To promote cultivation of Mangoes on scientific lines in order to produce good quality fruits suitable for both domestic and export markets.
2. To assist the farmers and entrepreneurs in post harvest management and marketing of Mangoes.
3. To give importance for processing and value addition.
4. To earn valuable foreign exchange by promoting export trade of Mangoes
5. To achieve greater scientific knowledge, professional skill and efficiency by imparting training to all the stakeholders regarding Mango production and marketing.

The details of progress are given in **Table 7.50**.

**(b). Karnataka Wine Board:**

To take up the developmental activities of the Wine Board, budgetary provision has been made under Assistance to Boards and Corporations.

**Table 7.50: Progress under Karnataka State Mango Development and Marketing Corporation Ltd (Rs. In Lakhs)**

Year	Particulars	Budget allocation	Release	Expenditure
2014-15	Corpus fund	164.00	164.00	164.00
	Developmental fund	490.00	490.00	490.00
	Salary and other	100.00	100.00	100.00
	<b>Total</b>	<b>754.00</b>	<b>754.00</b>	<b>754.00</b>
2015-16(up to December-15)	Corpus fund	104.00	26.00	26.00
	Developmental fund	550.00	137.50	137.50
	Salary and other	100.00	25.00	25.00
	<b>Total</b>	<b>754.00</b>	<b>188.50</b>	<b>188.50</b>

**Table 7.51. Progress under Karnataka Wine Board, (Rs. In Lakhs)**

Year	Particulars	Budget allocation	Release	Expenditure
2014-15	Developmental fund	200.00	200.00	200.00
2015-16*	Developmental fund	200.00	50.00	50.00

\*(up to Dec-15)

**(c).Marketing and Providing Infrastructure Facilities:**

The 22 Horticultural Produce Marketing and Co-operative Societies which have been established at the district level on the lines of HOPCOMS in Bengaluru. In this regard, a project for strengthening all district level HOPCOMS through Karnataka Horticulture Federation has been approved under RKVY with an outlay of Rs.26.50 crore. During 2012-13, Rs. 2.50 crores has been released. During 2015-16, the above said programme is being implemented under Assistance to Boards and Corporations.

During the year 2012-13 & 2013-14, the State sector scheme of Procurement of fruits and vegetables has been implemented to create infrastructure facilities for the collection of fruits and vegetables with a release of Rs.5.00 crore to K.H.F., Bengaluru and 11 district HOPCOMS. The same amount has been allocated in the year 2015-16 also. The progress under this scheme is given in **Table 7.52**.

**7.13.9:Biotechnology:**

The Biotechnology Centre of the Department of Horticulture is taking up activities like germplasm conservation, tissue culture, mushroom development, production of Bio-fertilizer and Bio-pesticides, soil, water & leaf analysis and DNA finger printing. Propagation of horticulture crops including medicinal and aromatic plants by adopting tissue culture and green house technology is an important commercial activity of the centre.

A total of 7.50 lakhs tissue culture plants have been produced by utilizing Rs.107.20 lakhs and 235 tonnes of bio-fertilizers and bio-control agents and vermicompost have been produced by utilizing Rs.67.39 lakhs upto the end of December-2015 under the

Development of Departmental Laboratories and by utilizing the revolving fund under KSHDA.

Training programmes and demonstrations have been arranged at this centre to create awareness about cultivation and consumption of mushroom Organic farming, Kitchen & Terrace gardening etc. A total of 28,200 Spawn bottles, 90.98 kg mushroom crop and 413 spawn run bags were produced upto the end of December 2015. Under Extension and Training Programme 16 training programmes were organized and a total of 703 farmers / public / students have been trained.

A total of 2526 & 870 water, soil and leaf samples were analyzed, for macro nutrients & micro nutrients respectively. In addition 157 samples of organic manure for quality, 96 samples for residue analysis, 426 samples for heavy metal contents and 121 phytosanitary samples have been analyzed up to the end of December-2015 in the departmental labs.

Further, under the scheme of Development of Departmental Laboratories, upto December-2015, a total of 5612, 1702 and 2000 water, soil and leaf samples were analyzed in Shivamogga, Vijayapur and Belagavi districts respectively. A total of 7500 mushroom spawn bottles were produced in Mysuru district.

The programme Vegetable Seed Sampling and Analysis is being implemented under Development of Departmental Labs. Scheme since 2011-12. The main objective of the scheme is to control sale of spurious seeds, correct analysis of the seed samples.

**Table 7.52: Progress under Assistance to Boards and Corporations implemented through KHF.**

Year	Financial (Rs. In lakhs)	
	Target	Achvt
2012-13	500.00	500.00
2013-14	500.00	500.00
2014-15	500.04	324.06
2015-16 (December 2015)	500.00	-

**Table 7.53: Progress under departmental Labs**

Year	Annual Physical		Annual Financial (Rs in Lakhs)	
	Target	Achievement	Target	Achievement
2011-12	2000	1418	10.00	9.55
2012-13	2000	1362	10.00	13.47
2013-14	2500	2397	30.00	28.75
2014-15	2200	2152	24.43	24.42
*2015-16	700	153	9.00	2.49

\* (up to December-2015)

**Table 7.54: National Mission on Medicinal Plants for the Year 2015-16**

Sl. No	Name of the Medicinal Plants	Area(ha)	Achievement (Rs. In Lakhs)
i.	Crops for 75% subsidy		Under NMMP, an action plan for Rs. 137.20 lakhs was approved by Government of India and has already released the amount to the department of Ayush and the release of amount to Department is awaited.
1.	Sandal wood	52	
2.	Raktachandan	18	
ii.	Crops for 30% subsidy		
1.	Ashwagandha	242	
2.	Tulsi	70	
3.	Coleus	4	
4.	Aloe vera	19	
5.	Andrographis (Kalmeg)	16	
6.	Senna	26	
7.	Amla	28	
8.	Stevia	10	
9.	Acorus calamus	11	
10.	Mucunna Prurita	23	
11.	Safedmusli	10	

Further, an Annual Action Plan for an amount of Rs.137.20 lakhs has been approved from Government of India under National Mission on Medicinal plants scheme for the year 2015-16, which includes programmes like area expansion of medicinal plants, development of nurseries, establishment of Storage/ Godown units etc. Government of India has already released the amount to the Department of Ayush and release of amount to the Department is awaited.

#### **7.13.10: Apiculture Development Programme:**

Apiculture being beneficial to mankind is emerging as a profitable industry providing

export opportunity. Apiculture plays a major role in providing financial independence to the practicing bee keepers. As Honey bees help cross-pollination in Horticulture and Agriculture crops, high and good quality yield can be obtained. Having many medicinal properties, Honey is the gift of nature to the human kind and Bee keeping can be practiced without much investment by landless small and marginal farmers, women and handicapped.

The department of Horticulture is implementing various programmes for bee keeping development under State/District sectors and National Horticulture Mission schemes.

**Objectives:**

- To create awareness on the importance of Honey bees in increasing farm production and on bee keeping and conducting training programmes,
- Distribution of bee boxes and colonies to the interested bee keepers on subsidized rates.
- Providing assistance to interested bee keepers to establish bee nurseries and production of disease resistant bee colonies (Apiaries).
- Maintenance and Development of Madhuvanas and nurseries of the department.
- To organize Madhu mahotsavas / Madhu mela and tour programmes at State / district level.
- To give wide publicity for beekeeping through leaflets / video and audio programmes.

To create awareness on bee keeping among beneficiaries, 2 days training is being given and interested beneficiaries are being given 50% assistance i.e. Rs. 1600/- for purchase of bee boxes and colonies. SC and ST beneficiaries are eligible for 90% assistance, i.e., Rs. 3600/- In order to facilitate the production of healthy bee colonies farmers are given assistance of Rs. 50,000/- for establishment of Apiaries / Colony production centers.

A budget provision of Rs.20.00 lakhs is made for infrastructure development of Bee keeping Training center and Madhuvana at Jamboti, Belagavi.

During 2015-16, to implement Apiculture Development programmes an allocation of Rs.200.00 lakhs under State Sector & Rs.79.50 lakhs under District Sector is earmarked. Up to December-2015, an amount of Rs.150.00 lakhs under State Sector and Rs.57.12 lakhs under District sector have been released. Bee keeping training of 2 days duration is given to 3155 beneficiaries, subsidy is given for the purchase of 1887 bee boxes and colonies to interested beneficiaries and Rs.8.82 lakhs is utilized for maintenance of 26 departmental madhuvanas with a total financial progress of Rs.116.42 lakhs.

**7.13.11:Karnataka Watershed Development Project-II Sujala-III:**

Based on the success of the Sujala-1, World Bank assisted Karnataka Watershed Development Project-II, Sujala-III is being implemented from 2012-13 to 2017-18 for a period of six years in eleven districts of Karnataka namely Bidar, Chamarajnagar, Davangere, Gadag, Kalburgi, Koppal, Yadgiri, Chikkamagalur, Vijayapura, Tumkur and Raichur. To implement this project totally 931 micro watersheds have been identified aiming to increase the income of farmers in rainfed areas by encouraging farmers to cultivate Horticulture Crops.

**Objectives:**

- To increase the production and productivity through demonstrations of perennial and annual horticulture crops.
- To establish soil, water and leaf analysis laboratory to identify the nutritional deficiencies in soil and to make suitable recommendations for increasing productivity in the field of farmers.
- To take up trainings, field days and exposure visits to educate the farmers on the improved technologies that can be adopted in crop diversification, post harvest management and marketing facilities.

For monitoring the project at state level and for implementation of the various project activities at the districts, 65 posts are created for which service support is provided under the project. For the year 2014-15 a budget of Rs.1000.00 lakhs was allocated and Rs.839.88 lakhs was spent. A budget of Rs.3200.00 lakhs is allocated for the year 2015-16. Demonstration of perennial and annual horticultural crops will be taken up in an area of 895 ha. Further, to educate farmers on adoption of improved technologies in cultivation practices, 383 trainings and 80 field days has been taken up imparting training to 25550 beneficiaries. To encourage co-operative ideology amongst the farmers 735 Farmers Interest Groups are formed and a

study will be taken up through a consultant to create different post harvest infrastructures like Pack House, Pre-cooling Unit, Ripening Unit, Low energy storage Units etc.,. A budget of Rs.154.66 lakhs is allocated to develop a model Micro Water Shed in departmental farms. An expenditure of Rs.280.45 lakhs is incurred under the project upto December 2015.

### 7.13.12 Integrated Farming in Coconut for Productivity Improvement

#### Programme:

To create awareness among the coconut growers about the adoption of improved farming systems/ new technologies in coconut like, Integrated nutrient management, Integrated management of pest and disease, adopting inter/ mixed cropping practices, moisture conservation methods in coconut plantation, etc, to increase the farm production for comprehensive development of Coconut crop, which is an important commercial crop of the State and to get better market price, "Integrated Farming in Coconut for Productivity Improvement Programme" is

being implemented by the department with the assistance from Coconut Development Board and State Govt.

The activities that are being implemented are, 1) Establishment and maintenance of demonstration plots 2) Subsidy for purchase of plant protection chemicals 3) Production of TXD hybrid coconut seedlings 4) Area expansion of coconut crop etc.

#### Objectives:

- To enhance the productivity of the coconut gardens by adoption of integrated farming systems.
- To increase the farmers' economy by growing Hybrid / dwarf coconut plants or inter / mixed crops.
- To encourage farmers to develop their Coconut garden into a model profitable plot.
- To provide insurance facility to the coconut palms destroyed by natural calamities.

Details of progress achieved are given in the **Table 7.58**.

**Table 7.58: Progress achieved under Integrated Farming in Coconut for Productivity Improvement Programme**

Sl. No	Year	Financial( Rs. in lakh)		Physical (Ha)	
		Target	Achievement	Target	Achievement
I	2014-15				
A.	Coconut Development Board assistance- Laying out of Demonstration plots and maintenance	181.50	181.40	1037	1037
B	Coconut crop improvement programme	300.00	299.49	3945	3969
<b>II</b>	<b>2015-16 (Upto December 2015)</b>				
A.	Coconut Development Board assistance - Laying out of Demonstration plots and maintenance	164.00	89.77	937	615.64
B	Coconut crop improvement programme	250.25	107.58	4767	2269



### 7.13.13: Scheme for establishment of Coconut Product Parks:

To economically strengthen farmers growing Coconut by helping integrated processing of coconut crop, facilitating better market price for coconut products through the establishment of coconut parks and also creating awareness among the farmers about the importance of other products obtained from coconut, it is intended to establish the Coconut Products Parks.

#### Objectives:

- To establish the coconut parks similar to that of Industrial parks and providing huge plots with all facilities to interested entrepreneurs so that different coconut processing industries can be established in one place.
- To provide better market facilities to coconut processed products and encourage their export.
- To provide employment opportunities in coconut growing area by establishing coconut processing industries.
- To support the coconut producer companies financially by providing equity share.

An amount of Rs.100.00 lakhs has been released during 2014-15 for establishment of Coconut products park in Sira taluk of Tumakuru district which was deposited to Nirmithi Kendra Tumakuru is conducting the during 2015-16 an amount of Rs.100.00 lakhs has been allocated and a Demand Assessment Survey (DAS) is being undertaken through TECSOK, Bengaluru for establishment of Coconut products park

### 7.13.14: Other important Activities Undertaken by the Department:

**(a) Assistance to Farmers:** Assistance to farmers is a district sector scheme comprising of 4 components, Area expansion, Plant

Protection, Ornamental plant production and Social Horticulture.

#### Objectives:

- Area expansion of perennial fruit crops by providing assistance to farmer.
- Providing assistance to plant protection.

During 2014-15 Rs. 200.87 lakhs was allocated and Rs.198.16 lakhs was spent. During the year 2015-16, a budgetary provision of Rs.216.28 lakh has been made for this programme and the programme has been implemented effectively with a financial achievement of Rs.101.82 lakhs upto the end of December 2015.

**(b) Publicity and Literature:** Collecting information about recent technologies in Horticulture and providing them to farmers through various media effectively, Publicity and Literature Scheme is being implemented throughout the state.

#### Objectives of the Scheme:

- Giving information about modern innovations in horticulture to farmers and encouraging them to make profits by adopting them.
- Giving information about new developments in horticulture to the farmers as well as the public.
- To increase technical knowledge of farmers by printing and distributing Brochure /Bulletin/Manuals having technical information on the cultivation of horticultural crops and departmental schemes.
- Conducting Symposium / Seminar / workshop / Field day in order to discuss and implement organic farming, drip irrigation in horticulture crops.
- Conducting District level Horticulture shows and Participating in Agriculture & Horticulture Melas

For the year 2014-15 an amount of Rs. 84.96 lakhs has been allocated, of which Rs. 84.20 lakhs has been spent. For the year 2015-16 Rs.101.19 lakh has been allocated out of which , Rs. 74.58 lakhs has been released of

which Rs. 53.24 lakhs were spent till the end of December-2015.

**(c) Farmers Training:** In order to educate farmers to get better returns by adopting newly developed improved hybrid varieties of high yielding potential crops and modern technology, training programmes are being conducted through 'Training to Farmers' programme under Zilla Panchayat Schemes. Under this scheme, both women and men farmers are being trained in preservation of fruits, vegetables and mushroom cultivation.

For the year 2014-15 an amount of Rs. 38.55 lakh has been allocated, 36.63 lakh has been released of which Rs. 35.70 lakh has been spent. For the year 2015-16, Rs. 46.72 lakh has been allocated out of which, Rs 29.69 lakh has been released of which Rs. 12.43 lakh were spent till the end of December-2015

**(d) Assistance to Cold Storage:**

Karnataka has 99 cold storages, of which 91 are in private, 4 are in co-operative and 4 are in public sector. To make the existing storages facilities economical and to encourage establishment of new cold storages in private / co-operative sector, electricity subsidy of Rs.1/- is provided for every unit of electricity consumed by the cold storage units.

**(e) Overviews of Financial development of University of Horticultural Sciences, Bagalkote:**

The University of Horticultural Science, Bagalkote, being the first Horticultural

University in Karnataka and the third Horticultural University in India, was established for overall economic development of farmers and Horticulture growers of Karnataka and for Education, Research. Having statewide jurisdiction and having completed 6 years of its service, it has generated high hopes in the field of horticulture. The University of Horticultural Sciences, Bagalkote is having 8 colleges, 1 Main research & Extension centre, 2 Regional Research and Extension centers and 8 Horticulture research stations, 10 All India Coordinated Research Projects (AICRPS) including a main campus at Bagalkot. The University plans to conduct new experiments in research and transfer the useful results to the farmers. 2046 Students, including 1110 Boys and 936 girls are studying in the university. For the financial year 2015-16, Rs.1.50 crores under plan head and Rs.33.95. crores under non-plan head have been released.

**(f) Karnataka State Horticulture development Agency (KSHDA):**

For the Special purpose of developing Horticulture farms and nurseries by rejuvenating them, Karnataka State Horticulture Development Agency (KSHDA) has been established. The main objective of the KSHDA is to produce high quality horticultural seed and planting materials and to build and operate Crop Development Resource Centres for holistic development of horticultural sector as well for building infrastructure facilities in the farms.

**Table 7.59: Progress under Assistance to Cold Storage**

Year	Annual Physical(no.s)		Annual Financial( Rs in lakhs)	
	Target	Achievement	Target	Achievement
2012-13	55	55	42.33	42.33
2013-14	55	55	47.33	46.72
2014-15	61	55	52.13	52.06
2015-16*	59	43	53.29	34.21

\* (up to December-2000)

**7.13.15: Outcomes & Challenges:**

- Post-harvest is the biggest linkage in the entire process of Horticulture activities. Nearly 30% of the Horticultural produce is wasted due to improper post-harvest management. Lack of awareness and education among farmers and traders and lack of adequate infrastructure such as pack houses, primary processing units, and field storage structure are some of the reasons for improper post-harvest management.
- In Karnataka, only 1% of the total production of fruits and vegetables is currently being processed so as to produce value added goods of higher market value. About 25-30% the produce is lost due to inadequate cold storage and transport facilities. At present there are 79 cold storage units with a total storage capacity of 2.67 lakh MT, for handling fruits and vegetables. Of these units, 5 are in the co-operative sector, 68 are in the private sector and 6 are in public sector. Based on the estimates of per capita consumption of Horticulture produces prepared by the Task Force set up by planning commission, demand for fruits and vegetables in Karnataka would be 145 lakh tonnes by 2020 and the State's current cold storage facility would cover a mere 2% of the produce. It is imperative that the cold storage capacity is augmented to reduce the losses and to move up agro processing value chain. By enhancing the capacity of cold storage and overall improvement of post-harvest linkages to the farmers, the State can minimize the losses caused due to wastage. Infrastructure of Modern Flower Auction House at Bengaluru can be used for sorting, grading, cold storage, electronic auction system, banking and other value addition facilities.
- Inadequate power supply and exorbitant power tariff for floriculture and processing

sector is a constraint for functioning of cold storage facilities.

- Location of cold storage facilities is a problem with most of them being situated away from farms. Cold storage in rural areas do not have graded cooling for different types of produce and cold storage chain suppliers incur high power tariffs charged at commercial rates. Further, as highlighted in the Report by Planning Commission for Twelfth Five Year Plan, the scheme for Cold Chain, Value Addition and Preservation Infrastructure only provides ordinary cold chain and fruit ripening solutions for consumption of fresh fruits and vegetables and thus requires restructuring to incorporate organic linkages with processing of perishable fruits and vegetables.
- The progress under the credit-link subsidy under NHM especially the "Post-harvest management" component has been very low. This needs to be strengthened adequately.

**7.14: Animal Husbandry and Veterinary Services:**

The Livestock sector plays a vital role in development of rural economy of the State. In Karnataka majority of the population are depended on Agriculture and allied activities. As per the 19<sup>th</sup> Livestock Census conducted during the year 2012, Karnataka has 2.9 crores of livestock and 5.3 crores of poultry population. To provide health care to the animals and for improvement and development of breeds of animals, various programmes are implemented successfully by the Department of Animal Husbandry and Veterinary Services, through its institutional network.

During 2015-16, an amount of Rs 1517.06 crores has been allocated for plan programmes and Rs.744.51 crores has been spent up to the end of December-2015. The budget allocations from the past three years are as follows.

**7.14.1 Animal Husbandry:**

In Karnataka, the Animal Husbandry and Livestock Sector has been playing a significant role in rural economy. During 2014-15, the share of Animal Husbandry in Gross State Domestic Product (GSDP) of Agriculture and Allied activities was 20.27%. As per 19<sup>th</sup> Livestock Census, the share of Karnataka in all India livestock and poultry population was 5.41% and 7.33% respectively. The density of livestock in the state was estimated at 151.21 per sq.km and 47468 per lakh human population. The livestock and poultry

statistics is given in **Table 7.61**.and the detailed information is depicted in **Appendix 7.15**.

**7.14.2 Livestock and Poultry Production:**In milk production India ranks second in the world and during 2013-14, Karnataka State ranks eleventh in the country. The production of milk in the State was 6.12 million MT during the year 2014-15. Details of the production of the Major Livestock Products namely, milk, meat, wool and eggs are shown in **Table 7.62** and more details are provided in **Appendix 7.16**.

**Table 7.60: budget allocations from the past three years for Animal Husbandry and Veterinary Services, (Rs. in lakhs)**

Year	2013-14	2014-15	2015-16
Plan Allocation	132533.45	139215.02	151706.00*
Non plan Allocation	33652.11	39109.01	52917.00

\*Includes RKVY allocation amount of Rs.16500 lakhs.

**Table 7.61: Livestock and Poultry Statistics**

Particulars	Livestock Census (No in Crore)			
	2003	2007	2012	Percentage change in 2012 over 2007
Cattle	0.95	1.05	0.95	-9.52
Buffalo	0.40	0.43	0.35	-18.60
Goat & Sheep	1.18	1.57	1.44	-8.28
Other Livestock	0.30	0.24	0.16	-33.33
Total Livestock	2.83	3.29	2.90	-11.85
Poultry	2.44	4.24	5.34	25.94

**Table 7.62: Livestock and Poultry Production**

Item	Unit	2011-12	2012-13	2013-14	2014-15	2015-16 (up to Dec-2015)	Percentage change in 2014-15 over 2013-14
Milk	'000 T	5448	5718	5997	6123	5370	2.10
Meat @	Tonnes	139553	166059	169894	181312	177323	6.72
Wool	Tonnes	7779	8020	7755	8821	6527	13.75
Eggs	No. in crore	347	368	412	439	400	6.55

@ Includes Poultry Meat.

### 7.14.3: Animal Health and Veterinary Services:

During 2015-16, the health of livestock and poultry rendered services through a network of 4215 Veterinary Institutions, comprising of 30 District Poly Clinic, 664 Veterinary Hospitals, 1833 Veterinary Dispensaries, 1512 Primary Veterinary Centers and 176 mobile veterinary clinics. Further 362 Artificial insemination centers and 64 other Veterinary Institutions rendered the services. During 2014-15, 107.98 lakh cases were treated for various diseases and 80.96 lakh cases were treated for various diseases up to the end of December-2015. In 2014-15, 627.14 lakh vaccinations were carried as preventive measure for various diseases and 252.05 lakh vaccinations were carried as preventive measure for various diseases up to the end of December-2015. **Table 7.63** shows

Details of Development of Animal Husbandry and Veterinary Services

### Performance under Artificial Insemination (AI) Programme:

Sperm stations of frozen sperms are located at Bengaluru and Dharwad. The Artificial Insemination (AI) facility has been provided in 4215 centers. Performance under Artificial Insemination Programme is shown in **Table 7.64**

### Division wise progress of Artificial Insemination programme and milk production:

The progress of artificial insemination and milk production of various division of the state are given in **Table 7.65** Bengaluru Division shows the high achievement under AI programme and Milk Production as compared to other division.

**Table 7.63: Development of Animal Husbandry and Veterinary Services**

Particulars	Unit	2012-13	2013-14	2014-15	2015-16 (Up to Dec-2015)
Veterinary institutions (including Artificial Insemination centers and Mobile Veterinary Clinics)	No.	4112	4112	4212	4215
Livestock farms	No.	11	11	11	11
Poultry farms	No.	23	23	24	24
Artificial inseminations done	Lakh	25.08	24.47	28.45	31.35
No. of cases treated	Lakh	111.58	123.40	107.98	80.96
Fodder produced	Tonnes	5492.96	5492.57	9564.81	8011.00
Milk produced	'000Tonnes	5718	5997	6123	5370
Egg produced	Lakh	36773	41223	43948	40018
Wool produced	Tonnes	8020	7755	8821	6527
Meat produced	Tonnes	166059	169894	181312	177323

**Note:** 1) Information pertaining to Sl.no 1 to 3 is cumulative

2) Information pertaining to Sl.no 4 to 10 is up to December 2015

**Table 7.64: Performance under Artificial Insemination Programme, (No.in lakh)**

Particulars	2013-14	2014-15	2015-16 Up to Dec. 2015)	% change in 2014-15 over 2013-14
I) Cow (AI)				
i) Cross breed	16.87	19.87	24.89	17.78
ii) Exotic	-	-	-	-
iii) Indigenous	2.81	3.55	2.33	26.33
Total Cow (AI)	19.68	23.42	27.22	19.00
No. of calves born(Cow)	4.64	5.04	3.95	8.62
II) Buffalo(AI)	4.79	5.03	4.13	5.01
No. of calves born (Buffalo)	1.13	1.26	1.00	11.50

**Table 7.65: Division wise progress of Artificial Insemination (AI) Programme and Milk Production:**

Name of the Division	2013-14			2014-15			2015-16 (upto December-15)		
	AI		Milk Production ('000 T.)	AI		Milk Production ('000 T.)	AI		Milk Production ('000T.)
	Target	% of Achievement		Target	% of Achievement		Target	% of Achievement	
Bengaluru	719700	155.60	2065	755200	157.64	2063	79855	115.40	1656
Mysuru	566700	126.95	1631	573100	137.76	1736	56092	104.81	1361
Belagavi	486800	141.10	1423	515000	150.38	1435	49251	142.74	1571
Gulbarga	215900	91.68	878	213000	91.44	889	18293	103.08	782

**7.14.4: National Project on Bovine Breeding and Dairy Development (NPBBD):**

1. The Centrally Sponsored Livestock Insurance Scheme with central subsidy assistance towards insurance premium for a maximum of two cross bred cows/buffaloes per beneficiary is being implemented throughout Karnataka Livestock Development Agency. During 2014-15, 34100 animals of the members of KMF milk unions are insured.
2. During 2015-16 under National Livestock Mission (NLM)-Risk Management-Livestock Insurance project, a proposal to cover 5.4 lakh milch animals belongs to the members of Milk Producers Co-operative Societies (MPCS) with maximum limit of 5 animals per beneficiary for Rs.40.54 crores has been approved in State Level Executive Committee (SLEC) under the Chairmanship of Additional Chief Secretary & Development Commissioner, GOK and the same was submitted to GOI for approval and release of GOI share. An administrative approval has been sanctioned for Rs.9.00 crore by Government of Karnataka and first installments of Rs.4.5 crore has been released and release of GOI share is awaited, necessary action has been initiated to cover 1,47,000 Milch Cattle and Buffaloes with released GOK share of Rs.4.5 crores, For which district wise Milk Union wise targets has been distributed and government share (40%) of Rs.4.5 crores is deposited in advance in the selected insurance companies and requested KMF/KMF Unions share (30%) of Rs. 3.375 crores to be deposited in the respective selected insurance companies for the same.

3. Imported semen of HF and Jersey breeds are being used to upgrade the genetic potentiality of local HF & Jersey animals of the farmers by charging Rs.85/- per dose. Up to 2015-16 2,38,390 doses were received out of which 1, 67,815 doses have been distributed to 30 Districts for Genetic Improvement of Existing Livestock.

4. National Project for Cattle and Buffalo Breeding has been re-designated as National Project on Bovine Breeding and Dairy Development from the year 2014-15. Project Proposal for Rs.38.56 crores has been accorded sanctions for the period from 2014-15 to 2016-17. Rs.11.6 crores is released in the current year to implement schemes from 2014-15 & 2015-16.

**Under this scheme:**

- It is proposed to select, train and establish 750 Multipurpose Artificial Insemination Technicians in Rural India (MAITRI) for 2014-15 and 2015-16 in 11 Districts to implement the scheme where Artificial Insemination and other Veterinary facilities not extended either by Department or KMF under NPBBD scheme.
- It is proposed to establish Gokul Gram as per the guidelines of Rashtriya Gokul Mission (RGM) to conserve and Develop local indigenous breeds viz. for Malnad Gidda Breed at Koila Farm in Dakshina Kannada District, Kudige Farm in Kodagu District and for Deoni Breed at Kurikuppe in Bellary Districts and Hallikhed of Bidar District under NPBBD 2015-16.
- It is proposed to establish and execute installation of Liquid Nitrogen Silos (LNS) at 12 selected places in the State to improve Liquid Nitrogen and semen straws supply network.

- It is proposed to establish procurement, processing and marketing network for indigenous cattle milk under RGM for which administrative approval for Rs.2.00 crores was accorded from GOI. Release of funds from GOI is awaited for 2015-16.
1. Sanctions for Purchase of sexed semen of 35,000 doses (HF 30,000, Jersey 5,000) through MOU with Bhartiya Agro Industries Federation (BAIF) for use in elite animals of farmers with subsidy assistance of 50% to genetically improve the existing elite stock was accorded by GOK. The allotment and earmark of Rs.5.00 crores for the same was made under RKVY in 2015-16. Rs. 2.5 crores has been released as 1<sup>st</sup> installment and measure to procure the same is under process.
  2. During 2015-16, under RKVY, for identification of animal as per Indian Council of Agriculture Research (ICAR) recommendations, action has been initiated to procure 9,00,000 ear tags and distributed to 30 districts for the use in animals inseminated with imported semen and livestock insurance scheme during 2014-15 and 2015-16.

#### **7.14.5: Cattle Development:**

In the state, Indigenous breeds are propagated by selective breeding in the livestock farms located at Kunikenahalli in Tumakuru, Ajjampura in Chikmagalur and Bankapura in Haveri districts. Cattle breeding programme for milch animal production and conservation of indigenous breeds like Hallikar, Amrutmahal, Khilar and Deoni for drought purposes is carried out through artificial insemination and embryo transfer technology.

Frozen semen needed for artificial insemination are produced at Hesaraghatta and Dharwad Frozen Semen Centre and supplied for breeding purposes. 59,47,339 Semen straws in the year 2014-15 and 15,64,000 upto the end of December 2015 are produced. In 2014-15, 28.45 lakhs artificial inseminations were done and resulting in birth of 6.30 lakh calves. Further, up to the

end of December 2015, 31.35 lakh artificial inseminations were done giving birth to 4.95 lakh calves.

#### **7.14.6: Karnataka Sheep and Wool Development Corporation (KSWDCL):**

In the state, five Sheep Breeding farms and Training centers are working under Corporation. As a part of breed improvement programme 239 cross breed rams have been distributed from its sheep breeding farms to sheep farmers in 2014-15. In 2015-16, 147 Rams were distributed to the farmers till the end of October 2015. During 2014-15, under "Kendriya Bhed Palak Bheema Yojana", 2865 sheep farmers were insured and Rs 34.80 lakhs has been given as compensation by Life Insurance Corporation of India towards death of 58 Shepherd families. During the year 2015-16 up to October end 1454 farmers are covered under Insurance and 31 Shepherds death applications are sent to LIC for claims of Rs 18.60 lakhs as compensation. During 2014-15, under Kendriya Bhed Palak Bheema Yojana- Shikshana Sahayojana (SSY) scheme, 2174 students were given a Scholarship amount of Rs. 26,08,800.00.

KSWDCL is implementing sheep wool improvement scheme (SWIS) in co-ordination with the Central Wool Development Board, Jodhpur. The scheme has been implemented in the project areas of Muddebihal, Chikkaballapur and Molkalmur Taluk during 2014-15, under breed improvement programme 166 cross breed rams are distributed, 83 each Cross Bred Rams were distributed in Muddebihal and Molkalmur Taluks. During 2015-16, the scheme is implemented in Sira, Hospet, Lingasaguru, Chincholi, Bidar, Aurad and Gokak Taluks. As part of breed improvement programme, during 2014-15, Karnataka Sheep and Wool Development Corporation distributed 396 cross breed rams and during 2015-16, upto the end of December 2015, 645 rams were distributed to shepherds at subsidized rates.

During 2014-15, de-wormers to sheep and goats have been distributed to the shepherds through sheep and wool producers co-operative societies registered with the KSWDCL. In districts where societies are not

there mass de-worming camps were organized to distribute de-wormers at a cost of Rs.180.00 lakhs. During 2014-15 by organizing 120 camps 4800 shepherds were trained in Scientific Sheep Rearing by organizing one day training programme at the cost of Rs. 6.00 lakhs. During 2015-16, it is planned to train 4800 shepherds by organizing 120 camps.

During 2014-15, training in scientific sheep husbandry has been provided for 50 sheep farmers at Central Sheep Breeding Farm, Hisar in co-ordination with the Central Wool Development Board, Jodhpur. In 2014-15, Rs.500.00 lakhs has been released to provide Rs.5.00 lakhs per society registered with the corporation as one time grant. Out of 352 societies 100 societies were provided with the onetime grant of Rs.5.00 lakhs. During 2015-16, Rs.2,000 lakhs is allocated to provide. One time grant to the remaining 200 societies at Rs.5.00 lakhs each, totally Rs.1000 lakhs has been released so far.

#### 7.14.7: Subsidy Scheme:

Under this programme, during the year 2014-15, an amount of Rs.44.00 lakhs has been spent. 343 beneficiaries (members) of sheep and wool producers Co-operative Societies have been benefitted by getting 25% subsidy i.e., Rs.13000/- and Rs.12250/- for (10+1) sheep and goat units at the unit cost of Rs.52,000/- and Rs.49,000/- respectively. Under this programme, the SC & ST members of sheep and wool producers Co-operative Societies get 75% subsidy of Rs.39,000/- and Rs.36,750/- for (10+1) sheep and goat unit at the unit cost of Rs.52,000/- and Rs.49,000/- respectively. Remaining loan portion is released through local Grameena Banks and Nationalized Banks. An amount of Rs.150.00 lakhs and Rs.75.00 lakhs is allocated in the budget for the implementation of the schemes during the year 2015-16. Progress Achieved from the year 2011-12 to 2014-15 are depicted in the **Table 7.66** and **Table 7.67**.

**Table 7.66: Progress Achieved under SCP and TSP during the year 2011-12, 2012-13, 2013-14, 2014-15**

Sl.No.	Schemes	Year	Amount released (in lakhs)	Physical (in units of (10+1))				Financial (Rs. in lakhs)	
				Target		Achievement		Target	Achievement
				Sheep	Goat	Sheep	Goat		
1	Special Component Plan	2011-12	57.00	196	196	137	61	57.00	29.50
		2012-13	50.00	168	171	45	49	50.00	13.85
		2013-14	50.00	96	68	40	16	50.00	17.15
		2014-15	130.00	320	102	320	102	130.00	130.00
2	Tribal Sub-Plan	2011-12	23.00	78	78	34	24	23.00	8.60
		2012-13	30.00	140	62	140	62	30.00	10.31
		2013-14	30.00	50	28	22	04	30.00	10.05
		2014-15	78.00	128	76	128	76	78.00	78.00

**Table 7.67: Progress Achieved under SCP and TSP during the year up to December - 2015**

Sl.No.	Schemes	Physical (in units of (10+1))		Financial (Rs. in lakhs)	
		Target	Achievement	Target	Achievement
1	Special Component Plan	Sheep Unit 400 Goat Unit 187 total 587	Sheep Unit 200 Goat Unit 94 total 294	150.00	75.00
2	Tribal Sub-Plan	Sheep Unit 200 Goat Unit 93 Total 293	Sheep Unit 100 Goat Unit 47 total 147	75.00	37.50



### a) Shepherds Suraksh Yojane:

As per the 19<sup>th</sup> Livestock Census, 95.83 Lakhs sheep and 47.96 lakhs goats were there in the state. Under this scheme ex-gratia will be provided to shepherds to overcome the accidental loss due to death of sheep and goats. It is proposed to grant ex-gratia compensation of Rs. 5,000/- to each sheep and goat which is above 6 months age and which die accidentally or die due to certified epidemic diseases not covered under Natural Calamity Relief or Insurance Schemes, Government has provided Rs. 590.00 lakhs in the revised budget during 2014-15 and Rs 590.00 lakhs is spent upto 31<sup>st</sup> March 2015 to provide beneficiaries ex-gratia amount to death of 11800 sheep and goats. During 2015-16, Rs.300.00 lakhs is released, and ex-gratia amount has been distributed to 6000 beneficiaries for death of sheep and goats.

1. Rs. 3.2 crores was provided under RKVY during 2014-15 for providing multi-utility ambulatory vehicles to 18 sheep predominant districts and the same is implemented.
2. Rs.1.00 crore is provided under RKVY during 2015-16 to provide infrastructure facility at APMC's for scientific marketing of sheep and goats which is being implemented.
3. At Dhanaguru sheep breeding farm, suitable programmes are formulated to impart training to farmers on scientific rearing of sheep / goat and fodder production.
4. Fodder seeds are distributed to farmers under drought area during 2014-15 for which Rs. 5.00 crores was released.

### 7.14.8: Poultry Development:

Karnataka state has the layer population of 156.7 lakhs and Broiler population of 275.6 lakhs producing 41223 lakhs eggs and 81,828 tonnes of chicken meat. There are 24(poultry farms) different levels of institutions working under the Department of AH&VS for development of poultry in the

State. The major developmental activities are breeding and rearing of Giriraja parent stock and supply of day old commercial chicks to the farmers. During 2014-15, 1132 persons were trained in poultry rearing and 3,28,659 Giriraja chicks were produced and distributed. During the current year, 2015-16 up to the end of December 2015, 578 persons were trained in poultry rearing and 2,09,442 eggs and 1,30,921 chicks were produced.

The following Departmental institutions are producing day old Giriraja chicks with the facility of breeding stock of parent Giriraja birds.

1. Regional poultry farm, Bangarpet, Kolar district.
2. District poultry rearing and training centre, Kudige, Kodagu district.
3. District poultry rearing and training centre, Gundlupet, Chamarajanagar district.
4. Poultry Extension centre, Koila, Dakshina Kannada district.

Reorientation and restructuring of the existing infrastructure has been taken up in the above mentioned four poultry farms breeding centers by way of modernization and automation from RKVY funds released during 2014-15 to bring in efficiency in the production of chicks. Under Rural backyard poultry development(CSS) the department has selected 6 districts namely Shivamogga (19.50 lakhs), Mandya (39.00 lakhs), Ramanagara (13.00 lakhs), Tumkur (26.00 lakhs), Bengaluru Rural (65.00 lakhs), and Bengaluru Urban (65 lakhs) of which Shivamogga, Mandya and Tumakuru districts have successfully completed and rest of 3 districts the programme is being implemented at different stages. The budget allocation for the year 2014-15 was 604.98 lakhs and expenditure incurred was Rs.434.95 lakhs. Budget allocation for the year 2015-16 is Rs.559.00 lakhs and the expenditure incurred is Rs.363.67 lakhs up to December end.

**7.14.9: Karnataka Co-operative Poultry Federation (KCPF):**

100 Primary Poultry Co-operative Societies are affiliated to Federation, Federation receives Grant in aid from the State Government, the following plan activities are planned to be implemented:

1) Short term training programme in Poultry Farming,

(2) Rearing and distribution of Giriraja birds,  
 (3) Maintenance of Regional Centers,  
 (4) Providing Assistance to Unemployed youths for establishment of Broiler Poultry units (500 birds)  
 (5) Production of backyard chicks for backyard poultry development  
 (6) Organizing workshops and  
 (7) Study and awareness tour programme to farmers Budget allocation for the Federation is as follows:

**Table 7.68: Physical and Financial Achievements under plan schemes (Rs lakhs)**

Year	PLAN			NON-PLAN		
	Amount sanctioned	Amount released	Amount Spent	Amount sanctioned	Amount released	Amount spent
2011-12	24.75	24.75	24.73	94.50	94.50	94.50
2012-13	46.00	46.00	46.00	145.56	145.56	145.56
2013-14	26.00	26.00	26.00	215.00	215.00	215.00
2014-15	36.00	36.00	36.00	225.00	225.00	225.00
2015-16 (Upto Dec-15)	124.00	93.00	93.00	251.00	188.25	188.25

**Table 7.69: Physical Progress**

Year/ Activity	Short-term training in poultry rearing to farmers	Rearing and sale of Giriraja birds	Maintenance of regional Centers.	Assistance to Un-employed Youths to establishment Broiler Poultry Farm (500 birds)	Production of backyard chicks for backyard poultry development	Organizing workshops	Study & awareness tour programme to farmers
<b>2013-14</b>							
Target	800	11000	-	-	-	-	-
Achievement	1067	22568	-	-	-	-	-
%	133	205	-	-	-	-	-
<b>2014-15</b>							
Target	1000	7650	04 Regional Centers	15 Beneficiaries	-	-	-
Achievement	1029	8760	04 Regional Centers	15 Beneficiaries	-	-	-
%	103	115	100	100	-	-	-
<b>2015-16(upto December -2015)</b>							
Target	700	-	04 Regional Centers	139 Beneficiaries	55000 chicks	3 work shop	150 Farmers
Achievement	746	-	04 Regional Centers	89 Beneficiaries	51610 chicks	2 work shop	150 Farmers
%	106	-	100	64	94	66	100

**7.14.10 Piggery Development:**

In the state, there are 5 pig Breeding Stations, which are located in Hessarghatta in Bengaluru District, Kudige in Kodagu District, Koila in Dakshina Kannada District and Bangarpet in Kolar District and Kalasa in Chickmagalur District. Among other activities, these stations are engaged in production and distribution of pure breed piglets to beneficiaries of various social-economic programmes, training and extension services in modern pig rearing. Unemployed educated youths and farmers are interested in modern pig rearing as a result of which, production of good quality of pork and the lifestyle of the pig rearers are being improved. Under RKVY scheme, to provide good quality pork and to establish marketing facility the Department of Animal Husbandry and Veterinary Services chose 12 districts namely Bengaluru Urban, Bengaluru Rural, Ramanagara, Kolar, Mandya, Tumakuru, Madikeri, Hassan, Dakshina Kannada, Udupi, Chikkaballapura and Chikkamagalur. Under this scheme the performance of the pig breeding programme in 2015-16 is given in **Table 7.70**.

**7.14.11. Rabbit rearing:**

Three Rabbit Rearing farms are functioning in the State. These farms maintain and breed New Zealand White, California White and Grey Giant breeds of rabbits. The bunnies are being sold to interested farmers. About 288 bunnies were produced up to the end of December-2015.

**7.14.12. Feed and Fodder Development:**

To mitigate the shortage of availability of Green Fodder in the State, livestock farms, fodder production, fodder seed production and training to farmers are being undertaken with the assistance of State Disaster Relief Fund, RKVY Centrally sponsored scheme and Calamity Relief funds. The progress made under this programme in the last three years is given in **Table 7.71**.

During 2015-16, under State Disaster Management funds 8.00 lakh fodder minikits worth of Rs.20.00 crores have been distributed in two phases to the farmers of drought prone taluks from which 32.40 lakh metric tonnes of green fodder yield is expected in 80,000 hectares.

**Table 7.70: The Progress Achieved Under The Pig Breeding Programme (Upto December -2015)**

Sl.No.	Name of the Pig Breeding Farm	Distribution of Piglets (Nos.)		Farmers Trained (Nos.)	
		Target	Achievement	Target	Achievement
1	Hesaraghatta	250	136	300	143
2	Kudige	375	298	200	134
3	Koila	375	147	350	226
4	Bangarapet	125	26	100	30
5	Kalasa	175	57	200	4
Total		1300	664	1150	537

**Table 7.71: Progress under Feed and Fodder development**

Sl.No.	Programme	2013-14	2014-15	2015-16 (Up to Dec-15)
1	Minikit Distribution Programme (Nos.)	272704	3,36,610	8,00,000
2	Fodder Production in Farms(in MT)	2608.31	9537	8011
3	Fodder seed production in farms (in Qtls)	10.20	4.83	7.37
4	Root slips distributed in farms (in lakh nos.,)	14.025	13.092	6.78
5	Training to farmers regarding fodder development (in nos.)	665	1724	935

**7.14.13. Rastriya Krishi Vikass Yojane:****Table 7.72: Financial Outlay for the Project approved for 2015-16 are detailed below:**

Sl.No	Name of the Scheme	Sector	Cost of Project (In Crores)
1	2	3	4
1)	Strengthening of Farmers Training Centre and creation of Infrastructure for skill development	AH&VS	
	a) Training Centre and Farmers Hostel Building at Burgi, Chamarajanagar Dist.		1.00
	b) Training Center at LBF, Hesaraghatta		2.00
	c) Training Facility at Buffalo Breeding Farm, Tegur		2.00
	<b>Sub Total:</b>		<b>5.00</b>
2)	Comprehensive Poultry Development Programme	Managing Director, KCPF	
	a) Two cluster in each division for broilers and layers – 16 clusters at Rs.20.00 lakh each subsidy		3.20
	b) One cluster in each division for desi birds (Aseel or quails etc. with assistance for breeding/ marketing net work at Rs.25.00 lakhs for each cluster as subsidy)		1.00
	c) Establishment of modernized and fully automated breeding and rearing sheds in departmental farms. (Bidar / Hessarghatta / Malavalli and Dharwad) Rs.50.00 lakh to each farm.		2.00
	d) Establishment of 500 birds broiler/ 250 birds layer units in clusters of 20 unit each as per NLM norms & assistance for medium scale Poultry Entrepreneurs for 20,000 layer units and 10,000 broiler units with unit cost of Rs.40.00 lakhs and subsidy of 25% for others and 33% for SC/ST.		4.00
	<b>Sub Total:</b>		<b>10.20</b>
3)	Fodder Development Programme	AH&VS	
	1) (a) Supply of post harvest equipments at 25% subsidy at 30 each taluk of 1HP, 2HP, 3HP capacity (approximately maximum of Rs.6,500.00 subsidy per unit).	AH&VS	2.00
	(b) 25% subsidy for production of certified/truly labeled seeds through members of milk producers societies (@ Rs.10/- per Kg for ATM seeds.	KMF	2.00
	(c) Subsidy for silage units (@ Rs.25,000 per unit)	KMF	2.00
	2) (a) Construction of fodder banks and fodder growing infrastructure at MPCS / GP in 10 locations with available gomala land at Rs.25.00 lakh for each growing fodder	KMF	2.50
	(b) Production of fodder at Amritmahal Kava lands	AH&VS	2.50
	<b>Sub Total:</b>		<b>11.00</b>
4)	Strengthening of Livestock breeding farms for genetic upgradation	AH&VS	
	a) Establishment of Gokula Grama for Deoni and Malnad Gidda, strengthening of bull mother farms by improving fodder production infrastructure & cow sheds/calf pens etc. at Livestock Breeding Farm, Hesaraghatta , Dharwad, Bankapur and BBS at Tegur .	AH&VS	12.50

**Table 7.72: Financial Outlay for the Project approved for 2015-16 are detailed below:**

Sl.No	Name of the Scheme	Sector	Cost of Project (In Crores)
	b) Indigenous Cattle Breed conservation through Trust and NGO's 50% subsidy for infrastructure, project up to 100 animals in 10 places is 50.00 lakhs each on PPP	AH&VS	5.00
	<b>Sub Total:</b>		<b>17.50</b>
5)	Strengthening of Semen collection and Frozen Semen Production centers and genetic upgradation	AH&VS	
	a) Strengthening of three State Semen Collection Centers at Hesaraghatta and Dharwad.	AH&VS	7.50
	b) Supply of Sexed Semen to the farmers for Breed Development and upgradation of indigenous breeds and introduction of sexed semen.	AH&VS	2.50
	<b>Sub Total:</b>		<b>10.00</b>
6)	Comprehensive Development of Sheep and Goat in Karnataka	Managing Director KSWDC	
	a) Establishment of small ruminants research station at Hesaraghatta and establishment of New Sheep Breeding farm and Sheep farmers training centers at Kudapura, Challkere Taluk.	Managing Director KSWDC	3.875
	b) Creating scientific marketing infrastructure for sheep and Goat at APMC by providing required infrastructure	Managing Director KSWDC	0.56
	c) Pashu Bhagya - Distribution of Sheep and Goat to beneficiaries 10+1 at 25 % subsidy (50% for SC / ST) as per NLM norms	D.D's 30 Districts	10.00
	<b>Sub Total:</b>		<b>14.435</b>
7)	Research and Extension Projects of Veterinary University.	KVAFSU, Bidar	
	a) Induction of lactation in unproductive animals	KVAFSU, Bidar	0.85
	b) Validation of ethno veterinary practices in the management of common ailments of livestock	KVAFSU, Bidar	1.05
	c) Organic polymer as cowslips to protect the hoof	KVAFSU, Bidar	0.50
	d) Plastination as an innovative technique in the preservation of biological specimens	KVAFSU, Bidar	0.68
	e) Study and Augmenting reproductive performance in Cattle and Buffaloes	KVAFSU, Bidar	0.50
	f) Pilot project for production of anti snake venom through poultry eggs	KVAFSU, Bidar	0.50
	<b>Sub Total:</b>		<b>4.08</b>
8)	Dairy and Dairy Infrastructure Development in Karnataka	KMF	
	a) ERP system on lines of AMUL	KMF	2.50
	b) Development of Bidar district as Milk Shed area by doubling the production of milk to 8 LLPD in next three years through interventions like subsidy on milk procurement transportation, 25% subsidy on cattle feed, provisioning of NGO for formation of Societies and strengthening bank linkage of beneficiaries, intensive AI using NGOs like	KMF	10.00

**Table 7.72: Financial Outlay for the Project approved for 2015-16 are detailed below:**

Sl.No	Name of the Scheme		Sector	Cost of Project (In Crores)
		BIAF, training for society secretaries, infertility camps and support for administrative cost of unviable societies, BMCs, procurement vehicles etc.		
	c)	Improve quality and logistics of milk reception and logistics of milk distribution using IT, GPS & GPRS based vehicles, BMC's with sim card in one of the milk union – BAMUL or KOMUL	KMF	1.00
		<b>Assistance to the Dairy Farmers:</b>		
	a)	For purchase of Cow mats or Rubber mats for control of mastitis, clean milk production and protection from external injury at 25% subsidy . Rubber mats – Rs.800 approximately per unit (25% subsidy)	KMF	1.00
	b)	Pressure wash instrument or machine Rs.5000 per unit (1250 – 25% subsidy)	KMF	1.00
	c)	Assistance to the Dairy Farmers for purchase of mineral mixture (Chelated at 25% subsidy ) - 10 kg per beneficiary	KMF	3.00
	d)	Assistance to the Dairy Farmers for purchase of Bypass Fat at 30 kg per farmer at 25% as subsidy	KMF	2.00
	e)	Assistance to the Dairy Farmers for purchase of Calf milk Replacers/ Calves starters, 30 kg per farmer	KMF	2.00
	f)	Supply of Milking Machine at 25% subsidy to 176 Taluks, each taluk at Rs.10,000/- subsidy to each unit	KMF	3.00
		<b>Sub Total:</b>		<b>25.50</b>
9	Strengthening Animal Health, Animal Breeding and Extension Services in Karnataka		AH&VS	
	a)	Door delivery of disease treatment and AI services through central toll free service. Funding to be provided for Veterinary Ambulances and creation of infrastructure call centre. Operations to be funded fully/partly through revenue earned from AI/Treatment services at doorstep.	AH&VS	10.00
	b)	Hardware for computerization	AH&VS	5.00
		<b>Sub Total:</b>		<b>15.00</b>
10)	Infrastructure for Strengthening Animal Welfare Activity		AH&VS	
	a)	Assistance to Develop Infrastructure for maintenance of Goshalas in districts at 25% subsidy to infrastructure at Rs.50.00 lakhs per goshalas in 5 districts		2.50
		<b>Sub Total:</b>		<b>2.50</b>
11)	Pashu Bhagya - Piggery Development Programme as per NLM guidelines		AH&VS	
	a)	Distribution of 3+1 pig unit/ 10 pig let unit for fattening with 25% subsidy for general and 50% for SC/ST at a	30 District DY Director	3.50

**Table 7.72: Financial Outlay for the Project approved for 2015-16 are detailed below:**

Sl.No	Name of the Scheme		Sector	Cost of Project (In Crores)
		unit cost of Rs. 94,000 and Rs. 99,000/- subsidy from RKVY.		
	b)	Strengthening of existing piggery farms and make these as self sustainable by utilizing the farm revenue	AH&VS	1.4585
	<b>Sub Total:</b>			<b>4.9580</b>
12)	Pashu Bhagya (purchase of milch animals as per DEDS guidelines)		AH&VS	
	a)	Induction of Milch Cow or Buffalo at 25% subsidy (for SC/ST 50%)	30 District DY Director	30.00
	b)	Provisioning of a project coordinator cum MIS specialist along with secretarial assistance	AH&VS	0.30
	c)	Hiring of an agency for the task	AH&VS	0.70
	d)	Publicity charges as well as charges for hiring NGO regarding IEC of beneficiary oriented schemes	AH&VS	1.00
	<b>Sub Total:</b>			<b>32.00</b>
	<b>Total:</b>			<b>152.1730</b>
13)	<b>Additional Fodder Production Programme</b>		AH&VS	
	a)	Distribution of Fodder Production kits to farmers		12.828
	<b>Sub Total:</b>			<b>12.828</b>
	<b>GRAND TOTAL</b>			<b>165.00</b>

The Budget allocation for the year 2014-15 is Rs.62.34 crores and the expenditure incurred was Rs.62.34 crores. During the year 2015-16 an amount of Rs.165.00 crores has been allocated and 13 projects were approved as detailed above.

**Table 7.73: Financial Outlay for the Project approved for 2015—16 are detailed below Revised:**

Sl. No	Name of the Project		Sector	Cost of Project
1	2		3	4
1)	Comprehensive Poultry Development Programme			
	a)	Two cluster in each division for broilers and layers – 16 clusters at Rs.20.00 lakh each subsidy	KCPF	2.00
	<b>Sub Total:</b>			<b>2.00</b>
2)	Fodder Development Programme			
	a)	Supply of Fodder Minikits	AH&VS	5.50
	b)	Supply of post harvest equipments at 50% subsidy 1HP, 2HP, 3HP capacity		2.00
	c)	Production of fodder at Amritmahal Kava lands		3.00
	<b>Sub Total:</b>			<b>10.50</b>
3)	Strengthening of Livestock breeding farms for genetic upgradation			
	a)	Establishment of Gokula Grama for Deoni and Malnad Gidda at Kurikuppe and Lingadhahalli	AH&VS	5.00
	<b>Sub Total:</b>			<b>5.00</b>

**Table 7.73: Financial Outlay for the Project approved for 2015—16 are detailed below Revised:**

Sl. No	Name of the Project		Sector	Cost of Project
4)	Strengthening of Semen collection and Frozen Semen Production centers and genetic upgradation			
	a)	Strengthening of three State Semen Collection Centers at SLBTC, SCC, Hesaraghatta and Dharwad.	AH&VS	7.50
	b)	Supply of Sexed Semen to the farmers for Breed Development and upgradation of indigenous breeds and introduction of sexed semen.		2.50
	<b>Sub Total:</b>			<b>10.00</b>
5)	Comprehensive Development of Sheep and Goat in Karnataka			
	a)	Creating scientific marketing infrastructure for sheep and Goat at APMC by providing required infrastructure	Managing Director KSWDC	1.00
	b)	Pashu Bhagya - Distribution of Sheep and Goat to beneficiaries 10+1 at 25 % subsidy (50% for SC / ST) as per NLM norms	Deputy Director's 30 Districts	10.00
	<b>Sub Total:</b>			<b>11.00</b>
6)	Research and Extension Projects of Veterinary University.			
	a)	Induction of lactation in unproductive animals	KVAFSU, Bidar	0.85
	b)	Validation of ethno veterinary practices in the management of common ailments of livestock		0.78
	c)	Pilot project for production of anti snake venom through poultry eggs		0.50
	<b>Sub Total:</b>			<b>2.13</b>
7)	Dairy and Dairy Infrastructure Development in Karnataka			
	a)	Development of Bidar district as Milk Shed area by doubling the production of milk to 8.00 Lakh Liter Per Day.	KMF	10.00
	<b>Sub Total:</b>			<b>10.00</b>
8)	Strengthening Animal Health, Animal Breeding and Extension Services			
	a)	Door delivery of disease treatment and AI services through central toll free service. Funding to be provided for Veterinary Ambulances and creation of infrastructure call centre.	AH&VS	2.00
	<b>Sub Total:</b>			<b>2.00</b>
9)	Piggery Development Programme			AH&VS
	a)	Under Pashu Bhagya Scheme- Distribution of 3+1 pig unit/10 piglet unit for fattening at a (subsidy of 25% for General and 50% for SC/ST ) unit cost of 94,000/- and 99,000/-, subsidy from RKVY respectively.	Deputy Director's 30 Districts	3.00
	<b>Sub Total:</b>			<b>3.00</b>
10)	Pashu Bhagya Scheme (Dairy Development )			AH&VS
	a)	Induction of Milch Cow or Buffalo at a unit cost of Rs.1.20 lakh (subsidy of 25% for General and 50% for SC/ST).	Deputy Director's 30 Districts	30.00
	b)	Publicity charges as well as charges for hiring NGO regarding IEC of beneficiary oriented schemes	AH&VS	0.50
	<b>Sub Total:</b>			<b>30.50</b>
	<b>GRAND TOTAL</b>			<b>86.13</b>



The Projects worth Rs.165.00 crores was sanctioned originally were revised to Rs.86.13 crores. Accordingly Projects were Revised Rs.42.00 crores was released out of this Rs.39.99 crores is spent.

**7.14.14: Assistance to State for Control of Animal Diseases (ASCAD):**

For Organization of seminars and training programmes, 100% funding is done by GOI. Financial assistance is provided for systematic control of livestock diseases of National Importance, Animal Disease Surveillance, upgradation of Diagnostic Laboratory and Biological production Units. During 2015-16, an amount of Rs.3471.41 lakhs has been sanctioned by GOI, Out of which 1746.21 and 1725.20 lakhs are central and state share respectively.

GOI has released Grants-in-aid of Rs.99.00 lakhs (Central share-60%) to implement the Special Component Plan for Sc's. During 2014-15, the approved action plan was for Rs. 1182.99 lakhs. A sum of Rs.733.92 lakhs was utilized out of released budget Rs. 744.49 lakhs (Central share75%,Rs.584.12 lakh and State share 25%, Rs.160.37 lakhs).

During 2014-15, 120.17 lakhs cattle and buffaloes were vaccinated against Hemorrhagic Septicemia (HS) and Preventive vaccination against Enterotoxaemia (ET) was done in 149.13 lakh sheep and goats. As a part of surveillance work 286 brain samples from clinically suspected animals and slaughtered animals were collected and forwarded to the laboratory and ascertained that BSE is not present in our state. In order to keep vigilance on the presence of Avian Influenza 4229 samples were collected from all the district and forwarded to the laboratories for examination. There was no evidence of Avian Influenza in the state. One Hundred Veterinarians and 100 Para Veterinarians were trained with regard to AI surveillance and action to be taken in the face of an outbreak. At Divisional level 4 seminars and at state level 2 seminars were organized on current topics of animal disease control.

**a) Mass vaccination Programmes:**

Several mass vaccination programmes are being implemented in the State. Upto 2014-15, GOI has provided 100% assistance for

FMD-CP, BCP, PPR-CP, NPRSM and NADRS. Under ASCAD the sharing pattern was 75:25. The sharing pattern for the current year 2015-16 is 50:50 under FMD-CP, PPR-CP and BCP.

**b) Foot and Mouth Disease Control Program:**

This Mass vaccination programme is being implemented in Pulse Polio Model since September 2011. The programme is carried out simultaneously in all the southern states at every six monthly intervals. August-September and February-March. During 2014-15, in the 7<sup>th</sup> and 8<sup>th</sup> round, 120.59 lakhs and 107.84 lakhs cattle, buffaloes and pigs were vaccinated. During 2015-16, 9<sup>th</sup> round of vaccination was carried out and immunizing of 109.54 lakhs of cattle, buffaloes and pigs were carried. On '0' (before vaccination) and 28<sup>th</sup> day vaccination serum samples were collected from randomly selected and identified animals to quantify the immune response to the vaccine.

During 2014-15, an amount of Rs. 650.00 lakhs has been released from GOI. An amount of Rs. 987.58 lakhs was available including the unspent balance of Rs. 337.58 lakhs (2013-14). Rs. 977.10 lakhs was spent. For 2015-16, Rs. 3441.00 lakhs of assistance has been earmarked in the action plan, first installment of Rs.519.40 lakhs has been released by GOI.

**c) National Animals Disease Reporting System (NADRS):**

176 blocks and 30 districts have been provided with the hardware, software and internet facility. The state monitoring unit located in Bangalore consolidates the reports at state level and forwards to the Govt. and GOI. During 2014-15, Rs. 5.00 lakhs was released and Rs.4.01 lakhs was spent upto the end of December 2015. During 2015-16, Rs. 10.00 lakhs has been earmarked.

**d) National Programme on Brucellosis Control:**

This disease characterized by abortions in last trimester of pregnancy and it is communicable to persons in contact with the animals (Zoonotic). As a precaution, Vaccination was given to 4-8 months old

female calves to protect them for lifetime from this disease. Hence since 2011-12 screening of animals by Milk ring test (MRT) has been done and the incidence was found to be 3.5%. During 2014-15 Rs.141.58 lakhs along with unspent balance of Rs. 4.67 lakhs (2013-14) total of Rs.146.25 lakhs was made available to implement the programme. Rs.145.40 lakhs was spent up to the end of December 2015, during first round 40,000 milk samples were screened and vaccination of 1.92 lakhs of 4-8 month old female calves were vaccinated. During second round in August 2015, 38471 milk samples were screened and 2.48 lakhs of 4-8 months old female calves were vaccinated.

**e) National programme on Rinderpest Surveillance and monitoring (NPRSM):**

Rinderpest has been eradicated in the Country. Surveillance work is being done continuously to ascertain that no cases of Rinderpest or cases with symptoms related to Rinderpest are prevalent in any village are presented for treatment at Veterinary Institutions. During 2014-15 Rs. 5.00 lakhs was released of which Rs.4.80 lakhs was utilized upto the end of December 2015, unspent amount of Rs.19,296(2014-15) has been revalidated and released for 2015-16. For 2015-16, an assistance of Rs. 10.00 lakhs has been proposed.

**f) National control programme on Peste Des Petits Ruminants (PPR) control Programme:**

The Mass vaccination programme of Sheep and goats to protect from PPR is being implemented since 2011-12. In first round, 116.33 lakhs sheep and goats were vaccinated and at every 6 monthly intervals newly born and adults left over during the previous round of vaccination i.e., 30% of the population are being vaccinated. During 2014-15, 46.31 lakhs sheep and goats were vaccinated. The GOI released Rs. 74.27 lakhs which was spent at the end of December 2015 for this purpose. During July 2015, 43.05 lakhs sheep and goats and during November 2015, 45.94 lakhs sheep and goats have been immunized. So far funds not released till December 2015. For year 2015-16 an Action plan for 391.00 lakhs has been prepared and

sent to govt. of India, so far no funds have been released till December 2015.

**g) Avian Influenza & Bovine Spongiform Encephalopathy surveillance programme:**

During 2015-16 as a part of surveillance programme of Avian Influenza a total of 15896 different samples have been collected and submitted to the laboratory till December 2015 and with regard to Bovine Spongiform Encephalopathy (BSE) surveillance activity a total of 198 brain samples were submitted for laboratory testing till December 2015.

**7.14.15: Directorate and Administration:**

Budget allocation for the year 2015-16 is Rs.2000.00 lakhs. In this an amount of Rs.800.00 lakh is Proposed for procurement of drugs and chemicals to meet the requirement of 4215 Veterinary Institutions and further Rs.325.00 lakhs to supply the equipments to the newly established diagnostic labs at the 15 district head quarters. Procurement of Computers laptops /,smart phones and required software through outsourcing to develop online reporting system and it is planned to provide furniture to 30 polyclinics and 4 State sector Joint Director Offices.

To establish and maintain public grievance cell/Sahayavani centre and the expenditure towards the maintenance of ambulances, vehicles at commissionerate, 9 training Centres and to meet the payment for outsources staff. Rs.1500.00 lakhs has been released the expenditure incurred is Rs.120.36 lakhs up to December- 2015.

**7.14.16: Institute of Animal Health and Veterinary Biological, Bangalore:**

Budget allocation for the year 2015-16 is Rs.650.00 lakhs. Rs. 320.00 lakh is proposed for vaccine production and disease investigation programmes and the remaining amount will be utilized for Purchase and AMC of laboratory equipments, extension and training, purchase of vehicles and its maintenance. The 20 % state share to AICRP to Foot and Mouth disease vaccine will also be met out in this plan. Rs.487.50 lakhs has been released the expenditure incurred is Rs.487.50 lakhs up to December- 2015.

**7.14.17: Control of Animal Disease:**

Budget allocation for the year 2015-16 is 1513.00 lakhs. It is proposed to take up vaccination programme against for the diseases [Enterotoxaemia and Haemorrhagic Septicaemia] that are of economic and zoonotic importance as well as mass parasitic dosing of animals before vaccination. It is also planned to organize taluk and district level awareness camps training programmes , surveillance and monitoring programmes. Rs.935.93 lakhs has been released the expenditure incurred is Rs.935.93 lakhs up to December- 2015.

**7.14.18: Amrithmahal Kaval:**

Budget allocation for the year 2015-16 is Rs.50.00 lakhs. It is proposed to utilize the allocated amount to construct cattle movement preventing tranches of about 25 kilometers in four kavals to prevent trespassing of animals and unauthorized encroachment these by protecting the land and fodder of the kavals. Rs.37.50 lakhs has been released the expenditure incurred is Rs.25.00 lakhs up to December- 2015.

**7.14.19: Livestock Farms and Training:**

Budget allocation for the year 2015-16 is Rs.1100.00 lakhs. It is proposed to procure 36 lakhs liquid nitrogen and chemicals required for the collection of frozen semen straws at different semen banks, production of Rs.4.75 lakhs chicks, piglets and local male calves in the departmental livestock farms, and to purchase of 9000 tonnes feeds for the livestock in livestock farms in the state. "Allocation will be utilized for repair and maintenance of vehicles, equipments and to take up required civil works at 18 livestock farms and their repairs and maintenance. The salary for outsourced group "D" employees will be paid and a provision has made to purchase 4 new vehicle to Joint Directors of State Sector. Rs.1068.20 lakhs has been released and the expenditure incurred is Rs.495.88 lakhs up to December-2015.

**7.14.20: Support to Pinjara poles and Goshalas:**

Budget allocation for the year 2015-16 is Rs.700.00 lakhs. It is proposed to support Pinjara poles and Goshalas for maintenance

of unproductive and abandoned animals and also to support State Animal Welfare Board for strengthening district society for prevention of cruelty to animals. Rs.525.00 lakhs has been released the expenditure incurred is Rs.42.62 lakhs up to December-2015.

**7.14.21: Karnataka Sheep and Sheep Product Development Board:**

Budget allocation for the year 2015-16 is Rs.1000.00 lakhs and Rs.2000.00 lakhs has been released to assist sheep and wool producers co-operative societies are in distress as one time grant. The Budget will be utilized to take up activities like maintenance of 5 sheep breeding farms of the State, education and extension, health coverage of sheep and goats, distribution of Rams for breeding purpose and to support farmers to establish Sheep & Goat Units The expenses of Insurance and coverage to Shepherds under Bhed Palak Vima Yojana and consulting changes towards preparation of Power Point Presentation Project reports will be met out under this plan. Rs.1850.00 lakhs has been released the expenditure incurred is Rs.1750.00 lakhs up to December 2015.

**7.14.22: Insurance to Sheep and Shepherds:**

Budget allocation for the year 2015-16 is Rs.1500.00 lakhs. It is proposed to pay Rs.5000/- as ex-gratia for shepherds who lose their sheep and goats [above six months of age] due to unexpected or certified communicable diseases with a condition that these sheep and goats are not covered under any other insurances schemes or calamity relief funds. Rs.1000.00 lakhs has been released the expenditure incurred is Rs.900.00 lakhs up to December 2015.

**7.14.23: National Livestock Mission:**

Budget allocation for the year 2015-16 is Rs.1901.00 lakhs. It is proposed to take up programmes namely Insurance coverage of livestock, Training of farmers, Officers, staff, Organising Taluk and District Livestock Melas. Organizing Livestock health camps and supply of fodder seed minikits . For the welfare of Scheduled Caste & Scheduled Tribes beneficiaries, they will be assisted to establish broiler units and also for fodder production by supplying fodder seed

minikits. Amount is not released up to December 2015.

**7.14.24: Veterinary Education and Training:**

Budget allocation for the year 2015-16 is Rs.10.00 lakhs. It will be utilized for training for organizing state level seminars and advertising the departmental programmes through print /electronic media. Refund of fees and registration fees and expenditure on higher level education to the students. Rs.7.50 lakhs has been released the expenditure incurred is Rs.7.50 lakhs up to December 2015.

**7.14.25: Sample Survey Scheme of estimation of Milk, Egg and Wool:**

Budget allocation for the year 2015-16 is Rs.381.00 lakhs. It is proposed to utilize the allocation towards staff salary and other allocation maintenance of expenditure for carrying out the enumeration of major livestock production like milk, egg and wool during three seasons of the year viz. summer, rainy and winter in randomly selected villages. These reports will be compiled and sent to the government. The expenditure incurred is Rs.218.91 lakhs up to December 2015.

**7.14.26: Animal Husbandry Statistics and Livestock Census:**

Budget allocation for the year 2015-16 is Rs.200.00 lakhs. The allocated amount will be utilized towards payment of honorarium to Enumerators/Superintendent, Master Trainers, District officers, Nodal officers, State level officers/Staff, and District /Taluk Case workers who were participated in the 19th Livestock Census and also towards Computerization of Census, Printing work and towards fuel cost to take up tour for Breed wise survey.

**7.14.27: Grants to Animal Husbandry Cooperatives:**

Budget allocation for the year 2015-16 is Rs.124.00 lakhs. The allocated amount of Rs.124.00 lakhs will be utilized to create awareness and interest in backyard poultry farming in rural areas. It is proposed to establish 40 primary poultry Cooperative societies, 10 each in each Revenue division

and thereby creating 200 self help groups and to train them.

To produce sufficient number of backyard chicks, parent stock is reared and maintained at regional poultry farms. To train farmers in rearing of chicks in scientific way and to help unemployed youth to establish broiler poultry units back ended subsidy assistance will be extended. 500 broiler poultry units, at a unit cost of Rs.1,39,750.00. Subsidy for SC/ST is Rs.46,200/- and General Rs.35,000/- and 51610 chicks were reared and distributed. 746 farmers imparted with short term training and conducted tour programme to 150 farmers. Established 89 Broiler farms, 4 Regional centers and 2 workshops have been conducted up to December end. Rs.93.00 lakhs has been released the expenditure incurred is Rs.93.00 lakhs up to December-2015.

**7.14.28: Establishment of Veterinary and Animal Sciences University, Bidar:**

Budget allocation for the year 2015-16 is Rs.848.00 lakhs. The allocated amount will be utilized to develop infrastructure facilities and other activities like training of veterinarians, supply of medicines to college hospitals, meeting the expenditure of Scheduled Caste & Scheduled Tribe students and organization of Livestock melas and camps by the Karnataka Veterinary & Fisheries Science University. Rs.561.00 lakhs has been released the expenditure incurred is Rs. 561.00 lakhs up to December- 2015.

**7.14.29: Incentive to Milk Producers:**

An additional grant of Rs.400.00 lakhs is released an Incentive to the milk producers (SC/ST/Others producers) of 24150.50 lakhs liters of milk. Budget allocation for the year 2015-16 is Rs.96602+400.00 lakhs, out of which Rs.96602.00 lakhs has been released and Rs. 65164.81 lakhs expenditure incurred up to December- 2015.

**7.14.30: Construction of Dispensaries under Rural Infrastructure Development Fund (RIDF):**

Budget allocation for the year 2015-16 is Rs.3000.00 lakhs. The allocated amount is for construction of buildings for veterinary

Dispensaries/Institutions of tranches 16, 17, 18, and 20 in rural areas with the assistance of NABARD. Rs.1499.50 lakhs has been released the expenditure incurred is Rs.639.00 lakhs up to December- 2015.

**7.14.31: Education Extension & Research (KVAFSU) Bidar:**

Budget allocation for the year 2015-16 is Rs.4000.00 lakhs. The allocated amount is proposed to take up approved civil works pertaining to Karnataka Veterinary Animal Fisheries Sciences University, strengthening of Infrastructure for the implementation of Education, Extension and Research activities. Rs.3000.00 lakhs has been released the expenditure incurred is Rs.3000.00 lakhs up to December- 2015.

**7.14.32: Pashu Bhavana and Other Buildings:**

Budget allocation for the year 2015-16 is Rs.1000.00 lakhs. It is proposed to take up the civil works of buildings of newly started polyclinics in 25 districts. Rs.750.00 lakhs has been released and up to December 2015, an expenditure of Rs 10.00 lakh is incurred.

**7.14.33: Supply of Drugs and Chemicals:**

Budget allocation for the year 2015-16 is Rs.1737.51 lakhs. The amount is allocated for purchase of Liquid Nitrogen which is required for preservation of Frozen Semen needed for Artificial Insemination, purchase and supply of emergency Drugs and Chemicals, vaccines & Frozen Semen Straws. Rs.1511.52 lakhs has been released the expenditure incurred is Rs.504.01 lakhs up to December 2015.

**7.14.34: Buildings:**

Budget allocation for the year 2015-16 is Rs.705.10 lakhs. The amount is allocated for repair and maintenance of building belonging to various Veterinary Institutions in the ZP Sector. Rs.463.47 lakhs has been released the expenditure incurred is Rs.163.94 lakhs up to December 2015.

**7.14.35: Strengthening of Extension Units:**

Budget allocation for the year 2015-16 is Rs.163.00 lakhs. Under this scheme extension Activities regarding Livestock health and Livestock development are being

taken up. Rs.133.60 lakhs has been released the expenditure incurred in Rs.56.89 lakhs up to December 2015.

**7.14.36: Rearing of Giriraja Birds:**

Budget allocation for the year 2015-16 is Rs.108.39 lakhs. Rearing of Giriraja Birds and selling them to the needy farmers under Socio-Economic Schemes to encourage backyard poultry farming. Rs.88.79 lakhs has been released the expenditure incurred is Rs.25.93 lakhs up to December 2015.

**7.14.37. Opening of Primary Veterinary Centers & upgradation:**

Budget allocation for the year 2015-16 is Rs.13009.69 lakhs. It has been provided in the budget for salary, allowance and other expenses of ongoing Institutions and Expenditure for Institutions to be opened newly and upgraded and Health, breeding and other Services are being provided to the farmers through these institutions. Rs.10407.98 lakhs has been released the expenditure incurred is Rs.8646.96 lakhs up to December 2015. 100 new veterinary dispensaries have been opened and 100 primary veterinary centres have been upgrades to veterinary dispensaries.

**7.14.38: Disposal of Biomedical Waste:**

Budget allocation for the year 2015-16 is Rs.176.00 lakhs. It has been allocated to maintain deep burial pits and sharp pits in the veterinary dispensaries for disposal of biomedical waste and also to keep the premises clean. Rs.89.61 lakhs has been released the expenditure incurred is Rs.18.89 lakhs up to December 2015.

**7.14.39: Organization of Infertility Camps:**

Budget allocation for the year 2015-16 is Rs.102.31 lakhs. It has been provided for organizing 850 Infertility camps to examine and treat the animals which are not conceived and to bring the awareness among the farmers regarding infertility in cattle and buffaloes. Rs.74.46 lakhs has been released the expenditure incurred is Rs.12.42 lakhs up to December 2015.

#### **7.14.40: FUTURE CHALLENGES AND CONSTRAINTS**

##### **7.14.40.01: Future outlook of the department:**

The 12<sup>th</sup> Five year plan which laid greater emphasis on Agriculture, farming and development of need based and market demand driven programmes would pave for augmented productivity in livestock and poultry sector. This could be achieved through conservation and development of animal genetic resources, establishment of milk traits and value addition by training and extension methods, professional efficiency development programmes and quality health coverage system and disease control programme.

The ongoing programmes and Activities of the 11<sup>th</sup> Five year Plan are also continued during 12<sup>th</sup> five year plan with a more trust given on:

1. Promotion of appropriate cross-breeds with due attention for conserving indigenous breeds of livestock for enhancement of milk production and breed conservation.
2. Fodder Development by encouraging fodder growers, through supply of minikits, fodder and other inputs.
3. Promotion of Backyard poultry rearing by providing Assistance to SH groups/poultry co-operatives.
4. Piggery Development through up-gradation and strengthening of pig breeding stations for more production of piglets for distributions to Beneficiaries
5. Strengthening of Extension, Training and Animal Health units.
6. Enhancement of Genetic improvement of Sheep and Goats.
7. Enhanced vaccine production. Control of Animal Diseases Surveillance through Immunization and Enhanced vaccine production

##### **7.14.40.02: Challenges:**

###### **a. Animal health sector:**

1. Effective management of health coverage facilities to livestock.
2. Creation of disease free zone against diseases of economic importance and identifiable diseases of livestock and poultry to provide/improve the export Opportunities for animals and animal produce.

3. Monitoring and control of animal diseases in view of constant migrations, bio-diversity and varied agro - climatic conditions.
4. Creation of awareness about communicable animal diseases.
5. Preparedness for control of Avian Influenza / Equine influenza.
6. Health coverage of livestock in remote villages

###### **b. Breeding, Production and Marketing Sector:**

1. Conservation and development of indigenous breeds of cattle like Krishna Valley, Amruthmahal, Khillar, Deoni and breeds of Sheeps and goat.
2. Genetic characterization of these native breeds and establishing milk traits.
3. Encouraging NGO's for development of local breeds
4. Providing clean and hygienic milk, healthy and wholesome meat and meat products to consumers.
5. Selective breeding for sustainability of cross breeding programmes.
6. Developing permanent pasture land for zero input management system, a system that was traditionally followed and encourage fodder cultivation.
7. Improving upon low digestibility of poor quality roughages for better utilization.
8. Reducing the gap between availability and requirement of cattle feed, fodder and essential nutrients.
9. Correcting low productivity by addressing the problem on animal reproduction, infertility, low fat and SNF etc.
10. Encouraging biomass fuel and organic farming practices.
11. Providing effective delivery systems for adapting new and innovative technologies.

##### **7.14.41: Identifying gaps and constraints**

###### **a. Animal Health Sector:**

1. Insufficient funding.
2. Lack of requisite man power. One veterinary institute headed by a qualified veterinarian for every 5000 livestock units is the pre requisite as per the recommendation of National Council of

Agriculture. The facilities are yet to be created in rural areas.

3. Inadequate diagnostic facilities and lack of sufficient number of subject matter specialists.
4. Unrestricted movement of animals from across forest areas inters state border areas. Inadequate facilities for quarantine of Animals / Check posts Animal.
5. Lack of effective disposal of carcasses to check the spread of infectious agents.

**b. Breeding, Production and Marketing Sector:**

1. Non availability of bulls having high yield germplasm of milk.
2. Inefficient marketing channel to improve marketing efficiency of farm produce.
3. Inadequate infrastructure and extension facilities.
4. Poor credit facilities and poor assessment of market trends.
5. Non- availability of minimum supportive prices for animal produce.

**7.14.42: Karnataka Milk Federation:**

The Karnataka Cooperative Milk Federation has been formed on Co-operative basis which has three tier system.

1. Primary cooperative societies at village level.
2. Cooperative unions at district level.
3. Federation at state level.

This organization has the responsibility of providing remunerative price and market to the rural milk producers of the state and supplying pure milk and milk products to the

consumers. The progress for the three years is given in the **Table: 7.74.**

The Federation has 22 dairy processing plants with a capacity of 56.80 lakh liters / day. Organization has 44 chilling centers to process 21.40 lakh liters of milk and also 5 milk product dairies which manufacture 100 MT milk powder every day. The Karnataka Milk Federation in its jurisdiction has 5 cattle feed plants which produces 45000 MT's of cattle feed / month, the plant has ISO 9001/2000 certification for quality production and supply of cattle feed to producers. At present, 13207 dairy co-operative societies are functioning, 23.38lakh farmers are enrolled as members, out of which, 7.98 lakh farmers are active members.

**1. Dairy Programme for women (Amrutha Yojane):**

Government of Karnataka in the state budget for the year 2007-08 introduced amruth yojane for devadasis/ widows and Schedule Caste and Schedule Tribe women, with one milch animal to each member to take up dairying as source of earning, to uplift their socio-economic condition. The cost for one animal was Rs.20,000/-of which 50% subsidy for General category (Rs.10,000/-) 60% subsidy to SC member (Rs.12000/-) and 75% to ST members (Rs.15000/-). subsequently during the year 2009-10 the unit cost was increased to Rs.35,000/-.The subsidy for General category was 50%,(Rs.17500/-) for SC - 60% (Rs.21000/-) and for ST - 75%.( Rs.26250/-) Under this scheme total 39861 beneficiaries get benefited incurring an expenditure of Rs.4916.24 lakhs.

**Table 7.74: Progress on Dairy Development in Karnataka Cooperatives**

Sl.No	Items	Unit	2012-13	2013-14	2014-15	December 2015
1	DCS registered	No.	614	441	554	368
2	DCS made functional	No.	705	481	751	459
3	Members enrolled	No	70878	38299	68853	36086
4	Milk procured	Lakh/ Tonnes	17.92	18.86	21.42	18.22
5	Animals Treated	Lakh	0.27	0.3	0.15	0.02
6	Animals inseminated	Lakh	27.50	27.85	30.86	24.88
6	Animals examined for pregnancy	Lakh	20.37	20.58	22.00	18.70

During the year 2014-15 the unit cost extended to Rs.1.00 lakhs for the purchase of 2milch animal for each beneficiary. Further it has been resolved to provide subsidy for widows and devdasis (General category)is 25%, for SC and ST - 75%.During the year

**2. Dairy Infrastructure:** Karnataka Milk Federation and district milk unions have utilized grants received from Government of Karnataka for strengthening infrastructure development. The grants are allocated for strengthening infrastructure development at Shikaripur cattle feed plant and also to construct staff quarters at Rs. 2500.00 lakhs, Rs.5.00 lakhs each to Gulbarga and Bellary milk unions for strengthening of chilling centers, Rs.1000.00 lakhs to Dharwad for milk powder plant extension works, Rs.700.00 lakhs to NSS for development of Fodder, and Rs.800.00 lakhs for strengthening Nandini Milk Products (NMP), all works are under progress. Till December-2015 the amount of Rs.22.88 crores received and utilized. During 2014-15 Rs.1110.00 lakhs was released to develop the infrastructures facility for new dairy at Chamarajanagar and milk powder plant at Channarayapatna.

### **3. Incentives to Milk Producers:**

Government of Karnataka was providing a cash incentive of Rs.2/- per litre of milk sold by farmers to milk cooperative societies. During the year 2013-14 the milk incentive was enhanced from Rs.2/- to Rs.4/- per liter of milk procured w.e.f 14.05.2013. Under the scheme an average of 8.20 lakhs milk producers are benefitted and Rs.3151.86 crores has been released till December-2015 and the amount due for formers is being directly remitted to the bank account of the milk producers.

### **4. Strengthening of infrastructure for quality and clean milk production:**

In order to improve the quality of the milk, the milk has to be chilled as early as possible, For this, the Bulk Milk Coolers(BMC) are being established at village dairy cooperative societies,. Training of farmers, supply of detergents, supply of stainless steel equipments etc., are undertaken in this programme. Under this programme during

2014-15 Rs.562.40 lakhs was released for 1200 beneficiaries, selection of beneficiaries is under progress. At present for the year 2015-16the scheme has been merged with "Pashu Bhagya " scheme.

the year 2014-15 Rs.200.00 lakhs has been released to D.K. and Tumakuru milk unions. Programmes are under progress.

### **5. Rashtriya Krishi Vikasa Yojane (RKVY):**

Under this scheme during the year 2014-15 Rs.1000.00 lakhs as a part of 25% grants released to support dairy cooperative producers by providing them power driven milking machine, chaff cutter, cow mat, calf milk replacer, area specific mineral mixture in Chelated form, By-passfat, fodder mini kits.

A sum of Rs.100.00 lakhs has been released to Belagavi, Tumakuru, Bengaluru and D.K. Milk union to establish mobile BMC's at Rs.25.00 lakhs each. Tender process is under progress. To establish Megha Dairy at Mysore, Rs.300.00 lakhs has been released and it's under progress.

### **6. National Programme for Dairy Development (NPDD):**

Under this scheme a proposal for Rs.2897.08 lakhs has been submitted to form cooperative societies in the northern Karnataka district areas i.e., Gulbarga, Bidar, Yadgir districts in Gulbarga Milk Union and Raichur, Bellary and Koppal districts in Bellary Milk union. In this scheme 100 % grants provided for the share capital of cooperative societies, purchase of cans, Electronic milk testing machine, Electronic milk weighing machine, mobile milk procurement units and salaries to staffs. During 2015-16 Rs.395.80 lakhs has been released to organize 610 dairy cooperative societies in the district of Gulbarga, Bagalkote and Yadagir under Gulbarga milk union ambit. Programmes are under progress.

### **7. National Livestock Insurance:**

Under National Livestock Insurance Scheme 31400 milch animals belonging to members of cooperative societies are targeted to provide insurance facility for the year 2014-15. This scheme is under progress, and Government released Rs.89.91lakhs as 40% premium and



the balance 30% has to be borne by milk unions and milk producers respectively.

**8. Support to training and employment programme (STEP):** Karnataka Milk Federation (KMF) initiated the Support to training and employment programme (STEP) for women in Karnataka from October 1997. Since then KMF has organized 1924 Women Dairy Co-operative Societies (WDCS) in STEP I to VIII phase. As on 31.10.2014 the Ministry of Women & Child Development, GOI has sanctioned Rs.5647.00 lakh and have released Rs.4433.00 lakh. The KMF and Milk Unions have utilized Rs.5323.00 lakh. As part of women empowerment, 2550 Nandini self help group have been formed with a savings of Rs.1602.00 lakh. Milk procurement per day from these WDCS is 6.64 lakhs litres and a payment of Rs.146.68 (including Rs.4/- incentive) lakh is made directly to women.

Karnataka Milk Federation (K.M.F) started one more scheme “ Ksheera Sanjeevini” – Phase-I with financial assistance from Sanjeevini - Karnataka State Rural Livelihood Promotion Society (KSRLPS) GOK from April 2014. It is targeted to enroll 10,000 women as Target Group Members (TGMs) covering 250 Nos of WDCS spread in 13 milk unions. The outlay of the project is Rs.17.10 crore for three years. In the year 2014-15 it covers 72 nos of WDCS with release of Rs.4.90 crore, 2880 TGM's are enrolled and are being trained in various programmes. During 2015-16, the programme is implemented in 108 Women Dairy Co-operative Societies.

#### **Outcome:**

The Milk procurement, membership and the artificial insemination have considerably increased due to incentive to dairy development activities thereby bringing financial growth in the dairy sector. This growth has brought in socio-economic development at the grass route level. Dairying has become a sustainable activity by providing continuous remunerative price for the milk.

The Government of Karnataka has also encouraged the milk producers of the State by

giving an incentive price of Rs.4/- per litre of milk to the milk producers of the cooperative societies, along with the introduction of “Kshree Bhagya Yojane” wherein the school children/Anganwadi children are provided with 150 ml of milk a day to overcome nutritional deficiency .

- a) Karnataka Milk Federation has covered all the 30 Districts of Karnataka State under Dairy development. There is substantial increase in milk procurement and sales in the State. There is an average milk procurement of 60 lakhs litres per day with an average liquid milk sales of 31 lakh liter per day, the balance being converted into different form of milk products.
- b) There is an increase in the number of Dairy Cooperative Societies organized at the village level covering almost all the districts of Karnataka,
- c) Women Dairy Co-operative Societies are being organized under the STEP Scheme only for Women.
- d) Landless farmers and other rural folk have taken up Dairy farming as a major of source of income which resulted in the economic upliftment of these farmers.
- e) KMF owns 5 cattle feed production plants which supply an average of 43000-44000 MT per month of balance cattle feed to milk producers.
- f) Input activities such Artificial insemination, Health coverage, Urea Mollases Brick, Liquid Nitrogen etc. are being provided at the door step of these dairy farmers.

#### **Challenges:**

- a) To ensure assured and remunerative market round the year for the milk produced by the farmer members,
- b) To make available quality milk and other premier dairy products to urban consumers,
- c) To ensure prosperity of the rural milk producers.
- d) To compete with MNC, s and private dairies with better quality of milk and milk products and in the process, sustain viability of cooperatives.

### 7.15 Fisheries:

In Karnataka State, fisheries has attained as an important sector contributing to fish production besides source of foreign exchange earner. Fish being one of the sources of quality protein, use of fish as food helps in eradication of malnutrition among rural population. Fisheries Sector contributes to production of quality animal protein required for human being besides provides more employment opportunities. The vast marine, brackish water and inland freshwater resources are the source of fish production in the State

Karnataka State has 320 Km long coast line along with 27000 Sq. km continental shelf area, 5.65 lakh hectares of various inland water resources and has vast scope for fisheries development. The brackish water area of 8000 hectares also provides good scope for shrimp/fish culture. There are about 9.61 lakh fishermen in the state of which 3.28 lakh fishermen in marine and 6.33 lakh fishermen are in inland who are involved in various fisheries activities. During the year 2014-15, the total fish production of the state was 6.13 lakh tones. Karnataka is in 6<sup>th</sup> position in marine fish production and 8<sup>th</sup> position in inland fish production when compared to fish production in the country. The total fish production during 2015-16, upto end of December 2015 is 4.33 lakh tones.

#### The major objectives of Department of Fisheries are:

- To enhance fish production utilizing all the available and useful fisheries resources.
- To execute and adopt the essential management measures required for sustainable fish production in the marine sector and also to bring awareness among the fishermen community about this.
- Development and maintenance of infrastructure for fishing, fish landing, preservation, processing and marketing both in marine and inland sector.
- Adoption of new technologies for fish seed production and fish culture

- Improvement in fish marketing network.
- Extending scientific and extension services to the fish farmers.
- Exposure of new technologies to technical officers and staff of the department.
- Improvement of the socio-economic conditions of fishermen community.

The budget allocation for the department from the year 2013-14 and 2014-15 and 2015-16 re as follows.

**Table 7.75: budget allocation for Fisheries Department (Rs in lakh)**

Year	2013-14	2014-15	2015-16
Allocation	20,041.40	19,214.26	26,789.00

During the year, the following new schemes are being implemented.

- 1) Provision has been made for inland fish farmers to avail short term loan upto Rs.1.00 lakh at Rs.0.0% interest from Co-operative Banks in order to promote Blue Revolution in the State.
- 2) Under R.K.V.Y. programme sanction has been accorded for development of fish culture in cluster mode in selected 4 taluks in integrated and organizer manner.
- 3) A new scheme namely "Diesel to fisheries Boats, reimbursement of Sales Tax" has been introduced from the current year. Under the scheme the amount equivalent to the Sales Tax on diesel used by mechanized boats is directly transferred to the bank accounts of the Boat owners. For this purpose Rs.105.00 crores budget has been provided exclusively for this purpose.
- 4) In 10 selected districts Integrated Fish Retail Outlet / Fish Canteen / Sale of Aquarium Fish / Information Centre units will be established under R.K.V.Y. project. Besides this, mobile fish retail outlet / fish canteen will be commenced in urban area during the current year.
- 5) In order to promote awareness to public about the different avenues in fisheries sector, it is proposed to provide one

mobile fisheries extension cum disease diagnostic vehicle in each revenue division.

- 6) Matsyamela will be conducted in different districts to provide information about fisheries activities
- 7) Under Matsyashraya scheme it is proposed to construct 3,000 houses to fishermen families.

**7.15.1: Marine Fisheries:** Development of marine fisheries sector is taken up with a focus on sustainability through empowering the traditional sector, enhancing of sea safety and rational exploitation of untapped deep-sea resources, achieving employment generation, social security of fishers, increased food security and augmenting sea food exports. Most important in the fisheries sector is development, expansion and maintenance infrastructure facilities like fishing harbors and landing centers. In this direction, Department of Fisheries has taken up construction and expansion of major

fishing harbours and landing centers with assistance of Central Share. Besides this, desilting programme in fishing harbours is also being implemented. The marine exports including fishmeal and fish oil exports from Karnataka was 1.28 lakh metric tons worth Rs.1426.53 crores, during 2014-15. During 2015-16 upto December 2015, the of marine fish production is Rs.2.83 Lakhs Metric tons. Trends in fish exports of Marine Produce from Karnataka for the last twelve years are given in **Figure 7.2**.

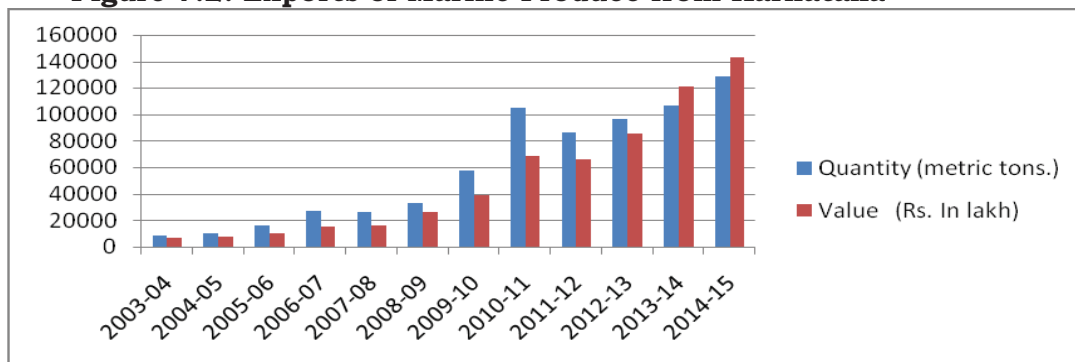
#### 7.15.2: Fish Production:

The annual fish production in Karnataka has shown a considerable increase from 2.51 lakh metric tons in 2004-05 to 6.13 lakh metric tons in 2014-15. Details of fish production for the last 5 years are given in **Table 7.76**.

#### 7.15.3: Fishing Fleet Operating In Karnataka:

Detail of fishing boats operating is furnished given in Table 7.77.

**Figure 7.2: Exports of Marine Produce from Karnataka**



Source: Dept of Fisheries

**Table 7.76: Details of Fish Production in Karnataka (MTs)**

Year	Marine	Inland	Total
2011-12	347383	199053	546437
2012-13	357325	168241	525566
2013-14	357358	197952	555310
2014-15	389822	223419	613241
2015-16*	282990	150000	432990

\*as on December 2015

**Table 7.77. Details of Fishing boats**

Mechanized boats	Motorised boats	Traditional boats	Total
Trawlers - 778 Multiday trawlers - 2431 Purse seiners - 274 Others - 297	Gillnetters(OBM)- 6978	Traditional-8119	} <b>18877</b>

Source: Department of Fisheries

**7.15.4: Inland Fisheries:**

Immense scope exists for development of inland fisheries with the available vast inland fisheries resources in Karnataka as shown in **Table 7.78**.

**7.15.5: Fish seed production:**

The fish seed production detail of the state is provided in **Table 7.79**.

**7.15.6: Fish Sanctuaries in Karnataka:**

River stretches are declared as fish sanctuaries due to conservation of endangered and rare native fish species. Because of their unique and delicate ecosystem, any type of fishing is banned in these declared river stretches. These rivers stretch help in developing natural breeding of fish species. Details of fish sanctuaries in Karnataka declared by Department of Fisheries are given in **Table 7.80**.

**Table 7.78: Inland fisheries resources in Karnataka**

Type	Area/Length
Major Tanks	2.40lakh ha
Minor Tanks	0.53lakh ha
Reservoir	2.72lakhha
Rivers	5813 km
Canals	3187 km
Brackish water areas	0.08lakh ha
Production Potential	4.02lakh MT

Source: Department of Fisheries

**Table 7.79: Fish Seed Production, (Rs. In lakhs)**

Year	Target	Achievement
2011-12	5454.00	5012.73
2012-13	6345.00	4282.35
2013-14	6800.00	4966.22
2014-15	6750.00	5299.67
2015-16 (upto Dec-2015)	6800.00	5733.15

Source: Department of Fisheries

**Table 7.80: Fish sanctuaries in Karnataka**

Place/Taluk/District	River	Length of protected area
“Vanhi Puskarani” (Ramanathapur) Arakalgud, Hassan	Cauvery	-
Ranganathittu, S.R. Patna, Mandya	Cauvery	5km
Muttathi area Malavalli, Mandya	Cauvery	-
Shishila, Belthangadi, D.Kannada	Kumaradhara	500m
Abhirama fish sanctuary (Hariharapura) Koppa, Chikmagalur	Tunga	-
Dharmasthala, Belthangadi, D.Kannada	Nethravathi	1km
Kelkaru, Belthangadi, D.Kannada	Palguni	-
Marakatha, Sulya, D.Kannada	Yenekkal (Kumaradhara)	-
Seethanadi, Karkala, Udupi	Seethanadi	-
Nakurgaya, Puttur, D.Kannada	Nethravathi	-
Nisargadhama, Kushalnagara, Kodagu	Cauvery	-
Uppukala, Sulya, D.Kannada	Kallaje	-
Bachanayakanagundi, Sulya, D.Kannada	Yenekkal (Kumaradhara)	2.0 Km
Thodikana, Sulya, D.Kannada	Chandragiri	500m

Place/Taluk/District	River	Length of protected area
Thingale,Karkala, Udupi	Seethanadi	500m
Sringeri, Sringeri, Chikmagalur	Tunga	1km
Jammatagi(Hariharapura), Koppa, Chikmagalur	Tunga	500m
Chippalagudda, Thirthahalli, Shimoga	Tunga	500m
Mattur-Hosahalli, Shivamogga Taluk & Dist.	Tunga	1.5 Km
Shivanasamudra, Malavalli, Mandya	Shimsha	1.4 Km
Bhagavathi Chaya Kolla, Surpura Taluk, Gulbarga	Krishna	-
Harangi Dam to Kudligi Dyavakere, Somwarpet Taluk, Kodagu District	Cauvery	5. Km

Source: Department of Fisheries

#### 7.15.7: Infrastructure in Fisheries Sector:

The State government has given importance for the development of infrastructure facilities like fishing harbours, landing centers, auction halls, ice plants, cold storages, freezing plants and frozen storages. An overview of the infrastructure in fisheries sector is given below.

#### 7.15.8: Labour Employed in Fisheries Sector:

Fisheries sector has been faring high in terms of its foreign exchange earning potential and employability of vast majority of coastal community in fisheries sectors associated with fishing. Improvements in technology has led to unbridled capital investment in this sector and has attracted more and more

people from the adjacent coastal transects who do not necessarily belong to the fishing community. Seafood exports from Karnataka is exploring new heights with increasing opportunities for value addition and branding of products. Further, over the years, there is increase in the coastal fisher folk population inducing more and more people into fishing and allied activities. Employment status and opportunities in marine fisheries sector of Karnataka has increased over the years along with mechanization and increased replacement of labour-intensive fishing technologies. Fish, being a highly perishable product, needs the services of several people for its fast movement from harvesting point to consuming centers without deterioration in its quality. The size of fisher folk in Karnataka population in the State is given in **Table 7.81**.

<p><b>MARINE:</b> HARBOURS: 8 JETTIES AND BEACHLANDING CENTRES: 88 SHRIMP HATCHERY: 5</p>	<p><b>FARMS (INLAND):</b> PRODUCTION: 27 REARING: 28 TALUK LEVEL NURSERY: 72 Total:127</p>
<p><b>FISHERIES CO- OPERATIVE SOCIETIES:</b> 346(INLAND), 109 (MARINE) FEDERATION: 1 (INLAND), 2 (MARINE)</p>	<p><b>COLD STORAGES:</b> 24(INLAND), 29 (MARINE) ICE PLANTS: 67 (INLAND), 186 (MARINE) FROZEN STORAGE: 1 (INLAND), 14 (MARINE) TRAINING CENTRES: 4 (INLAND)</p>

**Table 7.81: Fisher folk in Karnataka, (in lakhs)**

Sector	Number of fishermen	No. of active fishermen
Marine	3.28	1.57
Inland	6.33	1.39
Total	9.61	2.96

Source: Department of Fisheries

### 7.15.9: Major Programmes of the Department:

#### A) Marine Fisheries:

##### 1. Construction of fishing harbours (CSS):

Under this scheme, the construction and expansion of major fishing harbours and landing centers will be taken up for the marine infrastructure development in the State. During 2014-15, Rs.4266.00 lakh was spent for construction of fishing harbours at Malpe, Mangalore and Honnavar fishing harbors. Under this scheme, development of 3<sup>rd</sup> stage fishing harbour at Mangaluru and Malpe, development of fishing harbour at Honnavar and construction of break water works at Gangolli were taken up. During the year 2015-16 budget provision of Rs.5000.00 lakhs has been provided. However, due to non-release of grant from the centre no expenditure has been incurred as on Dec. 2015.

##### 2. Dredging of fishing harbours and landing centers (CSS):

Under the scheme during the year 2014-15 a budget provision of Rs.450.00 lakhs is provided and an expenditure of Rs.340.26 lakhs has been incurred towards dredging at Hejamadi, Kandethapalli, Kodibengre, Udyavara, Bhatkal and Hangarakatte landing centre. Siltation is common phenomena in fishing harbour and landing centers which adversely affect safe movement of fishing boats. As a part of maintenance of fishing harbour, the centrally sponsored scheme on dredging of fishing harbours and landing centers is being implemented. During 2015-16 budget provision of Rs.1000.00 lakhs has been provided no expenditure has been incurred during the current year as central and state share has not been released till-date.

##### Renovation of fishing harbours and landing centers:

This scheme has been initiated for construction of small fishing harbours and landing centers with State Government plan funding and renovation of existing harbours with central assistance.

In the year 2014-15 an allocation of Rs.2336.99 lakhs was provided and Rs.2,103.50 lakh was spent for the construction of jetties and landing centers. This amount has been spent for works at Maravanthe, Koderi, Shirur, Alvegadde, Tenginagundi and Alvekodi fish landing centers. The fishermen were provided with hygienic places to land their fish catch by constructing jetties and landing centers in various places. During 2015-16 an allocation of Rs.3002.00 lakh has been provided under the scheme and Rs.1778.92 lakh was spent up to end of Dec. 2015.

##### 3. Rashtriya Krishi Vikasa Yojana:

Under this programme, during the year 2014-15, Rs.539.00 lakhs has been spent against the release of Rs.739.00 lakhs. The activities like stocking of fish seed in selected reservoirs, financial assistance for supply of fishery requisites, transport vehicle, coracles etc. To fishermen has been provided. Permission has been accorded by the Govt. to utilize unspent balance of Rs.200.00 lakhs towards upgradation of fish seed production farms during the year 2015-16.

During the year 2015-16, programmes like upgradation of fish seed production farms, cage culture projects, integrated development of fish culture, marketing, extension and modernization, studies for production of quality fish seed under cluster approach and assistance for purchase of fishery requisites and development of fisheries co-operative societies under Special Developmental programme will be taken up. For this purpose a budget provision of Rs.1,000.00 is set aside during the year 2015-16

##### 4. Maintenance of coastal link roads:

The state has 366.51 Km long 266 fisheries link roads connecting fishing harbours and landing centers to National Highway and major processing centers in the coastal area.

Every year budgetary provision is provided for construction and maintenance of these roads. In the year 2014-15 an allocation of Rs.500.00 lakh was provided and Rs.444.14 lakh was spent for development and maintenance of link roads. Against the budget outlay of Rs.500.00 lakh during 2015-16, expenditure of Rs.217.56 lakh has been incurred up to end of Dec. 2015.

**5. NABARD assisted Rural Infrastructure Development Fund (RIDF) scheme:** In the year 2014-15, budgetary provision of Rs.3000.00 lakhs was provided and an expenditure of Rs.492.76 lakhs was incurred for different works. During the year 2015-16, Rs.1014.00 lakhs NABARD assistance has been provided and as on Dec. 2015, Rs.711.94 lakhs has been spent.

**6. Development and maintenance of fishing harbour and landing centers:** The allocation provided under this scheme is utilized for the maintenance including water & electricity charges, cleaning & repairs of fishing harbours. During 2014-15, out of Rs.245.00 lakh provided Rs.234.98 lakh has been spent on maintenance of fishing harbours.

Under this scheme allocation of Rs.150.00 lakhs has been provided during 2015-16 and Rs.112.50 lakh has been released and an expenditure of Rs.90.44 lakhs has been incurred.

**7. Subsidy on the electricity used by ice plants:** In order to rejuvenate the ice plants of coastal districts, a subsidy of Rs.1.50 per unit of electricity used by these ice plants is provided under this scheme. An allocation of Rs.390.00 lakh was provided during 2014-15 and subsidy of Rs.389.93 lakh was distributed to 186 plants. During 2015-16 an allocation of Rs.400.00 lakhs has been provided and expenditure of Rs.194.00 lakh has been incurred up to end of Dec. 2015.

## **B. Inland Fisheries:**

During 2014-15, the total fish seed produced from different fish seed production centers of department and private centers was 5299.67

lakh fry fingerlings. During the year 2014-15, 2040.81 lakh fish fingerlings were stocked in 3129 department tanks and 451.50 lakh fish fingerlings were stocked in 1728 Gram Panchayat tanks and developed. During the year 2015-16, 2764 departmental tanks and 1396 Gram Panchayat tanks have been developed by stocking 1657.22 lakh and 347.97 lakh fish fingerling respectively as on Dec. 2015. During the year 2015-16, 1.50 lakh M.T. of fish from inland resources has been produced (as on Dec. 2015).

### **Various Programmes under inland fisheries are given below:**

**1. Subsidy for purchase of fish seed:** Under the scheme 50% subsidy on cost of fish seed or maximum of Rs.25000.00 is provided to fish farmers for purchase of fish seed at the rate of 50.00 lakhs spawn or 10.00 lakh fry per ha. is provided. Further maximum subsidy of Rs.25,000/- is provided to each co-operative society under this scheme. With this, quality fish is made available to fish farmers and besides this prevents purchase of poor quality fish seed from other states.

During the year 2014-15, an allocation of Rs.50.00 lakh has been provided under the scheme and Rs.41.90 lakh has been spent. During the year 2015-16 an amount of Rs.50.00 lakhs budget has been provided and Rs.14.93 lakhs expenditure has been incurred as on Dec. 2015.

**2. Fish seeds:** Provision is made under this scheme to take up construction and maintenance of fish seed production farms to boost the fish seed production. During 2014-15 an allocation of Rs.50.00 lakh was provided and Rs.50.00 lakh was spent for maintenance of fish seed production centre. Rs.100.00 lakh budget has been provided for the year 2015-16 for this programme and Rs.54.00 lakhs expenditure has been incurred as on Dec. 2015.

**3. Supply of fishery requisite kits:** Under the scheme "Supply of fishery requisite nets" and other supplementary materials required to catch fish is provided to marine and inland fish farmers at 100% subsidy (Unit cost

maximum Rs.10,000). During 2014-15, out of an allocation of Rs.400.00 lakhs, Rs.399.94 lakh was spent to distribute kits to 3999 beneficiaries. For the implementation of the scheme Rs.200.00 lakh budget has been provided for the year 2015-16 and Rs.77.70 lakhs expenditure has been incurred as on Dec.2015.

**4. Distribution of Fibre glass coracle for inland fishermen:** The programme, distribution of fiber glass coracle was formulated keeping in mind the safety of inland fishermen. These fiber glass coracles are not only durable but also very strong and it also helps the fishermen to fish in deeper waters and also ensure the safety to the life of fishermen. During 2014-15, 2000 fishermen were provided with this facility by spending Rs.198.21 lakhs out of budget Rs.200.00 lakhs. The cost of each unit was Rs.10,000/- .

An amount of Rs.100.00 lakhs has been provided for the year 2015-16 towards the implementation of the scheme. The purchase of coracle is under progress and an expenditure of Rs.35.54 lakhs has been incurred as on Dec - 2015.

**5. Assistance for inland fisheries development:** Under this scheme, provision has been made for the recurring expenses for production of fish seed in fish seed centers, fish seed rearing in taluk level nurseries and in fish seed rearing centers. Allocation is utilized for purchase of fish seed and transportation, purchase and maintenance of vehicle, purchase and maintenance of other requisites. In general, essential and supplementary facilities required for increasing fish seed production is made under this scheme. Under this scheme an allocation of Rs.301.97 lakhs was made during 2014-15 and Rs.233.87 lakhs has been spent.

A budget allocation of Rs.439.0 lakhs has been provided during 2015-16 for this purpose and Rs.187.46 lakhs up has been spent to the end of Dec - 2015.

### **C. Schemes for Preservation, Processing and Development of Marketing Facilities.**

**1. Assistance for construction of fish market:** There is a need to establish hygienic fish markets. A scheme has been formulated such that local bodies can avail 40% financial assistance from National Fisheries Development Board, Hyderabad for construction of markets and the remaining 10% can be availed from by the State Government. Remaining 50% need to be obtained from NABARD as loan. In 2014-15, an allocation of Rs.30.00 lakhs was provided for the scheme and an expenditure of Rs.29.08 lakhs was incurred towards construction of 5 fish markets.

In 2015-16, an allocation of Rs.30.00 lakhs has been provided for this purpose and up to end of Dec. 2015 Rs.3.45 lakhs has been spent towards construction of 4 fish markets.

### **D. Fishermen Welfare Schemes**

#### **1. Centrally Sponsored Fishermen Welfare Schemes**

##### **a) Savings cum relief scheme for marine fishermen:**

Under this Scheme, Rs.100 per month will be collected from marine fishermen for a period of 9 fishing months in a year. Thus a total amount of Rs.900/- will be collected from each fisherman. A matching contribution of Rs.900/- each by the State and Central Governments is provided. Rs.2700/- thus collected is distributed during 3 none fishing (monsoon months) to the beneficiaries at Rs.900/- per month.

During 2014-15 a budget allocation of Rs.450.00 lakhs was provided under this component and Rs.450.00 lakhs was spent. In total 39048 beneficiaries were benefited and Rs.450.00 lakhs was distributed as relief. During 2015-16, Rs.811.00 lakhs is provided as state share for the scheme and 43383 fishermen are involved in savings.



**Table 7.82: Savings cum relief scheme for marine fishermen**

Year	No. of beneficiaries	Amount disbursed (Rs.in lakh)
2010-11	21066	252.78
2011-12	25721	308.66
2012-13	31223	371.72
2013-14	32724	392.90
2014-15	39048	450.00

**b) Group Accident Insurance Scheme:**

Under this Centrally Sponsored Group Accident Insurance Scheme, the premium amount is shared equally by State and Centre Government to cover insurance for 2.05 lakh fishermen of the State. During 2014-15, an allocation of Rs.26.25 lakhs was provided and Rs.20.75 lakhs has been paid to FISHCOFED, New Delhi towards premium by the State Government. During 2014-15, 38 insurance claims were settled and Rs.37.50 lakhs was disbursed as claim amount.

An allocation of Rs.21.00 lakh is provided for this purpose during 2015-16 and premium amount of Rs.20.75 lakhs has been paid.

**(c) Housing Scheme:** Under this scheme, HUDCO loan is being reimbursed. Rs.118.28 lakh has been reimbursed as against the allocation of Rs.150.00 lakh during 2014-15. During the year 2015-16, an allocation of Rs.330.00 lakhs is provided for this scheme and Rs.55.90 lakh has been spent up to end of Dec. 2015.

**1) Reimbursement of differential interest to commercial banks:**

Fishermen can avail loan up to Rs.50,000 from commercial bank @ 2% interest to take up fisheries activities. If the Commercial Banks and Regional Rural Banks provide loans to fishermen as loan, then Government will reimburse the difference of interest over and above 2%. An allocation of Rs.250.00 lakhs was provided during 2014-15. Under this scheme an expenditure of Rs.210.68

lakhs has been incurred to clear claims of 19392 fishermen. An allocation of Rs.250.00 lakh has been made during 2015-16 and no expenditure has been incurred upto end of Dec. 2015,

**2) Distress Relief Fund:**

Distress Relief Fund was established to provide relief to fishermen and their dependents in case of permanent disability/death while fishing. The compensation provided under the scheme for death cases has been increased to a maximum of Rs. 2.00 lakhs and the relief for loss/ damage of boat/net and medical expenses has been increased to a maximum of Rs. 25,000. During 2014-15, Rs.50.00 lakh was provided to the fund. 55 death cases have been settled. Compensation has been provided to 19 boat damage and fishing net loss cases. In total Rs.47.18 lakhs has been disbursed as relief.

An allocation of Rs.50.00 lakh is provided for contribution towards the Relief fund in the year 2015-16. Expenditure of Rs.25.00 lakh has been incurred up to end of Dec. 2015.

**3) Matsya Ashraya Yojane:**

Under this scheme housing facility is being provided to houseless fishermen. The subsidy under this scheme has been enhanced to Rs.1.20 lakh from 2014-15. During 2014-15, 2865 houses have been sanctioned and distributed. Further, Rs.7.70 crore has been released to Nodal Agency, Karnataka

Fisheries Development Corporation for construction of houses sanctioned during previous years. Rs.373.39 lakhs was released during 2014-15 towards the houses sanctioned during the year.

An allocation of Rs.1200.00 lakh has been earmarked for implementation of this scheme during 2015-16 and no expenditure has been incurred upto Dec. 2015.

## **E. District Sector Programmes**

### **1. Construction and maintenance of fisheries buildings and facilities:**

Budget provision has been provided for construction and maintenance of office buildings, repair and improvements to fish farms and taluk level nurseries, construction and maintenance of fish landing jetties, auction halls in coastal districts and for operational costs and purchase of equipments for the aquaria at Karwar, Hassan, Belgaum, Gulbarga, D.K., Bidar, Kolar, Kodagu and Bijapur. During 2014-15, an allocation of Rs.265.37 lakh was made under this scheme and an expenditure of Rs.235.26 lakh was incurred. An allocation of Rs.321.01 lakh has been made in the year 2015-16 for this scheme and so far Rs.87.84 lakh has been spent upto Dec. 2015.

### **2. Assistance for development of inland fisheries:**

Under the scheme of assistance for development of inland fisheries, subsidy for construction of fish ponds in their own land in water logged areas, assistance for supply of grass carp seed, assistance for development of fisheries in wells and ponds, etc are being implemented in district sector. During the year 2014-15 against an allocation of Rs.256.38 lakh an expenditure of Rs.225.47 lakh was incurred and 3089 beneficiaries were assisted under this scheme. In the year 2015-16 an allocation of Rs.300.76 lakh has been made and Rs.135.93 lakh has been incurred up to Dec. 2015.

### **3 Assistance to construction of fish markets and fish marketing -(ZP sector):**

In order to help fisher folk, to sell and transport harvested fish in fresh and hygienic condition, assistance is being provided for the purchase of a bicycle and insulated boxes with 50% subsidy, subject to a maximum limit of Rs.2000/-, 25% subsidy for purchase of 2 wheeler and ice box subject to maximum of Rs.10,000/-, 25% subsidy to a maximum of Rs.30,000/- for the purchase of a 3 wheeler tempo rickshaw and 25% subsidy subject to a maximum of Rs.35000/- for the purchase of 4 wheeler will be provided to a group of 3-4 persons. An expenditure of Rs.81.97 lakhs was incurred against the budget provision of Rs.94.06 lakhs under this scheme during 2014-15. Subsidy was provided to 1460 beneficiaries. In the year 2015-16, an allocation of Rs.112.00 lakhs has been made and Rs.28.36 lakhs has been spent up to end of Dec. 2015.

### **4. Centrally Sponsored Motorization of traditional crafts:**

Centrally Sponsored Scheme of Motorization of Traditional Fishing Crafts was introduced in the State during the year 1987-88 and so far 3493 traditional crafts have been motorized. During 2014-15 an allocation of Rs.106.20 lakhs was made and Rs.89.20 lakhs expenditure was incurred. During the year 2015-16 an allocation of Rs.116.00 lakhs has been provided. The central government has released Rs.58.00 lakhs and total of Rs.116.00 lakhs has been released including state share. An amount of Rs.38.89 lakhs has been incurred upto Dec. 2015.

### **5. Exhibition and training:**

Under this scheme allocation has been provided for preparation of suitable exhibits on fisheries activities and to participate in exhibitions at State, District and Taluk level. Also there is provision to conduct one-day workshop to impart training to interested fish farmers on fish culture activities and to provide information on departmental schemes.

During the year 2014-15, an allocation of Rs.49.03 lakhs has been provided and Rs.49.58 lakhs has been spent. 576 fishermen were trained and participated in 74 exhibitions.

An allocation of Rs.57.23 lakhs has been made during 2015-16 and expenditure of Rs.16.94 lakh has been spent up to end of Dec. 2015.

## **6. New schemes taken up for the year 2014-15**

### **1. Stocking of fish seed in reservoirs:**

There are 82 reservoirs in the State. The total water spread area is 2.72 lakhs hectare. There are thousands of fishermen families who depend solely on these reservoirs for their livelihood. (In the recent days the fish catch in these reservoirs has reduced and life of fishermen has become difficult). In this scheme provision has been made to stock good quality fish seed. An allocation of Rs.100.00 lakhs has been made for this during 2014-15 and an expenditure of Rs.98.20 lakh has been incurred. During the year 2015-16, Rs.200.00 lakhs budget has been provided for implementation of the scheme. During the current 154.00 lakh fish seed has been stocked and an expenditure of Rs.103.60 lakhs has been incurred as on Dec. 2015.

### **The constraints and gaps identified in the Department:**

- Inland fisheries development is rain dependent activity. Hence, better progress can be achieved depending on rain fall during the year.
- Beneficiaries are not coming forward to take up fish farming on commercial basis.
- There is shortage of technical and clerical staff in the department. The schemes are not being implemented effectively as many posts of Assistant Director of Fisheries (Gr.2) working at Taluk level are vacant.

## **Results (Achievements) and challenges**

### **Achievements:**

- ✓ The increase in the overall fish production of the state during the recent years
- ✓ Disposal of fishery rights of water bodies using FRIMS soft ware in transparent manner.
- ✓ Introduction of Pangasius species to fish farmers.
- ✓ Encouraging fish seed rearing in private sector.
- ✓ Promotion for construction of fish culture ponds and fish culture on scientific lines in private sector under NMPS scheme.
- ✓ Construction of hygienic fish markets to provide fresh fish to the public in clean environment and strengthen the marketing system for quick transportation.
- ✓ Enhanced fish seed production in the state
- ✓ Created awareness among fishermen on stocking of advanced fish fingerlings.
- ✓ Reduction in the pressure on near Shore Sea fishing by encouraging deep sea fishing.
- ✓ Construction and maintenance of fish landing centers, jetties and fisheries link roads to fishermen colonies and improvements to the fish seed production centers under RIDF scheme.

### **Future Challenges:**

- ❖ To encourage deep sea fishing and optimum utilization of unexploited resources
- ❖ Encouragement of commercial fish culture in inland water resources
- ❖ Introduction of new species for fish culture
- ❖ Create awareness among fishermen to reduce juvenile fishing in marine fisheries
- ❖ To bring in awareness among fishermen community about sustainable marine fisheries and initiate to adopt required management practices actively to achieve sustainable production.

### 7.15.10 Agricultural Research, Education and Training:

#### I) University of Agricultural Sciences, GKVK, Bengaluru:

The University of Agricultural Sciences, Bangalore established in 1963 is the first Agriculture University in India. The University has celebrated its Golden Jubilee during 2013-14. UAS, Bangalore has its jurisdiction over ten southern Districts of Karnataka covering 51 Lakh hectares of geographical area.

The Government of Karnataka has provided Rs. 1962.00 lakhs towards Agricultural Education and Rs. 2500.00 Lakhs towards Agricultural Research during the year 2015-16 under Plan grants.

#### a) Agricultural Education:

1. **Supporting Educational Programme in constituent colleges:** Presently there are four constituent colleges under the jurisdiction of UAS, Bangalore viz., Bangalore, Chintamani, Hassan and Mandya campuses. University is offering six undergraduate degree programmes, Master's degree programmes in 21 disciplines, Doctoral programmes in 13 disciplines and two year Diploma in agriculture at Mandya Campus. The colleges are provided financial support to purchase lab chemicals, seeds and manure, labor charges to conduct student practical in different disciplines. In this regard Rs. 415.07 lakh has been allocated, out of which Rs. 337.40 lakh has been spent upto the end of December-2015.

2. **Sustaining Plant Biotechnology, Food technology and B.Sc. (Agri) degree programme at Agriculture College, Hassan:** For this Rs. 192.55 lakh has been allocated, out of which Rs. 157.87 lakh has been spent upto the end of December-2015.

3. **Supporting Students Co-curricular activities, refurbishment of units, planning and financial accounting, library and organizing annual convocation:** For

this Rs. 259.62 lakh have been allocated out of which Rs. 168.67 lakh has been spent upto the end of December-2015.

4. **Providing Conveyance facility at GKVK for Students and Staff for the RAWE programme and hands on training:** To provide required logistic support Rs. 20.00 lakh has been spent upto the end of December -2015 for the maintenance of vehicles.

5. **Strengthening of Infrastructure at Teaching Campuses:** Road, street lights, water supply which are essential are to be maintained for providing better working atmosphere. For this Rs. 84.06 lakh has been allocated out of which Rs. 60.22 lakh has been spent upto the end of December-2015.

6. **Expansion of Hostels for Boys/ Girls at GKVK and other constituent Colleges:** The funds have been earmarked to take up Hostel expansion Rs. 750.00 lakh has been earmarked for this scheme. The work is under progress.

7. **SC Grants – EBL charges to students, special training to staff and ST Grants - EBL charges to students, special training to staff etc.:** For this Rs. 153.15 lakh has been allocated out of which Rs. 28.65 lakh has been spent upto the end of December-2015.

#### b. Agriculture research:

1. **State share to ICAR Coordinated Research Projects and Pension contribution of the staff of the ICAR Coordinated projects:** On-farm trials on cost effective fertilizer recommendations are in progress. New hotspots for nematode identified. Demonstrations on Dry land Technologies conducted. Weekly short range weather forecast issued. Popularization of small millets through demonstration and training undertaken. For this Rs. 882.64 lakh have been allocated out of which Rs. 600.41 lakh has been spent upto the end of December-2015.

2. **Strengthening location-specific research in different Research Stations:** Two projects, strengthening of Organic Farming and Quality seed production through participatory approach sanctioned under RKVY have been implemented. For this Rs. 392.66 lakh has been allocated, out of which Rs. 339.22 lakh has been spent upto the end of september-2015.
3. **Farmer Centric Demand Driven Research (FCDDR):** Under FCDDR, 18 research projects have been implemented on different themes, involving liquid bio-fertilizers, purity testing in Rice, Standardization of Artificial Screening techniques, production of predatory, management of late blight of potato, Akkadi system under dry lands, development of value added products, farm machinery etc. For this Rs. 35.00 lakh has been allocated, out of which Rs. 10.37 lakh has been spent upto the end of December-2015.
4. **Up gradation of Research Infrastructure and Support Service:** In order to strengthen the location-specific research in different research stations, infrastructure facilities have been created and also Farm Developmental activities like Deepening of farm ponds Construction of cattle sheds Drilling of bore wells etc., are undertaken. For this Rs. 225.95 lakh have been allocated out of which Rs. 101.27 lakh has been spent upto the end of December-2015.
5. **Modernization of old Agriculture Research Stations, Infrastructure Development of New Research Stations, ARIS Cell and KVKs:** Land developments have been completed in newly established Research Stations ARS, Nelamakanahalli and ARS, Kunigal. For this Rs. 240.90 lakh has been allocated out of which Rs. 120.71 lakh has been spent upto the end of December-2015.
6. **Improvement and development of varieties and value addition:** Under Varietal Developments Programme 44 trials on identification of high yielding and disease and drought resistant crops like Maize, Rice, Ragi, Chickpea, Field bean,

Cowpea, Blackgram, Greengram, Soybean, Grain Amaranth, Sugarcane, Fodder Crops etc. are under progress. For this Rs. 350.00 lakh have been allocated out of which Rs. 180.90 lakh has been spent upto the end of December-2015.

7. **SC Grants – contingency for student’s research, research grants to teachers and ST Grants – contingency for students research, research grants to teachers etc.:** For this Rs. 172.85 lakh has been allocated. Out of which, Rs. 20.24 lakh has been spent upto the end of December-2015.

#### c) Agricultural extension:

1. **Establishment of Agri-tech portal:** The UAS, Bengaluru under the Directorate of Extension has established an Agri-tech portal to serve as e-extension centre to repository of agriculture, weather, market, success stories and allied information and also digitized content generation of agri. Related technologies which includes relevant text, graphs, photographs etc., document and upscale the farmer practices and innovations.
2. **Sustainable Information Reach of Farmers through Milk Producers Co-operative Societies (MPCS):** Providing of timely technical information to large number of farmers plays an important role in increasing the agricultural productivity. With the limited number of extension personnel, MPCS can be used for effective tool for dissemination of technologies. There are 12066 MPCS functioning in Karnataka with 2.23 million milk producers as members. Most of the members will be visiting MPCS twice a day to sell their milk and will be spending about half an hour and at this time the local specific technologies can be displayed which will reach large number of farmers.
3. **Village adoption by KVKs for overall development:** The Seven KVKs of UAS, Bengaluru have adopted one village each near by the KVK for all round development and these villages will serve as a model to

other villages. An amount of Rs.13.16 crores has been spent for this program.

### Highlights:

- During the academic year 2015-16 532 Students admitted for under graduate degree, 90 Students admitted for post graduate degree and 52 Students admitted for Diploma in Agriculture.
- During the academic year 2015-16 53 Students admitted for B.Sc. (Ag. Biotech), 48 Students admitted for B.Tech( Food Science & Technology)
- All India Junior Research Fellowship Examination-2014 conducted by ICAR, New Delhi, 43 students have qualified and secured fellowship for higher studies.
- Introduced one year Distance Education in Diploma Agriculture and PG Diploma in Agriculture.
- Initiated 44 research Projects under Varietal Developmental Programme.
- The University has released Groundnut GKVK-5, Tamarind GKVK-17 and Fodder Cowpea MFC-08-14 varieties and developed technologies.

## II) UNIVERSITY OF AGRICULTURAL SCIENCES, DHARWAD:

The University of Agricultural Sciences, Dharwad is catering to the technical needs of farmers and people of seven districts of North Karnataka, viz., Bagalkote, Belagavi, Vijayapur, Dharwad, Gadag, Haveri and Uttara Kannada. There are five educational institutions offering degree programmes in Agriculture, Rural Home science, Agricultural Marketing & Cooperation, Food Technology and Forestry, M.Sc. programmes in 24 disciplines and Doctoral degree programme in 20 disciplines. The university is offering two years Diploma in agriculture at seven centers viz., Dharwad, Hanumanmatti, Jamakhandi, Konnur, Kumata, Nippani and Vijayapur campuses. The University has 30 research stations, 5 Krishi Vignana Kendras, 6 Extension Education Units, 5 training units and 1 Agricultural Information Technology Center located in Dharwad covering four different Agro-Climatic zones of the State. The University has initiated different activities in

colleges, research centers and extension education units in the field of Agriculture, Horticulture and Forestry.

The Government of Karnataka has provided Rs. 4322.00 lakhs under plan schemes and a sum of Rs.2387.00 lakhs has been released and Rs.2630.84 lakhs has been spent till December 2015.

### a) Agricultural education:

#### 1. Supporting Educational Programmes in constituent colleges :

The constituent colleges and centers are provided with the financial support to purchase laboratory chemicals, seeds and manure, labour charges to conduct practical experiments in different disciplines. Besides, colleges are also provided with the financial support for experiential learning and Rural Agricultural/ Rural Institutional/ Industrial/ Forestry work experience programme (RAWI/RIWI/RFWI). The support was also extended to purchase sports materials required by the students and college administration to carry out co-curricular activities. For all these educational and extensional programmes a total of Rs. 2000.00 lakh have been allocated out of which Rs. 1249.31 lakh has been spent up to the end of December-2015.

#### 2. Automation of Education, Accounts and strengthening of IABT:

It was planned for automation of Under Graduate, Post Graduate and Diploma/Certificate courses along with the administration, accounts in the different campuses and strengthens the activities of institute for Agri-Bio Technology. For this Rs. 24.03 lakh have been allocated out of which Rs. 4.27 lakh has been spent up to the end of December-2015.

#### 3. Infrastructure Development of Main Campus and Colleges:

Establishment of basic infrastructure facilities for staff and students are in progress. For this Rs. 361.63 lakh have been allocated out of which Rs. 334.16 lakh has been spent up to the end of December-2015.

#### 4. B.Tech.(FoodTech.) Degree Programme:

Funds were provided to strengthen the lab

and other equipments needed for B. Tech. (Food Tech.) programme. For this Rs. 50.00 lakh have been allocated out of which Rs. 17.82 lakh has been spent up to the end of December-2015.

**5. Hostel for Foreign Students:** To provide hostel, sports and other basic facilities for the international students a sum of Rs. 5.60 lakh have been allocated out of which Rs. 3.82 lakh has been spent up to the end of December-2015.

**6. University Library & Digital Library:** For the maintenance of library and purchase of new journals, books, furniture and equipments, digitalization of library, purchase of journals, newspapers, magazines, CABI, internet, digital library in different campuses a sum of Rs. 89.13 lakh have been allocated out of which Rs. 74.37 lakh has been spent up to the end of December-2015.

**7. College of Agriculture, Hanumanamatti:** For creating facilities such as teaching class rooms, lab facilities, hostels, library, recreation and sports facilities an amount of Rs. 553.50 lakh have been allocated for newly started Hanumanamatti college out of which Rs. 461.15 lakh has been spent up to the end of December-2015.

**8. Diploma / Certificate Courses:** Funds are provided to Diploma centers to construct class rooms, laboratories and hostel facilities, hands on experience, skill development in agriculture technologies exposure visit for the students. For this Rs. 234.64 lakh have been allocated out of which Rs. 51.10 lakh has been spent up to the end of December-2015.

**9. SC/ST Grants:** For this Rs. 775.02 lakh have been allocated out of which Rs. 279.79 lakh has been spent upto the end of December-2015.

**10. Strengthening of Community Radio Center:** To improve the quality and duration of broadcast by community Radio center, funds were provided for purchase of modern equipments. For this Rs. 31.20 lakh have been allocated out of which Rs. 27.30 lakh has been spent up to the end of December-2015.

**11. Infrastructure Development in Extension Education Units:** Funds were provided for purchase of essential training components, furniture, audio visual aids and mobile clinic vehicle. Demonstrations and new technology popularization campaigns were organised. For this Rs. 20.93 lakh have been allocated out of which Rs. 5.05 lakh has been spent up to the end of December-2015.

**12. Providing conveyance to students and staff for the support of education and research programmes:** To provide required logistic support and maintenance of vehicles a sum of Rs. 30.00 lakh have been allocated.

**13. Study Abroad Programme:** In this program fifteen students were sent to abroad to have first hand exposure to field and laboratories of foreign universities/institutes. The expenditure of accompanying faculty and two SC/ST students was met by the university.

#### b) Agricultural extension:

**'Raita Chetana' Help Line:** The University for the first time in the entire nation has established a 24 x 7 Toll free helpline (1800-425-1150) for farmers - 'Raita Chetana' to address their grievances through the concerned officers of line departments for due action.

**KISAN Mobile Advisory Services:** 10,000 farmers have been reached by KVKs through KIMAS (Kisan Mobile Advisory Services) through their cell phones by sending short message services (SMS) on various agricultural and allied technologies.

**SAMETI (N) Training Programmes:** Under SAMETI (North), 15 Training Programmes for 300 extension functionaries of development departments were organized by Directorate of Extension.

**Production of Quality Seeds and Saplings:** Mango, sapota, guava, tamarind, amla, jamun, curry leaf, drumstick, custard apple, perennial brinjal, lime of improved varieties were produced and sold.





### c. Agricultural Research:

1. **Staff Research Support Activities:** The scientists of the university have initiated the staff to research in agriculture, horticulture, animal science, social science and location specific trials. Special breeding program on cereals and pulses were undertaken during kharif and rabi seasons. The breeding work in millets, cowpea, tomato and linseed is in progress. For this Rs. 265 lakh have been allocated out of which Rs. 104.20 lakh has been spent up to the end of December-2015.
2. **Support to Pesticides Residue Testing:** For Pesticide Residue Testing and Quality Analysis of vegetables, fruits, food products, funds were provided. Survey and identification of the locations for sample collection and analysis work are in progress. For this Rs. 10.00 lakh have been allocated out of which Rs. 3.32 lakh has been spent up to the end of December-2015.
3. **Support to Organic Farming Research:** Development and standardization package of practices in organic cotton, maize, sunflower, pigeon pea and safflower has been taken. Identification of the organic blocks in seven districts was planned. Production of bio-agents is in progress. For this Rs. 41.90 lakh have been allocated out of which Rs. 35.11 lakh has been spent up to the end of December-2015.
4. **Support for Research on Protected Cultivation:** Funds are provided for maintenance of the greenhouse, shade house and up gradation of the existing structures for growing hi-tech crops. Development of technology for growing exotic vegetables, colour capsicum, lettuce, broccoli, chinese cabbage, red cabbage etc and high valued orkits gerbera heliconis, bird of paradis and alhpline work is in progress. For this Rs. 20.21 lakh have been allocated out of which Rs. 13.95 lakh has been spent upto the end of December-2015.
5. **Support for Infrastructure Development and maintenance in other**

**Research Stations:** The University has a total of 30 Agricultural Research Stations. Funds are provided for infrastructure development works in Agriculture Research Stations and works are in progress. For this an amount of Rs. 228.06 lakh is allocated, out of which Rs. 70.21 lakh has been spent up to the end of December-2015.

6. **Support for ARS- Malagi, Mudhol, Hombal, Kumta, Indi, Konnur:** Research activities in rice, groundnut, maize, soybean, sunflower, sugarcane, Bengal gram, sorghum and cotton crops and seed production of newly developed hybrids/ varieties are undertaken. For this an amount of Rs. 121.53 lakh is allocated, out of which Rs. 67.91 lakh has been spent up to the end of December-2015.
7. **Support for Agribusiness Export Knowledge Centers:** The Agribusiness Export Knowledge Centers are providing beneficial service to the farmers by advising them on timely information about marketing and export of agricultural produce. Survey and identification of markets for different crops for price forecasting, awareness programmes at hobli level are in progress. For this an amount of Rs. 7.00 lakh is allocated, out of which Rs. 4.58 lakh has been spent upto the end of December-2015.
8. **New Programmes:** Performance evaluation of Bt cotton hybrids, maize hybrids for their yields potential, development of paddy genotypes and suitable technologies for hilly and costal Karnataka and development of linseed and mustard genotypes suitable for northern Karnataka is planned and the work is in progress. For this an amount of Rs. 62.00 lakh is allocated, out of which Rs. 24.95 lakh has been spent upto the end of December-2015.

#### **New initiatives:**

The following new initiatives were implemented by the University to enhance the quality in the areas of agricultural research, education and extension activities during the year 2015-16.

1. Initiatives have been taken to produce breeds seeds, foundation seeds, certified seeds and truthfully labeled seeds of important vegetable crops.
2. A new Diploma (Agriculture) course at Konnur has been started during this year.
3. Doctoral programme in Forestry discipline has been started during this academic year.
4. University initiated the “*Study Abroad Programme*” for the final year undergraduate students.
5. University for the first time in the entire nation has established a 24 x 7 helpline for farmers - ‘Raita Chetana’ to address their grievances through the concerned officers of line departments for due action.
6. University has initiated to issue “Soil Health Cards” to the farmers of respective districts by Krishi Vigyan Kendras of UAS, Dharwad in a phased manner.
7. University has initiated to reach 10,000 farmers by KIMAS (Kisan Mobile Advisory Services) through their cell phones by sending SMS on various agricultural and allied technologies.

#### **New seeds/plants production:**

University has set a target of producing 6342 quintals of Breeds seeds, 3387 quintals of foundation seeds, 26578 quintals of certified seeds and 232 quintals of truthfully labeled seeds of vegetable crops for the year 2015-16.

#### **Achievements during the year:**

The achievements of the University in the fields of Agricultural Research, Education and Extension during 2015-16 are as follows.

#### **Research:**

- University is successful in getting four research and development projects with an outlay of Rs.400 lakhs from the State Department of Agriculture for taking up research and development activities.
- University from its own funds has sanctioned a total of 200 staff research projects to staff members amounting to Rs. 265.00 lakhs to find solutions to the problems of local farming community.
- University has implemented 1534 experiments on agricultural crops and allied sectors covering different disciplines.
- University has sent three varieties of cotton, five varieties of wheat, one variety each for groundnut and blackgram for registration under Protection of Plant Varieties and Farmers’ Rights Authority (PPV & FRA), New Delhi.

### **III) UNIVERSITY OF AGRICULTURAL SCIENCES, RAICHUR**

The University of Agricultural Science, Raichur is catering to the agricultural research, education and training needs of six districts, viz., Raichur, Kalaburagi, Bellary, Bidar, Yadagir, and Koppal. There are three educational institutions offering degree programmes in Agriculture and Agricultural Engineering, Diploma in Agriculture/Agricultural Engineering, Master’s Degree Programmes in 15 disciplines and Doctoral Degree Programmes in 11 disciplines. The University has 13 research stations located at four different agro-Climatic zones of the State. Six of the Krishi Vignana Kendra’s (funded by ICAR, New Delhi) located in the jurisdiction of the University.

University of Agricultural Sciences, Raichur, has taken steps for different activities of colleges, research centers and extension activities in the field of Agriculture and Agricultural Engineering to strengthen the divisions of research, extension and overall development of University of Agricultural Sciences, Raichur. Further, under the grants provided for RKVY project, numbers of research programmes have been formulated in accordance with the stipulated guidelines of the project.

The Govt. of Karnataka has provided Rs.3215.00 lakhs under plan schemes and Rs. 300.00 lakhs under RKVY Projects. A sum of Rs.2411.25 under plan and Rs.100.00 lakhs under RKVY projects has been released for third quarter.

**Table 7.83: Details of allocations and expenditure incurred are as follows.**

Sl No.	Particulars	Grants Allotted Rs.in lakhs	Grants Received Rs.in lakhs	Expenditure incurred upto 31.12.2015
Plan Grants:				
1	Grants-in-Aid Salaries	350.00	262.50	217.00
2	Creation of Assets	900.00	675.00	570.00
3	General	1965.00	1473.75	1160.00
4	RKVY	300.00	100.00	87.00
	Total	3515.00	2511.25	2034.00

**a. Agricultural Education:**

- Supporting Educational Programmes in constituent colleges:** There are four constituent colleges under the jurisdiction of UAS, Raichur viz., Raichur, Bheemaranagudi, Kalaburagi and Raichur campuses. University is offering two Undergraduate Degree Programmes and Master's Degree programmes in 15 disciplines, Doctoral Programmes in 11 disciplines and two year Diploma in Agriculture/Agricultural Engineering at Raichur, Bheemaranagudi, Hagari and Bidar campuses. The colleges are provided with the financial support to purchase laboratory chemicals, seeds and manure, labour charges to conduct student practical/ experiments in different disciplines. For this Rs. 2100.00 lakh has been allocated out of which Rs. 1279.00 lakhs has been spent upto the end of December-2015.
- Supporting student's co-curricular activities, refurbishment of Units, planning and financial accounting library and convocation:** For this Rs. 1965.00 lakhs has been allocated out of which Rs.1160.00 lakhs has been spent upto the end of December-2015.
- Providing conveyance facility to UASR students and Staff for the support of RAWE programme and hands on training to the students:** To provide required logistic support and maintenance of vehicles, Rs.19.75 lakhs has been allocated and the full amount has been spent up to the end of December-2015.

- Strengthening Infrastructure at teaching campuses:** To maintain infrastructure like road, street lights, water supply etc., Rs. 1650.00 lakhs has been allocated, out of which Rs. 882.00 lakhs has been spent upto the end of December-2015.
- SC/ST Grants: Contingency for Students, EBL charges to the students, special training to staff:** For this, Rs. 1.41 lakh for SC and Rs 0.29 lakh for ST has been allocated and the whole fund has been utilized upto the end of December 2015.

**b. Agricultural Extension:**

- ▶ **Village adoption:** In order to achieve overall development of the village, UAS Raichur initiated a "village adoption" by converging the activities of all the development departments. For this Jahagir Venkatapur village of Raichur district is being adopted.
- ▶ **Direct Seeded Rice (DSR):** This is being popularized in 20,000 acres of Raichur district. The farmers are impressed by this technology as it saves water & cost of cultivation and also to mitigate the labour scarcity.
- ▶ **Advisory Services – Mobile advisories to farmers through 'Farmers Portal':** Totally 170 SMS to farmers through text message regarding strengthening the farmers attitude message like, disease pest forecasting, remedies for diseases & pests, soil and water testing importance and organic farming were sent. Totally

12,000 farmers were covered in this service.

**c. Agricultural Research:**

**1. State share to ICAR Co-Ordinated Research Projects and pension contribution of the staff of the ICAR coordinated research project:**

There are 18 AICRP scheme operating in the University are financially supported with 25% share of the total budget by State Government. These are AICRP on Rice, Sunflower, Groundnut, Linseed, Chickpea, Pigeonpea, Sorghum, Cotton, IFS Scheme, farm machinery and power engineering, utilization of animal energy, food processing and post harvest technology, weed control, dry land agriculture, Plastics, Bio-Control, Renewable Energy Sources, Salt Affected Soils & use of Saline water in Agriculture. Under these projects 969 experiments have been laid out in the fields during the months.

**2. Strengthening location specific research in different research stations:**

Following four projects sanctioned under RKVY have been implemented.

- ✓ Establishment of Pesticide Residues Analysis Laboratory in Hyderabad-Karnataka Region.
- ✓ Enhancing Productivity in Groundnut, Chickpea and Rabi Jowar through Farmer's participatory varietal selection in Hyderabad-Karnataka Region
- ✓ Centre for Nano Science and Technology in enhancing the Quality of Agricultural Produce.
- ✓ Genetic enhancement for improving productivity and quality traits in sesame and chilli

For the above projects Rs.300.00 lakhs has been sanctioned out of which Rs.100.00 lakhs has released and Rs.100.00 lakhs has been spent upto the end of December, 2015.

**3. Farmers centric demand driven research projects:**

Under these schemes 23 research projects are being implemented on different themes involving Direct Seed Rice, Alternate Crops/

Paddy, Pigeonpea, Pest and Disease management. Researches on Bt Cotton, Pigeonpea, Sunflower, Maize, Sorghum, Chilli, are in progress. For above projects Rs. 135.91 lakh have been sanctioned out of which Rs.85.00 lakhs has been spent upto the end of December 2015.

**4. Improvement and development of varieties and value addition:**

Under varietal improvement programme 15 projects worth of Rs. 125.00 lakhs was spent on identification of high yielding, disease and drought resistant crops like maize, Rice, Cotton, Sunflower, Chilli, Groundnut, Greengram, Blackgram, Soybean, Sorghum, Pigeonpea, Chickpea, Linseed, Castor, Sesame etc., are under Progress.

For above projects Rs.125.00 lakh have been sanctioned out of which Rs.65.00 lakhs has been spent upto the end of December, 2015.

**New seeds/plants production:**

During Kharif good quality seeds in crops viz., Pigeonpea (690 q), Soybean (360 q), Greengram (150 q), Paddy (1960 q), Groundnut (70 q) are used. Around total of 75 qtls of seeds sold in different crops (Sunflower, Maize, Blackgram, Non Bt Cotton and Foxtail millet). During Rabi season Bengalgram (960 q), Sorghum (180 q) and Safflower (30 q) seeds distributed to the farmers. Along with this, seed production has been undertaken in Agricultural Research Stations and also with the farmers participatory approach to produce 10521 qtls under direct programme has been planned.

**Achievements during the year:**

University of Agricultural Sciences Raichur has developed five varieties and 34 technologies in crop production, crop protection, horticulture and agricultural engineering during 2015-16. 969 experiments were conducted in various disciplines and Government of Karnataka has released an amount of Rs. 260.00 Lakhs for various projects. Varieties in rice (IET19251), Pigeonpea (GRG-811), Cotton (SCS-973),

Sunflower (RSAH-1887) and Groundnut (Kadiri-9) were proposed for release at state level variety release committee.

#### IV) UNIVERSITY OF AGRICULTURAL AND HORTICULTURAL SCIENCES, SHIVAMOGGA:

The University of Agricultural and Horticultural Science, Shivamogga is catering to agricultural research, education and training needs of seven districts, viz., Shivamogga Chickamagalur, Chitradurga, Davangere, Udupi, Dakshina Kannada and Kodagu. There are six educational institutions offering degree programmes in Agriculture, Horticulture and Forestry, Diploma in agriculture, M.Sc. Programmes in 13 disciplines. The University has 14 research stations located in four different agro-Climatic zones of the State. Four of the seven Krishi Vignana Kendra's (funded by ICAR, New Delhi) that are present in the jurisdictional area are managed by the university

University of Agricultural and Horticultural Sciences, Shivamogga, has taken steps for different activities of colleges, research centers and extension activities in the field of Agriculture, Horticulture and Forestry to strengthen the divisions of research, extension and overall development of University of Agricultural and Horticultural Sciences, Shivamogga. Further, under the grants provided for RKVY project, numbers of research programmes have been formulated in accordance with the stipulated guidelines of the project. The Govt. of Karnataka has provided Rs.5195.00 lakhs under plan schemes and Rs. 350.00 lakhs under RKVY

Projects. A sum of Rs.3896.25 lakhs under plan and Rs.100.00 lakhs under RKVY projects is released for third quarter.

#### d. Agricultural Education:

- 1. Supporting Educational Programmes in constituent colleges:** There are four constituent colleges under the jurisdiction of UAHS, Shivamogga viz., Shivamogga, Hiriyur, Mudigere and Ponnampet campuses. University is offering three Undergraduate Degree Programmes and Master's Degree programmes in 14 disciplines, Doctoral programmes in 5 disciplines and two year Diploma in Agriculture at Kathalagere and Brahmavara campuses. For this Rs. 482.82 lakh has been allocated out of which Rs. 285.60 lakh has been spent upto the end of December-2015.
- 2. Supporting student's co-curricular activities, refurbishment of Units, planning and financial accounting library and convocation:** For this Rs. 365.40 lakh has been allocated out of which Rs. 221.23 lakh has been spent upto the end of December-2015.
- 3. Providing conveyance facility at UAHS students and Staff for the support of RAWE programme and hands on training to the students:** To provide required logistic support and maintenance of vehicles Rs. 33.00 lakh has been allocated out of which Rs. 31.04 lakh has been spent upto the end of December-2015.

**Table 7.84: Details of allocations and expenditure incurred are as follows.**

Sl No.	Particulars	Grants Allotted Rs.in lakhs	Grants Received upto 3 <sup>rd</sup> quarter Rs.in lakhs	Expenditure incurred upto 31.12.2015
Plan Grants:				
1	Grants-in-Aid Salaries	595.00	446.25	366.82
2	Creation of Assets	1100.00	825.00	803.34
3	General	3500.00	2625.00	2181.93
4	RKVY	350.00	100.00	80.00
	Total	5545.00	3996.25	3432.09

**4. Strengthening Infrastructure at teaching campuses:** Infrastructure like road, street lights, water supply are maintained for providing better working atmosphere of teaching and research campuses. For this Rs. 267.50 lakh has been allocated out of which Rs. 134.99 lakh has been spent upto the end of December-2015.

**5. SC & St Grants: Contingency for Students, EBL charges to the students, special training to staff:** For this Rs. 18.05 lakh has been allocated out of which Rs. 9.73 lakh has been spent upto the end of December-2015.

**b. Agricultural Extension:**

▶ **Village adoption:** Selected 20 villages from 7 districts of UAHS, Shivamogga jurisdiction for Village Adoption programme. To achieve overall development of the village through convergence.

▶ **Enhancing paddy productivity in Malnad and Hilly areas through large scale mechanized paddy demonstrations:** The large scale mechanized demonstration for enhancing paddy productivity in Malnad, Hilly and coastal zone areas is undertaken. Total areas covered in 200 acres to mitigate the labour scarcity.

▶ **Advisory Services – Mobile advisories to farmers through ‘Farmers Portal’:** Totally 31 SMS to farmers mobile regarding strengthening the farmers attitude message like “ಕೃಷಿಕರಲ್ಲಿ ಹತಾಶೆ ಭಾವನೆ ಬೇಡ. ಭಾವನೆಗಳು ಭರವಸೆಯತ್ತ ಸಾಗಲಿ” and other various information, disease pest forecasting, remedies for diseases & pests, soil and water testing importance and organic farming. Totally 3548 farmers were covered in this service.

▶ **“Negila Miditha” AIR programme:** The programme has been started during the year 2015-16 for one year sponsored by UAHS, Shivamogga, for the benefit of farming community through AIR,

Bhadravathi, where in, UAHS, scientists are giving time to provide technical information on agriculture and Horticulture crops for 5 minutes every day during morning and evening.

**c. Agricultural Research:**

1) **Development of irrigation systems in Agricultural and Horticultural Research Stations:** Development of drip and sprinkler irrigation system in four Zonal Agricultural and Horticultural Research Stations coming under UAHS, Shivamogga is under progress. For this Rs. 34.00 lakh has been allocated out of which Rs. 27.20 lakh has been spent upto the end of December-2015.

2) **Areca research programmes:** This is a project aimed at “Evaluation of Multistoried Cropping System in Arecanut”. The growth of crops like banana, pineapple, cocoa and black pepper planted in arecanut are being evaluated. Training programmes on multistoried cropping in arecanut will be started. Observation on growth of banana, pineapple, cocoa and black pepper will be recorded. Cultural operations are undertaken to keep the plots weed free. For this Rs. 25.00 lakh has been allocated out of which Rs. 18.75 lakh has been spent upto the end of December-2015.

3) **Cashew improvement programmes:** To educate and promote the Cashew crops in Non –traditional areas, Cashew Instructional farm is planned at AHRS, Bhavikere. For this Rs. 12.50 lakh has been allocated out of which Rs. 8.13 lakh has been spent upto the end of December-2015.

4) **Establishment of post harvest and value addition training centre at Mudigere:** Establishment model value addition processing centre building proposal worth of Rs. 40,00,000. e-Tendering process is in progress. For this Rs. 100.00 lakh has been allocated out of which Rs. 75.00 lakh has been spent upto the end of December-2015.

- 5) **Research on bio-fuels at Ponnampet and Hiriyur:** For this Rs. 25.00 lakh has been
- 6) **Strengthening of Custom Hiring Centre – Mechanization:** Strengthening of Custom Hiring Centre-Mechanization:- Now a days due to Scarcity of labours for any agricultural operations Custom Hiring Centre has got more importance. We have under taken to Strengthen the Custom Hiring Centre-Mechanization we are providing the different farm Implements/equipments/machineries for hiring. For this Rs. 50.00 lakh has been allocated out of which Rs. 42.50 lakh has been spent upto the end of December-2015.
- 7) **Establishment of Hi-Tech horticulture centre for research, demonstration and training on protected cultivation at Madikeri:** The establishment of Hi-Tech horticulture centre for research, demonstration and training on protected cultivation at Madikeri is under progress. For this Rs. 130.00 lakh has been allocated out of which Rs. 78.00 lakh has been spent upto the end of December-2015.
- 8) **Solar hub at Navile, Shivamogga:** The establishment of solar hub in the University campus at Navile is nearing completion. For this Rs.162.50 lakh has been allocated out of which Rs. 150.00 lakh has been spent upto the end of December-2015.

## **7.16 FOOD SECURITY THROUGH PUBLIC DISTRIBUTION SYSTEM**

The Department of Food and Civil Supplies and Consumer Affairs, GOK enforces the Essential Commodities Act, 1955 and various control orders issued there and to ensure proper control of the supply and distribution of food grains and trade and commerce in certain commodities. The Department also implements Targeted Public Distribution System (TPDS) which is an important constituent of the strategy for Food Security to population Below Poverty Line (BPL).

### **7.16.1 Provision of Food to the Poor through Public Distribution System in Karnataka**

1. The Public Distribution System (PDS) evolved as a system of management of scarcity and for distribution of food grains at affordable prices. Over the years, PDS has become an important part of Government's policy for management of food economy in the country. PDS is supplemental in nature and is not intended to make available the entire requirement of any of the commodities

distributed under it to a household or a section of the society.

2. PDS is operated under the joint responsibility of the Central and the State Governments. The Central Government, through FCI, has assumed the responsibility for procurement, storage, transportation and bulk allocation of food grains to the State Governments. Food grains are distributed through the PDS to the poor at fixed rates throughout the year. The PDS runs parallel with the market mechanisms to provide food at free and controlled rates to the poor to provide sustenance and food security to the people for whom food at market prices are beyond reach. As in other States, rice, wheat, sugar, and kerosene oil are distributed through the FPSs in Karnataka as well.

3. The operational responsibility including allocation within State, identification of families below the poverty line, issue of Ration Cards and supervision of the functioning of FPS, rest with the State Governments.

### **7.16.2 Targeted Public Distribution System (TPDS)**

The PDS was revamped as targeted public distribution system (TPDS) in 1997 in order to target the system towards the poor. The State Government identifies the poor and makes arrangements for the delivery of qualitative, fixed quantity of food grains at free and concessional rate in a transparent and accountable manner to the poor through the

FPS. To identify the BPL families State Government in its order dated: 24.08.2012 has identified the 14 exclusion criteria. At present National Food Security Act-2013 was in force in the State from January 2014, under this Act Central Government releases the foodgrains as per unit system to the priority households in the State. Households belongs to AAY and BPL families have been considered as priority households under NFSA and foodgrains are distributed at free of cost in the State.

### **7.16.3 Wholesale Depots and Fair Price Shops**

At present release of foodgrains to the state from the Central Government have been lifted from the district FCI godowns to the taluk wholesale depots, then the same has been distributed to the taluk Fair Price Shops. The above system is prevailing in the State.

Depending on the topography and existing cardholders, there is one FPS in every Revenue village and, currently, 20483 FPS are operating in the State. In the hilly areas of Dakshina Kannada, Kodagu, Raichur, Mysore and Chamarajanagara, 9 mobile FPS are also working which are operated by the Karnataka Food and Civil Supplies Corporation. Details of the number of FPS in various districts of the State are given in Appendix 10.1

### **7.16.4 National Food Security Act-2013 (NFSA)**

National Food Security Act-2013 is in force wef. January-2014 in the State. According to this by removing the concept of BPL and APL families, the concept of "Priority families" and "Non-Priority families" concept can be adopted. Under this Act the Central Government has selected 76.04 % population of rural area and 49.36% population of urban area and each these members are availing five kg of foodgrains allotment. In Karnataka State, AAY and BPL cards families has been considered as Priority Families under this Act. According to this Act AAY families are availing 35 kgs of foodgrains and the rest of the Priority Families are availing foodgrains on the basis of unit system. Under PDS

system in Karnataka there are 4.66 Crores beneficiaries which is according to the directions of the Central Government. APL families are considered as Non-priority families and they have been issued foodgrains at concessional rate with effect from June 2015. Under NFSA 1,65,000 MTs of Rice & 52403 MTs Wheat(including Ragi & Jowar) is being released every month to the State.

### **7.16.5 Anthyodaya Anna Yojane (AAY)**

The Central Government has implemented Anthyodaya Anna Yojane (AAY) which is in force wef. August-2002 in the State. It converse the poorest of the poor and is designed for those who are not able to afford two square meals per day. They are the poorest segment of the BPL population such as landless agricultural laborers, households headed by widows, terminally-ill persons affected by HIV, households headed by non specified income source old age persons comes under this scheme. Such beneficiaries are identified in the Grama Sabha by the concerned Grama Panchayath. Under this scheme 7,99,109 families have been identified and getting the benefit of 35 kgs of foodgrains distributed to each such families every month.

### **7.16.6 Annabhagya Yojane.**

Annabhagya scheme is in force wef. July-2013 in Karnataka. From the date of implementation of Annabhagya yojane the beneficiaries of BPL cards holders are availing enhanced quantity of foodgrains. Earlier to this a BPL card family having one member were availing a minimum quantity of 4 kg rice and 1 kg wheat, and a maximum quantity of 20 kg rice and 3 kg wheat. According to New Scheme a BPL family having 1 member is availing quantity 10 kg, 2 members family is availing 20 kg, 3 members and above family is availing 30 kg of foodgrains. Under Annabhagya Scheme upto April 2015 the rate of issue of foodgrains per kg is also reduced to Rs. 1/- from May 2015 onwards every unit of the priority households have been issued 5 Kgs of foodgrains at free of cost. Uniform rate for Kerosene is introduced throughout the State. All the eligible card holders are getting



1 Kg sugar per card. Under this scheme more than 103 lakh BPL families are the beneficiaries every month. By increasing the issue quantity and distributing foodgrains at free of cost, supports the food security and also purchasing ability of the BPL families.

With the implementation of Annabhagya Yojana there is more positive effect in the production on Agricultural field. In addition to Central supporting price, the local attractive bonus on the crops of paddy, ragi and jowar is also declared. Because of this the requirement of foodgrains in the state under

PDS system can also be stored locally and conveniently.

The Central Government NFSA-2013 and the State Annabhagya schemes are implemented on combination in the State. According to this combined scheme the requirement of food grains for every month is 3 lakh MT. But the Central Government monthly allotment of foodgrains is 2,17,403 MT which is below the State foodgrains requirement. As such the deficit quantity of foodgrains is met by the foodgrains like rice, ragi and jowar procured under MSP scheme.

**Table 7.85: The quantity and rate of foodgrains that is being distributed in the State under Annabhagya yojane**

Details		AAY	BPL
Rice	scale of issue (in Kgs)	29	Three K.G per Unit
	Rate per kg (in. Rs.)	Free	Free
Wheat/ Ragi/ Jowar	scale of issue(in Kgs)	6	Two K.G per Unit
	Rate per kg (in. Rs.)	Free	Free
Sugar	scale of issue (in Kgs)	1	1
	Rate per kg (in. Rs.)	13.50	13.50
Palm Oil	scale of issue (in Ltrs)	1	1
	Rate per Ltr (in. Rs.)	25.00	25.00
Salt	scale of issue (in Kgs)	1	1
	Rate per kg (in. Rs.)	2.00	2.00

The category wise beneficiaries identified as AAY, BPL and APL are shown below the table.

**Table 7.86: Details of Number of PDS Cardholders**

Parameters	Card type	No of Card Holders				
		2011-12	2012-13	2013-14	2014-15	2015-16*
As per Government order No. FCS/ 80/ DRA/2012/24-08-2012 24 Parameters have been Prescribed	AAY	1199700	1118371	1100340	1017034	801945
	BPL	8401792	8715869	8486938	9325498	9599310
No	APL	3832931	3499056	2767627	1957100	595264
Total Cards in the State		13434423	13333296	12354905	12299632	10996519

(\* till December -2015 Allotment)

### 7.16.7 Padithara Khatari Scheme

Padithara Khatari Scheme has been introduced in the state during February - 2014. Under this scheme availability of food grains in fair price shops guarantees from 1<sup>st</sup> of every month cardholders can draw foodgrains from 1<sup>st</sup> of every month till 10<sup>th</sup> during 8-00 AM to 8-00 PM (Excluding lunch hours between 1-00 PM to 4-00 PM and National Holidays) Rest of the days in the month fair price shops functions between 8-00 AM to 12-00 AM and 4-00 PM to 8-00 PM (Excluding Tuesday and National Holidays). It guarantees the foodgrains availability from the first of every month. Other-wise card holders are entitled for compensation.

### 7.16.8 Food grains Allotment and Offtake

Foodgrains allotted by the FCI godown to the State are being transported to the concerned

taluk godown by the agencies identified or appointed by the State Government.

The State Government has identified agencies for lifting and distribution from FCI wholesale godowns to the taluk godowns in the State. The State Government has two agencies, Karnataka Food And Civil Supplies Corporation Ltd, (KFCSC) which is a Government organization, and Taluk Agricultural Produce Cooperative Marketing Societies (TAPCMS). Under PDS, food grains are lifted from FCI godowns and stored in State-owned or hired godowns. The total capacity of State-owned godowns and hired godowns is indicated in Appendix.

National Food Security Act has been implemented in the State under which allocation of food grains is given only for priority households (AAY and BPL cards only).

**Table 7.87: Percentage of allotment and off take of food grains by the State in the past 5 years, (In MTs)**

Year	Rice			Wheat		
	Allotment	offtake	Percentage	Allotment	offtake	Percentage
<b>AAY</b>						
2011-12	411120	411120	100	86253	85413	99
2012-13	366439	366243	100	73866	73771	100
2013-14	158244	158244	100	32573	32573	100
<b>BPL</b>						
2011-12	932982	922982	99	114005	113975	99
2012-13	869891	869488	100	205743	205524	100
2013-14	288080	288127	100	38378	37269	97
2014-15 (including AAY)	949826	904054	95	208535	206683	99
*2015-16	1873543	1873462	99	333746	333595	99
	<b>Ragi</b>			<b>Jowar</b>		
	101043	101043	100	6838	6838	100
	<b>Palm Oil (in KL)</b>			<b>Iodized Salt</b>		
	89721	89721	100	87844	87844	100
<b>APL</b>						
2011-12	970067	902392	93	92094	87484	94
2012-13	10,37,940	9,61,963	92	97,512	90,052	93
2013-14	5,41,661	5,29,697	98	24,686	24,533	99
2014-15	<b>No allotment</b>					
*2015-16	2379	2379	100	2452	2452	100

(\* upto December-2015)

### Allotment of foodgrains to the welfare institutions

Central Government has provided 7939 MTs rice and 3402 MTs wheat at BPL rate to the State for the year 2015-16. The same has been distributed to 145 welfare institutions in the State.

#### 7.16.9 Sugar Allotment and Offtake:

At present G O I in its sugar directorate was not allocating levy sugar to the State. Hence sugar is being purchased from the two sugar factories of the State Govt. and 13 co-operative sugar factories @ Rs. 2900/- per qtl.(taxes extra) and also through NCDEX the same has been distributed 1 kg per card to the AAY and BPL card holders. Details of allotment and offtake during the past years are given in the Table 7.88.

#### 7.16.10 Superior Kerosene Oil.

The GOI has limited the quantity of Kerosene allotment to 42,480 KL wef. April-2015. SKO is being distributed to the FPS through wholesale dealers appointed by the oil companies. For the purpose of kerosene distribution to the card holders, ration cards have been categorized as gas and non-gas cards. Ration cards which are having LPG connections are not entitled for kerosene allotment.

AAY and BPL cards having one and two members are entitled kerosene of three ltrs. and AAY BPL cards having three and more members are entitled kerosene of five ltrs. Rural area non-gas APL card holders are

entitled for kerosene of two ltrs. For all these cards the rate of kerosene is 18/- Rs. per Ltr. There are 290 SKO wholesale dealers of different oil companies and 19168 kerosene retailers are functioning in the State. District-wise details of SKO dealers is given in Appendix.

In order to avoid misuse in the PDS kerosene it has been converted into blue colour and it will be issued only to non-gas card holders. SKO is also given to the fishing purpose through permits issued by the Deputy Commissioners in the coastal districts like Dakshina Kannada, Udupi and Uttara Kannada. Each permit holder is eligible for 300 ltrs of kerosene per month during the fishing season.

#### 7.16.11 Levy Collection from Rice millers:

Procurement of levy rice from the rice millers has been stopped during 2015-16.

#### 7.16.12 Food Subsidy and Transportation:

The cost of maintenance for the purchase, stocking and the difference between the procurement prices and issue prices that borne as subsidy which is provided for the supply of foodgrains under PDS by the State Govt. is collectively called as food subsidy. The state is also bearing the cost of transportation of foodgrains from FCI godown to taluk wholesale points and from taluk wholesale points to FPS. The details of food subsidy and transportation cost spent is given in Table 7.89.

**Table 7.88 Allotment and Offtake of Sugar**

Year	Allotment (in MTs)	Offtake (in MTs)
2011-12	112697	95550
2012-13	109630	95863
2013-14	73012	35849
2014-15	280293	280293
*2015-16	98736	98162

(\* upto December-2015)

**Table 7.89: Subsidy and transportation, (Rs. in Lakhs)**

Year	2011-12	2012-13	2013-14	2014-15	2015-16*
Food subsidy	67,642	46,131	1,61,560	1,13,840	1,07,833
Transportation charge (including BPL and AAY)	11,377	9,228	11,550	16,017	13,626
Total	79,019	55,359	1,73,110	1,29,857	1,21,459

(\*upto October-2015)

### 7.16.13 COMPUTERISATION OF PUBLIC DISTRIBUTION SYSTEM IN THE STATE

- a. Computers have been installed in all the **213** offices of the Department, 5267 Panchayats and also in 295 PDS Whole Sale Points in the state which are connected to the central server through Broad band. Apart from this for processing the application regarding ration cards in the village level Web Cameras and Bio-metric devices have been supplied to all these Panchayaths
- b. Services of the **Bangalore-one, Karnataka-one** centres and **Atalji Jana snehi** centres and where there is no such centres, services of the Private Photo-bio centres are also being utilized to Capture the photos and Bio-metric of the ration card holders and new applicants.
- c. ineligible family possessing BPL Ration Card and other irregularities, they can register their opinion. Based on their opinion necessary action can be taken from the department.
- c. Action is being taken to link Ration cards with EPIC Number, Aadhar number. Ration card holders can register their mobile number and EPIC/UID numbers to their Ration Cards through SMS service or by visiting food office/Photo-bio-centers/Gram panchayath of their jurisdiction:
- d. Allotment of Public Distribution System Commodities up to the level of Fair price Shops and up to the RC level is made online.
- e. Public can contact **1967** to register their complaints regarding public distribution system.

### II. Establishment of Data of the Ration Card Beneficiaries:

- a. The Department of Food has a digitized database of all ration cards. It includes Priority households (BPL and Anthyodaya families) and Non priority households (APL families). The database is stored in the servers maintained by NIC at a centralized location in Bangalore.
- b. Public can visit the department website **ahara.kar.nic.in** and if they find any

**Table 7.90: Details of EWPOS machines installed, district wise**

District	No. of EWPOS
Tumkur	1092
Chikkamagaluru	529
Mysore	1039
Gulbarga	245
Belgaum	137
Dharwad	327
Bangalore IRA	508
Total	3877

### LEGAL METROLOGY

The new Legal Metrology laws have come

### Computerisation at the Fair Price Shop level

The department has been making use of the finger print bio-metrics of the beneficiaries in all the stages, viz., at the time of applying for new ration cards, distribution of ration cards to the applicant and distribution of ration articles through specially designed Electronic-cum Point of Sale Machine (**EWPOS**) at the shop level.

into force with effect from 01.04.2011. The aim of the Department of Legal Metrology is to protect the interest of the consumers in respect of the weight and measurement. To achieve this aim, the department maintains the accuracy in the weights, measures, weighing and measuring instruments used in the trade and commerce by subjecting them to regular verification. In addition to maintaining the accuracy in the weights and measures, the department undertakes inspections of the trading and

commercial establishments to detect the cases for violations like the use of unverified weights and measures, short weighment and measurement, usage of non-standard weights and measures etc., prosecutions are launched against the erring traders and penalties are levied on them for violations.

The department enforces the Legal Metrology (Packaged Commodity) Rules 2011 and ensures that declarations are made by the manufacturers on the packages and the retailers do not charge more than the retail sale price marked on the packages. The department also

As bulk of the industrial products and agricultural produce are weighed on the weigh bridges, it is very essential to maintain the accuracy in the weigh bridges. To expedite the process of the verification of these weigh bridges, the department has procured 150 Electronic Working Standard and distributed it to department field officers. The department is also having 7 weigh bridge mobile testing kits. The department is constructing laboratory building in various district places

ensures the correct quantity in the packages by undertaking the net content checking of the packaged commodities at the manufacturer's packer's premises. The progress achieved by the department during the last financial year and current year is given below:

**Table 7.91: Progress of Legal Methodology (Rs. in Lakh)**

Year	Verification Fees	Compounding Fees	Total
2014-15	1781.70	677.94	2459.64
2015-16*	1422.00	402.00	1824.00

\*(upto December 2015)

with the support of State Government. Rs.575.00 lakh is provided in 2015-16 budget for construction of laboratory building and purchase of sites.

The department is undertaking re-verification and stamping work by the enforcement officers and it is proposed to purchase and supply the required number of stamping equipments to them out of plan budget. The department is organizing awareness programmes to educate the consumers about the provisions of the Legal Metrology Act and Rules.

\*\*\*\*\*

## NATURAL RESOURCES

# 8

### 8.1 FOREST AND BIODIVERSITY

Forests are an integral part of the natural resources and integral part of environmental and ecological systems. The State's dense forests are located in the Western Ghats region. About 60% of the Western Ghats of the country is located in the State. In order to protect and develop bio-diversity, the State has formed 4467 Bio-diversity Management Committees at Grama Panchayat level. Bio-diversity heritage sites (such as the 400-year old tamarind grooves at Nallur, Devanahalli taluk) have been developed to conserve and develop the unique genetic diversities.

In recent years, due to fundamental and proximate factors, Western Ghats, one of the hot spots of the world's bio-diversity has been under severe threat. Although the depletion of forest cover is halted to a large extent and forest cover has quantitatively increased in the recent years, the natural forest stock is qualitatively still under degradation. Increased deforestation and degradation of the environmental resource base has serious implications for production and resilience of the ecosystem. The loss of forest cover is a serious threat to the environment, sustainable development and the livelihoods of millions of people in the State.

Forest resources significantly contribute to the State's Gross Domestic Product (GSDP) by being a major source of timber, medicinal plants, NTFPs, grazing, recreational activities, carbon sequestration, watershed provisions etc. Forest resources are under severe pressure due to rapid population growth and in this scenario, meeting developmental, livelihood, agricultural and industrial needs and conserving forests for

productive and ecological services is a major challenge. The main factors responsible for the depletion of the forest resource base are diversion of forest areas for developmental activities, encroachment of forest area, destruction of natural habitat, mining and quarrying, wildlife poaching, smuggling of timber, erosion of common property resources, excessive fuel wood collection and live stock grazing. The Forest Department of Karnataka has succeeded in halting quantitative depletion of forest cover through afforestation programmes but the deteriorating quality of forests continues to be a major threat to the sustainability of both human beings and animals.

#### 8.1.1 Area under forests

Karnataka's geographical area of 191,791 sq. km. constitutes 5.83% of India's area. Forest accounts for the second largest land use after agriculture. As per Annual Report of 2014-15, the total forests cover in the state is 43,356.47 sq.km. Thus, about 22.61% of the State's geographical area is under forest cover (**Table 8.1**).

The estimates of Forest Survey of India (FSI 2013) on the basis of satellite data show that the recorded forest area of the State is 38,284 sq.km, which is lower than the State's estimates. Thereby, about 19.96% of the geographical area is under forest cover (**Table 8.2**). The estimation of forest cover, classified on the basis of forest canopy density, shows that the State has 1,777 sq. km of very dense forest, 20,179 sq. km of moderately dense forest and 14,176 sq.km of open forest. District wise forest canopy density estimates along with the changes (as compared to the 2013 assessment) are given in **Table 8.3**.

**Table 8.1: Classification of total forest area in Karnataka  
(Source-Annual Report 2014-15)**

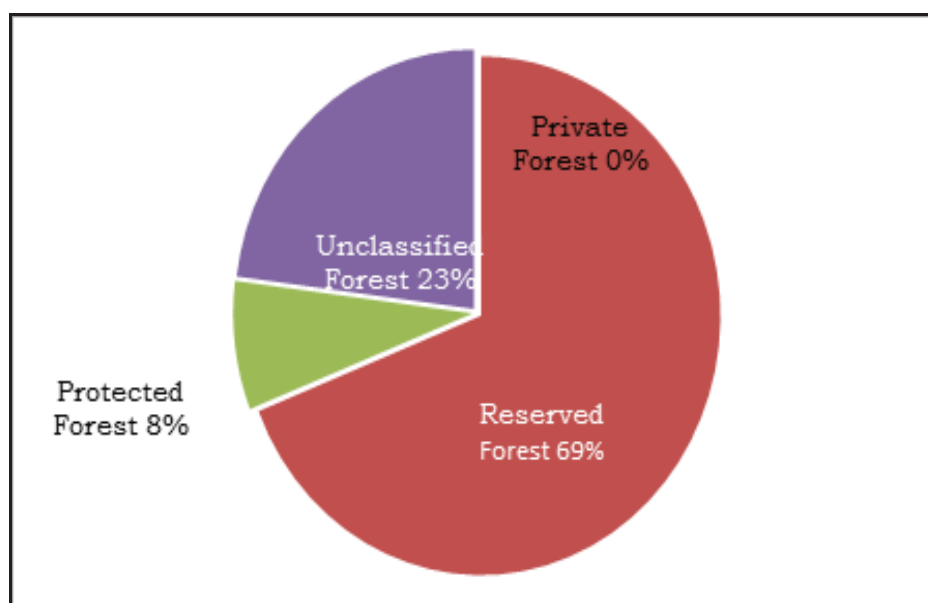
Sl. No.	Legal Status	Area (Sq. Km.)	% age of geographical area
1	Reserved Forest	29,688.37	15.48
2	Protected Forest	3,540.07	1.85
3	Village Forest	49.05	0.03
4	Unclassified Forest	10,024.91	5.23
5	Private Forest	54.07	0.03
Total		43,356.47	22.61

Source: Annual report 2014-15 of Karnataka Forest Department.

**Table: 8.2: Recorded Forest Area as per Forest  
Survey of India 2013**

Forest Area	Area in Sq. km
Reserved Forest	28,690
Protected Forest	3,931
Unclassified Forest	5,663
Total	38,284
Of State's Geographical Area	19.96%

**Figure 8.1: Classification of total Forest Area**

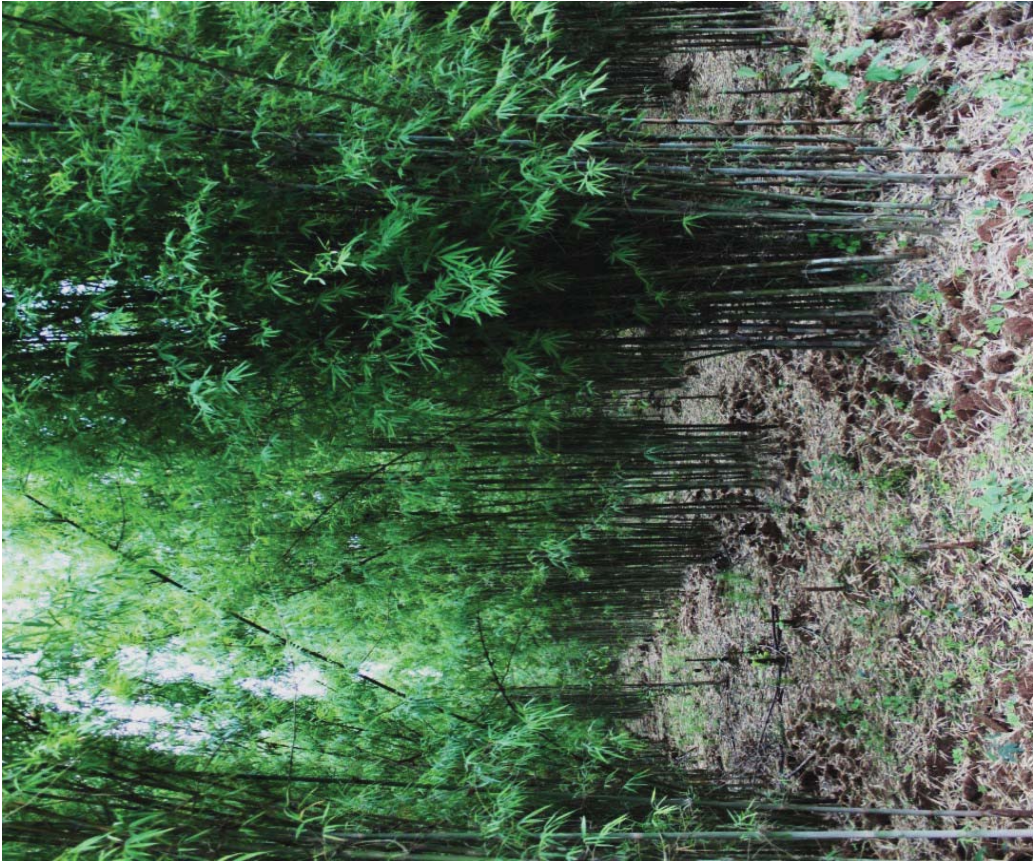


**Table 8.3 : District- wise Forest Cover along with Geographical Area in 2013 (sq.km)**

District	Geographical Area	Very Dense Forest	Mod. Dense Forest	Open Forest	Total Forest Area	% of Geog. area	Change	Scrub
Bagalkot	6575	0	11	189	200	3.04	0	280
Bengaluru Rural	5815	6	133	673	812	13.96	0	253
Bengaluru Urban	2190	0	39	111	150	6.85	0	30
Belgavi	13415	17	757	320	1094	8.16	0	478
Bellary	8450	0	110	663	773	9.15	1	250
Bidar	5448	0	18	36	54	0.99	0	12
Vijayapur	10494	0	0	12	12	0.11	0	2
Chamarajnaragar	5101	45	1043	1548	2636	51.68	0	179
Chikmagalur	7201	587	2428	666	3681	51.12	0	17
Chitradurga	8440	0	56	362	418	4.95	0	435
D.Kannada	4560	253	1009	1598	2860	62.72	0	0
Davangere	5924	4	339	399	742	12.53	0	246
Dharwad	4260	0	232	153	385	9.04	0	5
Gadag	4656	0	0	122	122	2.62	0	66
Kalaburagi	16224	0	87	209	296	1.82	0	51
Hassan	6814	67	752	511	1330	19.52	0	91
Haveri	4823	0	154	245	399	8.27	0	56
Kodagu	4102	246	2142	951	3339	81.4	0	0
Kolar	8223	0	59	447	506	6.15	-3	283
Koppal	7189	0	1	13	14	0.19	0	61
Mandya	4961	1	98	209	308	6.21	0	135
Mysuru	6854	4	648	417	1069	15.6	0	38
Raichur	6827	0	2	22	24	0.35	0	16
Shivamogga	8477	205	2808	1334	4347	51.28	-60	13
Tumakuruu	10597	0	62	490	552	5.21	0	219
Udupi	3880	158	1415	617	2190	56.44	0	0
Uttara Kannada	10291	184	5776	1859	7819	75.98	0	0
Total	191791	1777	20179	14176	36132	18.84	-62	3216

Source: Forest survey of India 2013.





### A Changes in Forest Cover

The forest resources of the State are under severe pressure with drastic fall in the area of dense forest cover between 2001 and 2013. The dense forest cover was estimated at about 26156 sq. km (70%) in 2001 and declined to 21956 sq. km (60%) in 2013, which is a 10% decline over 12 years.

However, the open forest cover increased from 10835 sq. km. to 14176 sq. km. during this period (**Table 8.4**). The forest cover of the State has slightly declined when compared to the Country's forest cover during the period (**Table 8.5**).

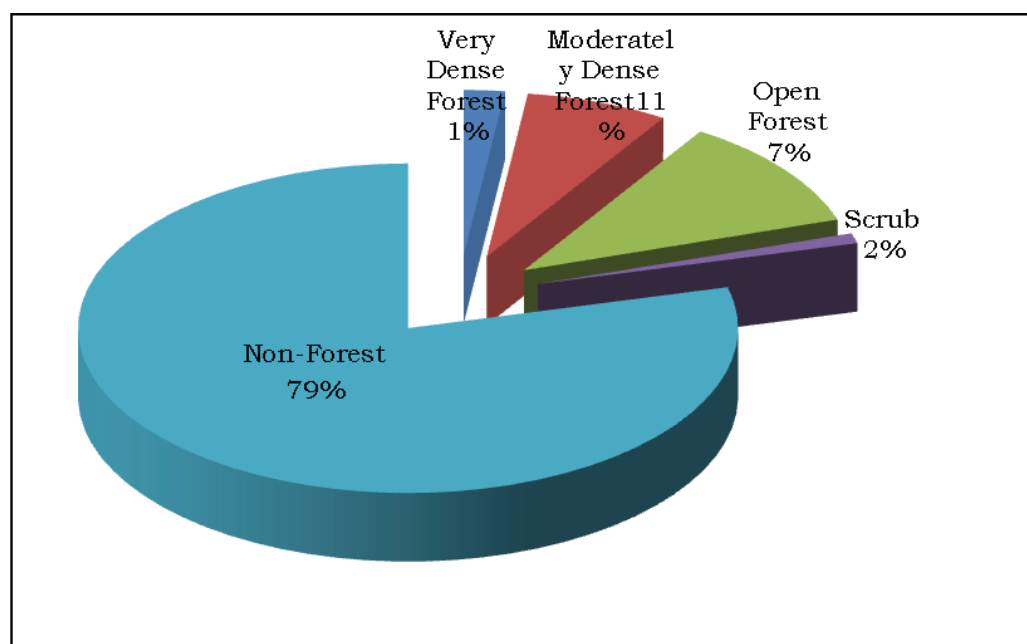
**Table 8.4 Forest cover according to Forest Survey of India (sq.km)**

Sl. No.	Forest Type	Year (Forest cover( in Sq km)				
		2005	2007	2009	2011	2013
1	Dense Forest	21968	21958	21968	21956	21956
2	Open Forest	14232	14232	14232	14238	14176
	Total	36200	36190	36200	36194	36132
3	India	690171	690899	690171	692077	697898
4	Percentage forest cover of state <i>vis-a vis</i> India	5.25	5.24	5.24	5.24	5.17

**Table 8.5 Change Matrix of Karnataka according to Forest Survey of India (area in Sq.Km)**

Forest Type	2013 Assessment					Total
	VDF	MDF	OF	SCRUB	NF	
Very Dense Forest	1777	0	0	0	0	1777
Moderately Dense Forest	0	20173	6	0	0	20179
Open Forest	0	6	14164	0	68	14238
Scrub	0	0	0	3175	0	3175
Non-Forest	0	0	6	41	152375	152422
Total - 2013	1777	20179	14176	3216	152443	191791
Net Change	0	0	-62	41	21	

**Figure 8.2: Forest area according to forest Survey of India**



**B. Comparison with southern states:**

Forest cover in Karnataka is 18.84% to total geographical area of the state as per Forest Survey of India, where as, in southern states Kerala has highest proportion of forest area to its total area. The comparison with neighbouring states is given in **Table 8.6**.

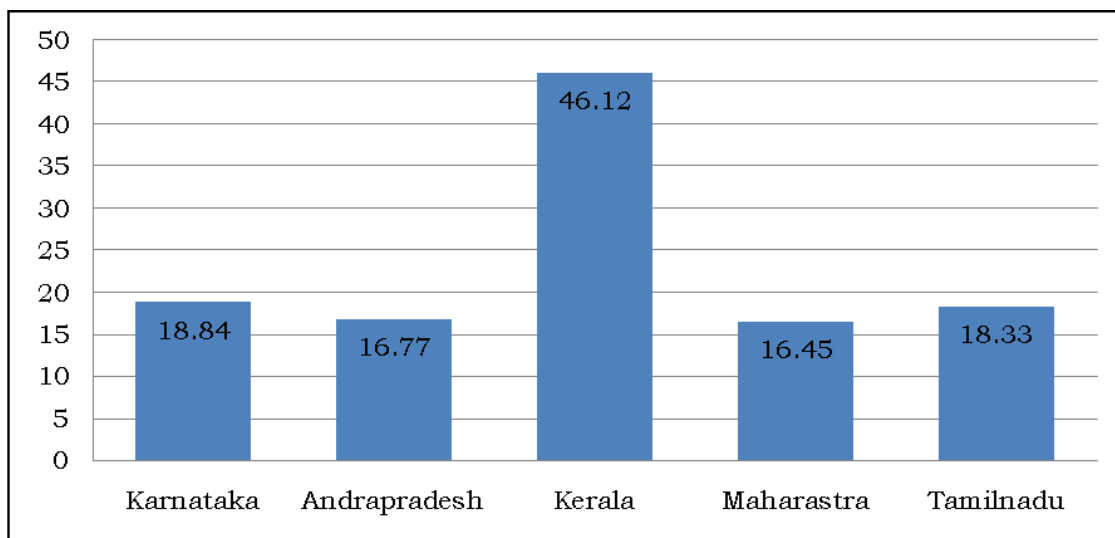
**C. Forest cover in Different Forest Types.**

The forest vegetation is classified in to seven

types based on gradients of rainfall, length of dry season and temperature. About 16.70% of forests are wet evergreen, 13.56% is semi-evergreen, 24.20% is moist deciduous and 24.34% is dry deciduous. Thorn forests form 11.93%, plantations form 8.24% and broad-leaved hill forests form 1.03% (**Table 8.7**).

**Table 8.6 Comparison with southern states (area in sq.km)**

State	Geographical area	Total Forest area	Percent of Geographical area
<b>Karnataka</b>	<b>191791</b>	<b>36132</b>	<b>18.84</b>
Andhra Pradesh	275069	46116	16.77
Kerala	38863	17922	46.12
Maharashtra	307713	50632	16.45
Tamilnadu	130058	23844	18.33
<b>India</b>	<b>3287263</b>	<b>697898</b>	<b>21.23</b>

**Figure 8.3: Proportion of Forest Cover to Geographical Area in percentage****Table 8.7 Forest cover in Different Forest Types**

Sl. No	Types of Forests	% of forest area
1	Wet Evergreen Forests	16.70
2	Semi-Ever green Forests	13.56
3	Moist Deciduous Forests	24.20
4	Plantation/TOF	8.24
5	Dry Deciduous Forests	24.34
6	Thorn Forests	11.93
7	Sub-Tropical Broad Leaved Hill Forests	1.03
	<b>Total</b>	<b>100.00</b>

**D. Tree Cover and Forest Cover**

The estimated forest cover is 18.83% and the tree cover is 3.08% of the geographical area totaling 21.91% (Table 8.8).

**8.1.2 National Parks and Wildlife Sanctuaries:**

The forests of Karnataka support a wide range of flora and fauna (bio-diversity) through a network of well-connected and protected Wildlife Sanctuaries and National Parks. The State has **5 National Parks** / Tiger Reserves and 29 Wildlife Sanctuaries covering an area of 9526.03 sq.km. Apart from the National Parks and sanctuaries, the state has 12 Conservation Reserves (624.80 sq. kms) and

01 Community Reserve (3.12 sq. kms) comprising of 627.92 sq. kms. All these areas form 23.42% of the total forest area. (Tables 8.9 and 8.10).

These are spread over evergreen to scrub forests, representing different ecosystems with rare and endangered species of plants, animals and birds. With about 6,072 wild elephants and nearly 406 tigers, Karnataka ranks first in the Tiger population of India. About 4,500 species of flowering plants, 500 species of birds, 120 species of reptiles, 70 species of frogs and 800 species of fish are in the State forests.

**Table 8.8: Forest and Tree Cover**

Category	Area (in sq. km.)	% of Geographical Area
Tree Cover	5920	3.08
Forest Cover	36132	18.83
Total Forest & Tree Cover	42052	21.91

**Table 8.9: Wildlife Preservation: National Parks / Bird Sanctuaries / Wildlife Sanctuaries**

Sl. No.	Circle	Division	National Park / Wildlife Sanctuary	Area (in Sq.Kms)
1	CCF Bengaluru Circle	1. DCF, Bannerghatta National Park	1. Bannerghatta National Park	260.51
		2. DCF, Ramanagara Division.	2. Ramadevara Betta vulture Sanctuary	3.46
2	CCF, Mysuru Circle.	3. DCF, WLD, Mysuru.	3. Adichunchanagiri Peacock Wildlife Sanctuary	0.84
			4. Ranganathittu Wildlife Sanctuary	0.67
			5. Arabithittu Wildlife Sanctuary	13.50
			6. Melkote Wildlife Sanctuary	49.82
3	CCF, Chamarajanagar Circle,	4. CF & Director Chamarajanagar	7. BRT Tiger Reserve	539.52
		5. DCF, Cauvery WLD, Kollegal	8. Cauvery Wildlife Sanctuary	1027.53
		6. DCF Kollegal (T) Dn,	9. Malai Mahadeshwara Wildlife Sanctuary	906.187
4	CCF, Kodagu Circle	7. DCF, WLD, Madikeri	10. Pushpagiri Wildlife Sanctuary	102.92
			11. Talacauvery Wildlife Sanctuary	105.59
			12. Brahmagiri Wildlife Sanctuary	181.29
5	CCF, Mangaluru Circle	8. DCF, Kudremukh WL Dvn, Karkala	13. <b>Kudremukh National Park</b>	600.57
			14. Someshwara Wildlife Sanctuary	314.25
			15. Mookambika Wildlife Sanctuary	370.37
6	CCF, Kanara Circle,	9. CF & Director, Dandeli	16. Kali Tiger Reserve(Dandeli)	886.41
			17. <b>Anshi National park (Tiger reserve)</b>	417.34

Sl. No.	Circle	Division	National Park / Wildlife Sanctuary	Area (in Sq.Kms)
7	CCF, Shivamoga Circle	10. DCF, WL Dvn., Shivamoga	18. Shettihalli Wildlife Sanctuary	395.60
			19. Sharavathi Wildlife Sanctuary 20. Gudavi Bird Sanctuary	431.23 0.73
8	CCF, Chikmagaluru, Circle	11. DCF, WL Dvn., Chickmagaluru	21. Bhadra Wildlife Sanctuary	500.16
9	CCF, Dharwad Circle	12. ACF, WL Sub-Dvn, Ranebennur	22. Ranebennur Black Buck Wildlife Sanctuary	119.00
			23. Attiveri Bird Sanctuary	2.23
10.	CCF, Bellary Circle	13. ACF, WL Sub-Divn, Kamalapura	24. Daroji Bear Sanctuary	82.72
		14. DCF, Davanagere (T) Dvn, Davanagere	25. Rangayyadurga Four Horned Antelope Wildlife Sanctuary	77.23
		15. DCF, Bellary	26. Gudekote Sloth Bear Sanctuary	38.48
			27. Jogimatti Wildlife Sanctuary	100.48
11	APCCF Field Director Project Tiger, Mysuru.	16. CF & Director Bandipur	28. <b>Bandipur Tiger Reserve</b>	872.24
			29. Nugu Wildlife Sanctuary	30.32
		17. CF & Director Hunsur	30. <b>Nagarahole Tiger Reserve</b>	643.39
12	CCF, Belgavi Circle	18. DCF, Belgavi (T) Dvn, Belgavi	31. Bhimgad Wildlife Sanctuary	190.42
		19. DCF, Gokak (T) Dvn, Gokak	32. Ghataprabha Bird Sanctuary	29.78
		20. DCF, Bagalkore (T)	33. Yadahalli Chinkara Wildlife Sanctuary	96.36
13	CCF, Kalaburagi Circle	20. DCF, Kalaburagi (T) Dvn. Kalaburagi	34. Chincholi Wildlife Sanctuary	134.88
			<b>Total Area:</b>	<b>9,526.03</b>

**Table 8.10: Wildlife Conservation Reserve & Community Reserves**

Sl. No.	District	Name	Area (Sq.km)
1	Haveri	Bankapura Peacock Conservation Reserve	0.56
2	Tumakuru	Mydhanhalli (Jayamangal) Blackbuck Conservation Reserve	3.23
3	Chikkamagluru	Basur Amrut Mahal Kaval Conservation Reserve	7.38
4	Uttara Kannada	Hornbill Conservation Reserve	52.50
5	Uttara Kannada	Aghanashini Conservation Reserve	299.52
6	Uttara Kannada	Bedthi Conservation Reserve	57.30
7	Uttara kannada	Shalmala Conservation Reserve	4.89
8	Bellary	Thungabhadra Otter Conservation Reserve	20.00
9	Bengaluru Urban	Puttenahalli Lake Birds Conservation Reserve	0.15
10	Gadag	Magadi Kere Conservation Reserve	0.54
11	Gadag	Kappattagudda Conservation Reserve	178.72
12	Mandya	Melapura Bee eater Bird Conservation Reserve	0.031
<b>Total Conservation Areas</b>			<b>624.80</b>
13	Mandya	Kokkare Bellur Community Reserve	3.12

**8.1.2 (A) Eco-tourism Activities :  
Information of visitors to National  
Parks / Wildlife Sanctuaries.**

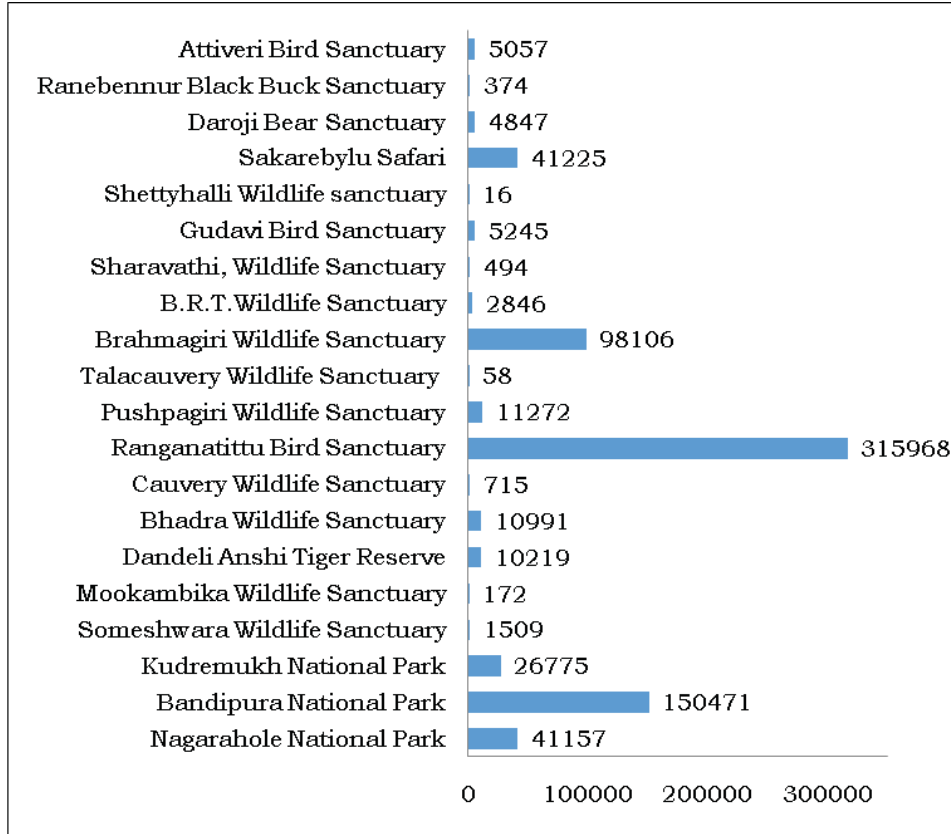
1. Among the visitors to the sanctuaries, 97.82% are domestic visitors while 2.18% are foreigners in 2014-15(**Table 8.11**)
2. Maximum number of Foreigners visited to Nagarahole National Park followed by Ranganathittu Bird Sanctuary and Bandipur National Park.
3. From this analysis it is clear that some of the Protected Areas are having high pressure of Eco-tourism while others are underutilized. Therefore to reduce the

pressure on the Protected Areas like Bandipura, Nagarahole and Kudremukh etc., it is necessary that the less visited Protected Areas like BRT, Bhadra, Dandeli and some other Protected Areas may be provided with better Eco-tourism facilities / infrastructure. Their potential may also be given more publicity. Once they become popular they may also have more tourists. This will help in sensitizing the people and also creating the awareness about the Wildlife conservation in the State.

**Table 8.11:VisitorstoNationalParks&WildlifeSanctuariesduring 2014-15**

Sl. No.	Park / Sanctuary	Indians	Foreigners	Total
1	Nagarahole Tiger Reserve	36467	4690	41157
2	Bandipura Tiger Reserve	146469	4002	150471
3	Kudremukh National Park	26759	16	26775
4	Someshwara Wildlife Sanctuary	1509	-	1509
5	Mookambika Wildlife Sanctuary	172	-	172
6	Kali Tiger Reserve	10198	21	10219
7	Bhadra Tiger Reserve	10855	136	10991
8	Cauvery Wildlife Sanctuary	715	-	715
9	Ranganatittu Bird Sanctuary	311433	4535	315968
10	Pushpagiri Wildlife Sanctuary	11272	-	11272
11	Talacauvery Wildlife Sanctuary	58	0	58
12	Brahmagiri Wildlife Sanctuary	97250	856	98106
13	B.R.T. Tiger Reserve	2793	53	2846
14	Sharavathi, Wildlife Sanctuary	494	-	494
15	Gudavi Bird Sanctuary	5245	-	5245
16	Shettyhalli Wildlife sanctuary	16	-	16
17	Sakarebylu Safari	40020	1205	41225
18	Daroji Bear Sanctuary	4492	355	4847
19	Ranebennur Black Buck Sanctuary	374	-	374
20	Attiveri Bird Sanctuary	5053	4	5057
	Total:	711644	15873	727517

### 8.4 VisitorstoNationalParks&WildlifeSanctuaries during 2014-15



**Table 8.12: VisitorstoNationalParks&WildlifeSanctuaries for the year 2015-16 Upto December-2015**

Sl.No.	Park / Sanctuary	Indians	Foreigners	Total
1	Nagarahole Tiger Reserve	78222	3604	81826
2	Bandipura Tiger Reserve	145451	2497	147948
3	Kudremukh National Park	32169	5	32174
4	Someshwara Wildlife Sanctuary	12636	0	12636
5	Mookambika Wildlife Sanctuary	18163	0	18163
6	Kali Tiger Reserve	10363	7	10370
7	Bhadra Wildlife Sanctuary	10207	127	10334
8	Cauvery Wildlife Sanctuary	668	6	674
9	Ranganatittu Bird Sanctuary	23187	2579	25766
10	Pushpagiri Wildlife Sanctuary	6654	29	6683
11	Talacauvery Wildlife Sanctuary	27	0	27
12	Brahmagiri Wildlife Sanctuary	132437	455	132892
13	B.R.T. Tiger Reserve	1735	32	1767
14	Sharavathi, Wildlife Sanctuary	623	0	623
15	Gudavi Bird Sanctuary	6120	0	6120
16	Shettyhalli Wildlife sanctuary	13	0	13
17	Sakarebylu Safari	4376	704	5080
18	Daroji Bear Sanctuary	3971	193	4164
19	Ranebennur Black Buck Sanctuary	169	0	169
20	Attiveri Bird Sanctuary	6821		6821
	Total	494012	10238	504250

### 8.1.2 B Deaths of humans and wild animals

In the year 2014-15, among the reported deaths of wild animals (including due to natural and unnatural causes) elephant has the maximum number 36%, followed by other animals 58.5% and tigers 5.8%. Due to attacks by wildlife, 49 persons were killed. Ex-gratia at Rs. 5.00 lakhs per person amounting to Rs.245.00 lakhs was paid, as given in the **Table 8.13 and 8.14.**

### 8.1.2 C Expenditure on wildlife development activities and Revenue realized and Expenditure on National parks and wildlife sanctuaries

Among the schemes of the Forest Department concerning wildlife and national parks, Project Tiger 15.37%, Integrated Development of Wildlife habitats 4.21%, Long term measures to mitigate Man-animal conflict attracted the greatest expenditure of 30%, Nature conservation activities attracted 10.54% and Voluntary Rehabilitation of families from Tiger Reserves

and National parks Rs.41.33 crores was spent out of total expenditure during 2014-15 (**Table 8.15**).

### 8.1.2 D Chinnara Vana Dharshana Yojane:

In order to bring awareness and to change their perception about environment Forest / Wild life and to make them to involve in the protection and development of forests among the high school children (9<sup>th</sup> Standard) the Government of Karnataka in their order No. FEE 88 FAP 2015, dated 15-07-2015 has launched a scheme titled Chinnara Vana Dharshana Yojane. Rs.200.00 lakh has been earmarked for implementation of the scheme.

### 8.1.2 E Revenue Realized from Forestry:

The State has realized revenue to the tune of Rs.17410.98 lakh during 2014-15 from marketing of forest produce such as timber, firewood, sandalwood, bamboos, canes and other non-timber forest produce (**Table 8.16**).

**Table 8.13: Death of wild animals during 2014-15 and 2015-16 (Up to December -2015)**

Sl. No.	Name of animal	No. of death of animals	
		2014-15	2015-16 (Up to Dec)
1	Elephants	92	51
2	Tiger	15	6
3	Other animals	151	86
	Total	258	143

**Table 8.14 Man – Animal conflict – Loss of Human Life & Compensation paid**

Loss of human life and compensation paid	Year	
	2014-15	2015-16 (Up to Dec)
No. of persons killed due to attack by wild animals.	49	24
Total compensation paid (Rs)	245.00 lakh	120.00 lakh



**Table 8.15: Expenditure under Wildlife and National Parks / Sanctuaries**

Sl. No.	Scheme	Expenditure (Rs. lakh)				2015-16 up to Dec-15
		2011-12	2012-13	2013-14	2014-15	
1	Project Tiger	2866.190	1,610.770	2,569.38	2031.16	743.34
2	Development of Wildlife Sanctuaries & National Parks	657.811	589.949	483.929	556.59	77.70
3	Project Elephant	235.66	270.412	280.648	272.05	15.31
4	Nilgiri Biosphere Reserve	--	-	-	-	-
5	Kudremukh National Park for Rehabilitation	250.00	239.64	500.00	500.00	25.00
6	Rehabilitation in Nagarahole Tiger Reserve	943.93	470.00	-	-	-
7	Voluntary Rehabilitation of families from Tiger Reserves and National parks	-	-	1,820.00	3633.37	845.50
8	Eco-Tourism	50.00	-	-	73.83	110.48
9	Nature Conservation	499.510	994.487	1,495.724	1393.05	500.79
10	Long Term Measures to mitigate Man-Animal Conflict	-	-	1,753.62	3962.64	177.24
11	Development Newly Declared Sanctuary	-	-	871.93	793.62	123.78
	<b>Total</b>	<b>5503.101</b>	<b>4,175.26</b>	<b>9,775.23</b>	<b>13216.31</b>	<b>2619.14</b>

**Table 8.16: Revenue Realized from Forest Produce (2014-15)**

Sl. No.	Forest Produce	Revenue realized (Rs. lakh)
1	Timber	8848.15
2	Firewood and charcoal	2575.24
3	Bamboos	104.88
4	Sandalwood	255.59
5	Non-timber Forest Produce	135.34
6	Other source of revenue	5491.78
	<b>Non taxable revenue of the Dept.</b>	<b>17410.98</b>
	<b>Forest Development tax (FDT) collection</b>	<b>*63879.31</b>

\* Including FDT collection from mining and other sources

### 8.1.3 Developmental programs:

#### (A) Afforestation:

Afforestation programmes are being undertaken periodically. During 2014-15, area to an extent of 53,927 hectares have been afforested by planting 519.28 lakh seedlings. Under the farm forestry 253.53 lakh seedlings were distributed to farmers and general public for planting in private lands. In 2015-16 upto the end of December - 2015, 68,705 hectares have been covered by planting 433.708 lakh seedlings. 217.54 lakh seedlings have been distributed to farmers and general public for planting in private lands.

#### (B) JICA-Assisted Karnataka Sustainable Forest Management and Bio-diversity Conservation Project (KSFMBBC) :

The objectives of the project are ecological restoration, biodiversity conservation, afforestation, livelihood improvement and poverty alleviation among local communities through participatory forest management. The Forest Department implemented the JICA Phase II KSFMBBC project since 2005-06 with an outlay of **Rs.745.00** Crore for 8 years upto 2012-13. By availing savings due to increase in exchange rate for JPY the Project period is extended for a further period upto -2015, with total outlay of **Rs.841.49** Crores. The project covers 176 taluks in all the 30 districts of the State. During 2005-06 to 2013-14 totally Rs.792.60 crore has been spent for afforestation, Bio-diversity Conservation activities, Soil & moisture conservation works, Forest & wildlife protection works,

Research, Training, Basic Infrastructure and other developmental works are taken up. During 2014-15 Rs.18.06 crore is spent up to end of March-2015 for maintenance of Research plots, GIS-MIS, Training, Administrative charges, Honorarium to Motivators & other program. Under this project 1,222 Village Forest Committees and 73 Eco Development Committees are formed (**Table 8.17& 8.18**).

Under this scheme for each VFCs and EDCs Rs.1.00 lakh amounting to Rs.12.95 crores has been provided for implementing Poverty Alleviation Programmes (1222 VFCs + 73 EDCs= 1295). This amount will be utilized by the respective VFCs for income generating activities viz., Animal husbandry, Sheep rearing, Sericulture, Bamboo/Cane articles, leaf plate making, collection and processing of Non-timber Forest Products. In total 6066 Self Help Groups are formed benefiting 48409 beneficiaries. SHG beneficiaries are those living below poverty line; confirming that the project has given importance to economically and socially needy sections of the society. Besides **Rs.4.94** crore additionality for taking up Income Generality Activities (IGA) has also been provided to 577 VFCs. Convergence with other line Departments was undertaken wherein 33492 enterprising beneficiaries were converged with banking institutions to take up activities. Policy of Care and Share – Out of VFC share, 50% is credited to Village Forest Development Fund (VFDF) and 50% is credited to Village Development Fund (VDF) as per G.O.No.FEE 50 FAP 2000, dtd:19-06-2002

**Table 8.17: VFCs formed under JICA**

<b>Sl No</b>	<b>Division</b>	<b>No. of VFCs formed</b>
<b>Project A</b>		
1	Belagavi	55
2	Gokaka	29
3	Kollegala	31
4	Chikmagaluru	30
5	Koppa	33
6	Dharwad	17
7	Haveri	50
8	Mysuru	18
9	Hunasuru	32
10	Hassan	48
11	Shivamogga	27
12	Bhadravathi	37
13	Sagara	37
14	Madikeri	33
15	Virajpet	6
16	Karwar	47
17	Haliyal	40
18	Yellapura	47
19	Honnavaara	47
20	Sirsi	60
21	Mangaluru	36
22	Kundapura	38
23	Chamarajanagar	6
	<b>Total - A</b>	<b>804</b>
<b>Project B</b>		
24	Bengaluru Urban	8
25	Bengaluru Rural	14
26	Ramanagar	25
27	Kolara	17
28	Chikkaballapur	20
29	Bagalakote	28
30	Bijapur	7
31	Bellary	31
32	Chitradurga	37
33	Davanagere	33
34	Koppala	19
35	Gadaga	27
36	Kalaburagi	38
37	Bidar	34
38	Raichuru	11
39	Mandya	30
40	Tumakuruu	39
	<b>Total-B</b>	<b>418</b>
	<b>GRAND TOTAL (A+B)</b>	<b>1222</b>

**Table 8.18 EDCs formed under JICA**

SI. No	Name of the wildlife division	No. of Eco-Development Committees formed
1	Shettihalli WL	13
2	Sharavati WL	08
3	Daroji WL	20
4	Ranebennur WL	10
5	Bandipur WL	22
	<b>TOTAL</b>	<b>73</b>

**(C) District Sector Schemes****Social Forestry Scheme:**

In the year 2014-15 a budget provision of Rs.2358.00 lakh was provided under Social Forestry Scheme. Out of this, Rs.2351.28 lakh has been spent for raising 2214 ha plantations and maintenance of 9903 ha. older plantations. Advance work of 1548 ha, besides raising 9.76 lakh seedlings.

In the year 2015-16 a budget provision of Rs.2732.50 lakh is provided under above Scheme. Out of which, up to end of december-2015, Rs.1546.94 lakh has been spent for raising 3594 Ha. of plantations and maintenance of 6954 ha. of older plantations.

**8.1.4 State Sector Plan Schemes in the wake of climate change**

**In the wake of climate change, the State is implementing various schemes to encourage tree planting as a mitigation measure for climate change.**

**i. Special Component Plan:**

To reduce pressure on forests and to uplift the SC families, action has been taken to provide LPG gas connection, installation of Bio-gas plant, improved fuel efficient stove, distribution Medar bamboos, Solar water heater, Solar Lamp, fodder plot construction, Supply of Bee-hive boxes directly to the selected beneficiaries.

In the year 2014-15 Rs.2647.64 lakh was provided for implementing the above programme. 49,241 Nos of beneficiary have been identified. Out of this, RS.2603.71 lakh has been spent up to end of March 2015. 17,750 Nos of solar lamps have been

distributed, 4393 Nos of saral ole have been constructed, and 22466 Nos of LPG gas connection has been provided to the beneficiaries. Besides this, 200 to 600 Nos medari bamboos to each beneficiary have been distributed to 240 beneficiaries, 583 Nos of bio-gas plant have been installed, 3024 Nos of solar water heaters have been distributed and fodder plots have been formed in the lands of 80 beneficiaries and 275 Bee-hive boxes have been distributed to the beneficiaries with training. In addition to this, training has been given to the SC beneficiaries for construction of saral ole also.

During 2015-16, Rs. 1633.00 lakh has been allocated. Out of this, Rs.810.25 lakh has been spent up to the end of December-2015 for providing 14,240 Nos of LPG gas connection, distributing 318 Nos of solar water heaters and 129 Bee-hive boxes, 25 nos of Solar Lamps and 8 nos. of Bio-gas plant have been constructed to the respective beneficiaries.

**ii. Tribal Sub-Plan:**

To reduce pressure on forests and to uplift the ST families, action has been taken to provide LPG gas connection, installation of Bio-gas plant, improved fuel efficient stove, distribution Medar bamboos, Solar water heater, Solar Lamp, fodder plat construction, Supply of Bee-hive boxes directly to the selected beneficiaries.

In the year 2014-15 Rs.597.87 lakh was provided for implementing the above programme. 11668 Nos of beneficiary have been identified. Out of this, RS.575.88 lakh has been spent up to end of March 2015.

4522 Nos of solar lamps have been distributed, 956 Nos of saral ole have been constructed, 5395 Nos of LPG gas connection has been provided to the beneficiaries. Besides this, 200 to 600 Nos medari bamboos to each beneficiary have been distributed to 67 beneficiaries, 164 Nos of bio-gas plant has been installed, 295 Nos of solar water heaters have been distributed and fodder plots have been formed in the lands of 46 beneficiaries and 107 Bee-hive boxes have been distributed to the beneficiaries with training In addition to this, training has been given to the ST beneficiaries in making handicrafts from bamboos.

During 2015-16, Rs. 492.00 lakh has been allocated. . Out of this, Rs.218.04 lakh has been spent up to the end of December -2015 for providing 3946 Nos of LPG gas connection, 17 Nos of solar water heaters, 25 nos of Solar Lamp have been distributed and 8 nos. of Bio-gas plant have been constructed to the respective beneficiaries.

### iii. Sirichandana Vana:

Under this scheme, protection and maintenance of Sandalwood plantation and naturally grown sandalwood trees area is taken up through erection of chain link mesh, watch and ward, soil working, cultural operation and other protective measures.

In the year 2014-15, Rs.220.00 lakh was earmarked and released. Out of this, Rs.208.57 lakh has been spent for protection of 613 ha of naturally grown sandal areas, creation of 186 ha sandal plantations, maintenance of 387 ha older plantation, maintenance of 31.40 Km inspection path, maintenance of 149 Kms Fire line, besides raising of 1.484 lakh sandal seedlings.

In the year 2015-16, Rs.386.00 lakh has been earmarked, out of which Rs.88.11 lakhs has been spent upto the end of December-2015 towards maintenance of 613 ha. plantation, 50 ha. Advance work and raising of 1.69 lakh of sandal seedlings.

### iv. Development of Degraded Forests:

Under this scheme, degraded forests are rejuvenated through afforestation, besides soil and water conservation measures. Wherever there is adequate rootstock, such areas are protected from biotic pressure thereby encouraging natural regeneration. Alternatively, plantations are raised in other areas based on the requirement of small timber, fuel wood and fodder. In 2014-15, Rs.250.00 lakh was allocated, out of which Rs.243.39 lakh was spent for raising of 368 ha. plantation, maintenance of 1041 ha. plantations and for executing 92 ha, of advance works.

In the year 2015-16, Rs.362.00 lakh has been earmarked out of which Rs.168.38 lakh has been spent upto the end of December-2015 for raising of 91 ha, plantation, maintenance of 1282 ha, older plantations, 150 ha. Advance work and raising of 3.826 lakhs seedlings.

### v. Raising Seedlings for Public Distribution:

Under this scheme, seedlings have been being raised for public distribution and to implement the programme "Krishi Aranya Protsaha Yojane (KAPY)".

#### (a) Raising of Seedlings for Public Distribution: Major Works.

Under this program, seedlings are being raised for Distribution to Public, Farmers, organization at subsidized rates through VFCs to plant in their lands. For the purpose, seedlings of suitable local species are raised in 4"X6", 5"X8" and 8"X12" sized bags every year by the department.

In the year 2014-15, an allocation of Rs.1518.00 lakhs was earmarked and released by the Government. Out of this, including the programme of KAPY Rs.1494.52 lakhs have been spent for maintenance of 149.88 lakh seedlings, raising of 145.75 lakh seedlings and Rs.186.13 lakh has been distributed as incentive to the farmers / beneficiaries including conducting workshop and publicity under KAPY programme. In the year 2014-15 under KAPY 66.73 lakh seedlings have been distributed to the

registered farmers and 83.15 lakh seedlings have been distributed to the public at concessional rate.

In the year 2015-16, an allocation of Rs.3315.00 lakh is earmarked, out of which Rs.1235.80 lakhs has been spent upto the end of December-2015 towards raising of 122.83 lakh seedlings, maintenance of 175.826 lakh seedlings and 159.63 lakh seedlings have been distributed to the public at concessional rate.

### 8.1.5 Krishi Aranya Protsaha Yojane:

As per National Forest Policy of 1988, 33% of the Geographical area must be under forest and tree cover. To achieve the goal, the Department is implementing various afforestation programmes. Since the target of afforestation and tree planting is very high, greening must be done in a massive scale. This can be achieved successfully by voluntary involvement of farmers, public and NGOs.

To enlist the cooperation of farmers and general public in the noble task of increasing tree cover, Government of Karnataka has launched a programme titled "KRISHI ARANHYA PROTSAHA YOJANE" from the year 2011. As per the guidelines of the programme, the farmers may obtain the seedlings at subsidized rates at nearest nurseries of the department. Seedlings so obtained be planted in their lands and nurtured, in which case they get incentive for each surviving seedlings from the Government. Apart from getting incentive they are entitled to get returns from such seedlings when it yields.

#### Brief note of the scheme is as under:

- In the year 2011-12, 13,634 nos. of farmers have registered under this scheme all over the State and 40,55,860 seedlings have been distributed to registered farmers. Out of the seedlings planted, 18,67,136 seedlings have survived. After one year an incentive of Rs.1,86,71,360/- has been distributed to the farmers as incentive at the rate of Rs.10/- seedlings as per the guidelines.
- In the year 2012-13, 16,765 nos of farmers have registered under the scheme. 76,93,796 seedlings have been distributed to

these registered farmers. Out of this 26,15,008 seedlings have survived in the lands of 13,210 farmers. An incentive @ Rs.10/- per seedling to the tune of Rs.2,61,50,080/- has been distributed in 2013-14. A sum of Rs.2,32,77,120/- @ Rs.15/- per seedlings for the survived seedlings of 15,51,808 have been distributed to the 8,662 registered farmers for the survived seedlings planted in 2011-12 in the year 2013-14 as 2<sup>nd</sup> year incentive.

- In the year 2013-14, Government has sanctioned for payment of service charges for having distributed the seedlings through VFC's & NGO's. Accordingly in the year 2013-14 3,00,404 seedlings have been distributed through 45 VFC's & 8,76,304 seedlings through 65 registered NGO's. In total 11,76,708 seedling have been distributed to 23,215 farmers & Rs.23,53,416/- service charges have been distributed to the above 45 VFC's & 65 registered NGO's @ Rs.2/- per seedling.
- In the year 2014-15, 66,73,154 seedlings have been distributed to 15,806 registered farmers. In the year 2014-15, an incentive of Rs.2,64,17,580/- has to be distributed to 13,508 registered farmers for the survived seedlings of 13,20,879 @ Rs.20/- per seedling planted in 2011 rains and an incentive of Rs.2,87,40,480/- has to be distributed to 11,071 registered farmers @ Rs.15/- per seedling for the 19,16,032 survived seedlings planted in 2012 rains and an incentive of Rs.3,11,63,730/- incentive has to be distributed to 12,174 registered farmers for the survived seedlings of 31,16,373 @ Rs.10/- per seedling for the seedling planted in 2013 rains. In total Rs.8,63,21,790/- has to be distributed as incentive to the registered farmers in 2014-15. But an incentive of Rs.1,86,13,100/- has been distributed to them depending on the availability of budget allocation.

In the year 2014-15 Rs.23,24,292/- as service charges @ Rs.2/- per seedling is to be paid to the eligible 13 VFCs and 43 registered Organizations to 2870 registered farmers who have planted 11,62,146 seedlings through them. But, due to shortage of funds this amount has not been paid to them. However, action will be taken to pay the same in 2015-16.

**(b) Raising of Seedlings for Public Distribution - Special Component Plan:**

This Scheme is newly launched during 2014-15. A Budget Provision of Rs.343.00 lakh was provided. From Development Wing a programme for Rs.109.14 lakh has been prepared. A sum of Rs.209.28 lakh has been surrendered to Government and Rs. 24.58 lakh has been re-appropriated to 2406-01-789-0-00 Special Component Plan scheme.

Under this scheme Rs.98.95 lakh has been spent for transportation of seedlings of eligible beneficiaries, for making payment as incentive to the beneficiaries of KAPY. Besides, raising 7.08 lakh seedlings.

**(c) Raising of Seedlings for Public Distribution - Tribal Sub Plan**

This Scheme is newly launched during 2014-15. A Budget Provision of Rs.139.00 lakh was provided. From Development Wing a programme for Rs.67.61 lakh has been prepared. A sum of Rs. 56.09 lakh has been surrendered to Government and Rs.15.29 lakh has been re-appropriated to 2406-01-796-0-00 Tribal Sub Plan – 423-TSP. Under this scheme Rs.65.39 lakh has been spent for transportation of seedlings of eligible beneficiaries, for making payment as incentive to the beneficiaries of KAPY. Besides, raising 5.24 lakh seedlings.

**vi. Roadside Plantation Scheme:**

Under various afforestation programmes, about 15000km of roadside planting has been taken up for planting by the forest departments since 1980. Since 2000, onward a large number of trees have been felled for the purpose of widening roads. Hence, the department has felt the urgency to take up roadside plantations in all the districts under the roadside plantation scheme from 2011-12 with details as under-

1. For roadside plantations, tall seedlings of native tree species of Neem, Ala, Arali, Goni, Tapasi, tamarind, etc., are being raised in 14”x 20” size bags and planted in pits of 1M<sup>3</sup> dimension.
2. Plants are well protected and maintained by staking, thorn-fencing, Farm Yard Manure (FYM) application and watering during summer months.
3. Tree patta has issued to adjacent land

owners for maintaining them after three years.

In the year 2014-15, Rs.2194.01 lakh has been allotted out of which Rs.2129.19 lakh has been spent on raising of 983 kms of monsoon plantations, maintenance of 3914 kms older plantations and taking up 439 ha. advance works along the road side.

During 2015-16, Rs.2577.00 lakh has been earmarked out of which Rs.1346.73 lakh has been spent up to the end of December- 2015, for raising of 876 kms plantation and for maintenance of 4427 km older plantations.

**vii. A Tree for every child and a park for every school :**

(Maguvigonda mara Shalegonda vana): In order to create awareness regarding ecology and environment among school children and to encourage them to plant trees voluntarily. Open areas around educational Institutions will be identified for planting seedlings by providing seedlings to school authorities for planting. Schools from the primary level, colleges and even universities are involved.

In the year 2014-15 Rs.40.00 lakh has been provided. A sum of Rs.37.81 lakhs has been spent for maintenance of 7.960 lakh seedlings and raising of 1.932 lakh seedlings in different sizes of Pbs.

In the year 2015-16, Rs.50.00 lakh has been earmarked. Out of which, Rs.22.26 lakh has been spent up to the end of December-2015 towards maintenance of 1.962 lakhs seedlings. Out of this, 1.608 lakhs seedlings have been distributed to school children and to raise plantation in the premises of school/college/universities and for raising of 1.40 lakh seedling.

**8.1.6 Talukigonda Hasiru Shala Vana” (Green school for each Taluka) –**

In the budget speech at Sl.No.121 of 2015-16 a new scheme titled “Talukigonda Hasiru Shala Vana”, has been announced. Under this program, in every taluk among the schools / colleges which are at a distance of 3 to 5 Kms or having government / forest land to an



Raising of Roadside Plantation under RSP



extent of 3 to 5 acres will be selected and in one of the Government schools / colleges the students will be involved in planting of seedlings and maintenance of plantation. This is a 5 year program.

The Government in their order No.FEE-87-FAP-2015 dated 15-07-2015 has accorded sanction for implementation of this program for a period of 5 years from 2015-16, in the year 2015-16, Rs.30.00 lakh has been allocated and released. By utilizing this amount, the program has been implemented in the following districts.(Table 8.19)

**viii. Greening of Urban Areas:**

The main objective of this scheme is to minimize effects of pollution caused due to high intensity of population, vehicles and industries in urban areas by planting ornamental, shade and fruit-bearing trees. Tree parks, woodlots and avenue plantations are also established in towns and cities to improve aesthetics. In the year 2014-15, Rs.1967.75 lakh has been allocated and the same has been released. It was targeted to raise 1630 ha of plantations, maintenance of 5700 ha. plantations, maintenance of 5.581 lakh seedling and raising of 4.493 lakhs seedling. Up to end of March 2015, Rs.1913.79 lakhs have been spent for raising 1850 ha of plantations, 5698 ha. plantations have been maintained and 268 ha. Advance work with raising of 4.693 lakh seedlings

In the year 2015-16, Rs.2500.00 lakh has been earmarked out of which, Rs.1461.73 lakh has been spent upto the end of

December-2015, for raising 2503 ha. of monsoon plantations, maintenance of 6402 ha. of older plantations, besides raising 0.90 lakh seedlings.

**ix. Samrudda Hasiru Grama Yojane (SHGY):**

The Government is implementing "Samrudda Hasiru Grama Yojane" in the selected villages across the state on experimental basis to make villages self reliant. Accordingly, 80 Village Forest Committees (VFCs) were selected for implementation. The objectives of the scheme are as under.

- To enhance the natural resource base in these villages by afforestation and conservation of forests and by conserving Natural Resources.
- To recharge and enhance the availability of ground water through Soil and Moisture Conservation Works.
- Promote energy efficient lifestyle by promoting gobar gas, Sarala ole, LPG, etc.,

In 2014-15, Rs.150.00 lakh was allocated, out of this Rs.146.55 lakhs has been spent for the various programmes of this scheme. Maintenance of 1295 ha. of older plantation, raising 225 ha. of plantation, maintenance of 2.39 lakh seedlings, construction of 11 Nos. of Gobar Gas Plants, distribution of 1952 Nos of saral ole and 211 LPG connection have been provided to the beneficiaries.

During 2015-16 Rs.200.00 lakhs has been provided under this scheme. Out of this

**Table 8.19 Talukigonda Hasiru Shala Vana**

Sl. NO.	District	Taluka	Name of the school
1	Chickballapur	Chinthamani	Sri Murarji Desai residential school, Chinthamani.
2	Mangaluru	Bantwala	Government high school, Sarapadi.
3	Hassan	Holenarasipura	Murarji residential school, Haradana halli.
4	Belagavi	Khanapura	Kitturu Rani Chennamma kanya residential School, Kitturu.
5	Dharwad	Hubli	Anchitageri, Murarji Desai school.
6	Kalburagi	Kalburagi	Sathya Saibaba school, Kamalapura.

budget, maintenance of 650 ha. of older plantations, 652 Nos LPG connections have been provided, conducted 20 training programme and 62 beneficiaries are given skill development training. Up to the end of December-2015 Rs.63.80 lakh has been spent for these activities.

**X Talukigonda Hasiru Grama (One Green Village for each Taluka):** The Government in their order No: FEE-86-FAP-2015 dated 15-07-2015 has launched a new scheme titled Talukigonda Hasiru Grama by selecting one village in each taluka of the State and will be converted as green village. On experimental basis, one village per taluka has been taken in selected 6 districts for implementation. In 2015-16, Rs.150.00 lakh has been earmarked. Out of this upto end of December -2015 Rs.31.94 has been spent for 150 ha. advance works including raising of seedlings, installation of 22 no of Solar street lamps and 1140 nos of Solar house lamp.

**Xi Village Forest Committees**

In the year 2014-15 Rs.100.00 lakh has been provided. Out of which of Rs.91.21 lakh has been spent in 150 VFCs for raising 160 ha. of plantation & maintenance of 7.38 lakh seedlings. In the year 2015-16 Rs.108.00 lakhs has been provided in the budget. Out of this Rs.33.27 lakhs has been spent up to end of December-2015 for maintenance of 160 ha. of 1st year plantation, 8 nos of training programme, 175 beneficiaries are given skill development training, 291 Nos of LPG connection provided and 01 Nos Gobar Gas Plant are constructed in the house of beneficiaries .

**Xii Development of Tree Parks and Urban Forests:**

Providing forestry and environmental facilities to citizens in Urban areas; Tree Parks are being created for publicity and awareness regarding conservation of forests and environment. In the year 2014-15 Rs.892.75 lakh has been provided. Out of which of Rs.712.83 lakh has been spent for raising of 445 ha. plantation, maintenance of 881.36 ha. older plantation and 52 ha. advance work along with raising of seedling.

In the year 2015-16 Rs.1200.00 lakh has been earmarked. Out of which of Rs.359.133 lakh has been spent up to December-2015, for maintenance of 898 ha. Older plantation.

**Xiii Devarakadu (Dyvivana):**

A unique programme for development of Dyvivana on 100 ha. Area in each division is being formed by the Karnataka Forest Department by planting fruit yielding and seedlings of religious significance. In this Dyvivana separate nurseries will be established for raising of seedlings of religious, medicinal plants for distribution to the public to plant the same in the open land of their house and in their lands. This dyvivana will be raised and developed nearest to the temple of the respective division to educate among public and children about biodiversity. In 2014-15 Rs.200 lakhs has been earmarked for establishing Devarakadu at district head quarter. Out of which Rs. 191.52 lakh has been spent for this purpose besides maintenance of 2075.10 ha. of plantation. In the year 2015-16 Rs.250.00 lakhs has been earmarked out of which Rs.96.55 lakhs has been spent up to December-2015, for maintenance of 2042.10 ha plantation.

**8.1.7 Centrally Sponsored Schemes and Central Plan Schemes**

**i. National Afforestation Programme-Forest Development Agency (NAP-FDA)**

The scheme titled National Afforestation Programme (NAP) has been formulated by merger of four 9<sup>th</sup> Plan Centrally Sponsored Afforestation schemes of the Ministry of Environment and Forests. The scheme is operated by the National Afforestation and Eco-Development Board (NAEB), Ministry of Environment and Forest (MOEF) as a 100% Central Sector Scheme. The scheme involves two tier set up namely Forest Development Agency at the division/district level and Joint Forest Management Committees (JFMC's) at the village level. In Karnataka, NAP is being implemented from 2002-03 under 10<sup>th</sup> and 11<sup>th</sup> year plan in 45- FDA's with the following objectives.

1. Sustainable development and management of Forest resources.

2. Increase and improve forest and tree cover.
3. Rehabilitation of degraded forest and other areas by institutionalizing decentralized participatory forest management and supplementing livelihood improvement process.

Under this scheme, the Government of India has approved and released Rs.2134.74 lakh to State Government accounts during 2014-15 which includes the balance amount for the years 2012-13 and 2013-14. In turn the State Government has released the entire amount to the department. A sum of Rs.1812.06 lakh has been spent up to end of March-2015 by the implementing officers for creation of 450 ha of plantation, maintenance of 3240 ha of plantation raised in first year and 9598 ha of plantation raised in second year besides, advance work of 2850 ha.

In the year 2015-16 budget provision of Rs.1.00 lakh is provided in the State budget. The work program for the year 2015-16 has been submitted to Government of India for Rs.1503.64 lakh for raising 2580 ha., of Advance work 2850 ha., of plantation and for maintenance of 13,123 ha., older plantation in the ratio of 60:40(Central share 60% and State share 40%). Out of this, the Government of India has approved the programme for Rs.1658.70 lakh (including Flexi funds) and in the given sanction for Rs. 497.61 lakh and released Rs.104.51 lakh as 1st installment by adjusting unspent balance amount Rs.393.10 lakh in previous year) **(Table.8.20)**

**Table 8.20:Physical and financial progress of NAP-FDA**

Year	Plantations raised (ha)	Financial Progress (Rs. crore)
2010-11	2393	13.35
2011-12	9598	12.36
2012-13	9598	9.68
2013-14	3240	9.25
2014-15	450	18.12
2015-16	2850	-

## ii. National Bamboo Mission:

The Department of Agricultural and Co-Operation, GOI has launched a new Centrally Sponsored Scheme titled National Bamboo Mission with 100% Central assistance from 2007-08 onwards. The main objective of the Scheme is to develop bamboo in forest lands through Forest Development Agencies (FDA's) with the support of Joint Forest Management Committees (JFMC's) and in non forest areas through Bamboo Development Agencies (BDA's). Approved annual allocation for the year 2014-15 is Rs.616.09 lakh. Against that Rs.464.62 lakh was released by Government of India to the Government of Karnataka. The Government of Karnataka has released Rs.270.62 lakh up to end of March 2015. Out of this, Rs.254.75 lakh has been spent for raising 500 ha. of Bamboo plantation and maintenance of 1st and 2nd year plantations of 5377 ha**(Table 8.21).**

**Table 8.21:Progress of National Bamboo Mission**

Year	Plantations raised (ha)	Financial Progress (Rs.crore)
2010-11	853	4.10
2011-12	2132	4.19
2012-13	1972	4.93
2013-14	3405	9.34
2014-15	500	2.547
2015-16	1,850	1.213

\*(up to end of December-2015)

In the year 2015-16 The Government of Karnataka has released the Balance amount of Rs.194.00 lakh of the year 2014-15. The same has been released to the unit officers for implementation of the programme. Out of this, a sum of Rs,121.37 lakh has been spent up to end of December-2015.

In the Year 2015-16 this scheme has been changed as National Agro Forestry and Bamboo Mission. A sum of Rs.200.00 lakh has been earmarked in the State budget for the year 2015-16. A proposal has been sent to Government of India for Rs.1434.00 lakh towards creation and Advance work in 1850 ha, maintenance of 500 ha of 1st year plantation and other developmental works. The Government of India has approved the

proposal for Rs.1192.50lakh (Central share 60% & State share 40%) and released Rs.400.00 lakh as 1st installment to State Government. Release of funds from the Government of Karnataka is awaited.

### iii. Conservation and Management of Mangroves:

The main objective of the scheme is to check and prevent sea erosion in the coastal region. Under this scheme, activities like raising of mangrove plantations, maintenance of older mangrove plantations in coastal Divisions, besides creating awareness, training and publicity among the local population are being undertaken. This Programme is being implemented in Honnavara, Mangalore, Karwar and Kundapur Divisions.

A budget provision of Rs.150.00 lakh has been earmarked in the State budget for implementation of this scheme for the year 2014-15. A proposal for Rs.214.06 lakh was submitted to Government of India for approval. The Government of India has approved the programme for Rs.101.55 lakh (which includes Rs.15.00 lakh being the revalidated amount for the year 2013-14) and released 84.24 lakh. Out of this Rs.76.07 lakh has been spent upto end of March-2015. In the year 2015-16, proposal for Rs.249.43 lakh has been submitted to Government of India. Approval is awaited.

### iv. CSS Integrated Forest Protection Scheme:

During the year 2014-15 under CSS Intensification of Forest Management Scheme an amount of Rs.377.60 lakh was released, out of which an amount of Rs.360.423 lakhs has been spent end of March -2015. This amount has been spent in the forest areas of all the 13 Territorial Circles for maintenance of 7515 km fire lines in forest areas.64 nos fire protection camp, fixation of 564 nos RCC pillars, 6 Nos construction of residential quarters for frontline staff.

In the year 2015-16 Rs.570.48 lakh has been earmarked. Out of which Rs.122.50 lakhs has been spent upto the end of December-2015 for maintenance of 7366 km

fireline , 71 nos of fire preventing camps, Construction of 6 nos of residential quarters to the frontline staff, erection of 470 nos of concrete poles for demarcating forest boundry

### 8.1.8 Revenue and Expenditure:

**Table 8.22** presents the details of revenue realized by sale of forest producesuch as timber, firewood, bamboos, sandalwood, non-timber forest produce and also revenue realized from sanctuaries, and other miscellaneous revenue item setc. The expenditure component includes the establishment cost as well as cost of afforestation and other departmental programmes.

**Table 8.22 Revenue and Expenditure from Forest Department**

Year	Revenue	Expenditure (Rs. crore)
2009-10	212.44	518.19
2010-11	163.70	555.69
2011-12	168.29	665.05
2012-13	171.51	852.12
2013-14	161.12	1015.66
2014-15	175.32	1161.52
2015-16(*)	170.00	1129.12

\*Anticipated

### 8.1.9 ECOLOGY AND ENVIRONMENT

The State is constitutionally duty bound to ensure environment protection in all walks of life. With this objective, the Department of Ecology & Environment was established in the year 1981 in the State. The Ecology and Environment Department is functioning with the principle objective of protection of the ecology and environment, conservation of natural resources, ensuring adoption of pollution control measures for the sustainable development in the state. The Department looks after policy formulation and ensuring implementation of the rules, regulations, guidelines and instructions for the protection of environment and ecology. Inter-departmental environmental issues leading to conservation and protection of environment are also being coordinated. The Department of Ecology and Environment is

at the secretariat level and is assisted by the following institutions in discharging of its functions.

- 1) Karnataka State Pollution Control Board (KSPCB)
- 2) Karnataka Bio-diversity Board (KBB)
- 3) Karnataka Lake Conservation and Development Authority (KLCDA)
- 4) Environment Management & Policy Research Institute (EMPRI)
- 5) Karnataka State Coastal Zone Management Authority (KSCZMA)
- 6) State Environment Impact Assessment Authority (SEIAA)

#### 8.1.10. Karnataka State Pollution Control Board:

##### Water Resource and Pollution:

The Karnataka State Pollution Control Board has been established on 21.08.1974, under the Water (Prevention and Control of Pollution) Act 1974. It is a statutory body vested with the duties of implementing the provisions of both the Water and the Air Acts for control of pollution. The board is also enforcing rules and regulations framed by Government of India under the Environment (Protection) Act, 1986, viz., The

Hazardous Waste (Management, Handling and Transboundary Movement) Rules 2008, The Plastic wastes (Management and Handling) Rules 2011, the Bio-medical Waste (Management & Handling) Rules 1998, the Municipal Solid Wastes (Management and Handling) Rules, the Noise Pollution (Regulation and control) Rules 2000, and The Batteries (Manufacturing and Handling) Rules 2001. In addition to this, it is also discharging the duties entrusted to it both by the State and Central Governments from time to time on other environment related matters.

##### Industrial Pollution:

The Karnataka State Pollution Control Board is covering all the industries/activities generating effluents and emissions under the consent mechanism. The industries/activities are categorized as Red, Orange and Green based on their pollution potential. The Red category activities with high pollution potential are given priority in monitoring mechanism. The effluents/emissions discharge is regularly monitored as per the statutory norms to ensure compliance to the standards prescribed. Details of the industries covered are given in the **Table 8.23**.

**Table 8.23 Number of industries/institutions covered by KSPCB**

Sl. No.	Particulars	Number of Industries/ Institutions	
		Total	Operating
1.	Industries	35427	21790
2.	Stone Crushers	3449	1251
3.	Infrastructure projects- Layouts	1849	35
4.	Infrastructure projects- Apartments, Commercial Complex, etc	3628	1193
5.	Hospitality Projects	738	541
6.	Hospitals	25172	24338
7.	Mines	753	194
8.	Coffee Estates (Pulping units)	2639	2484
8.	Telephone Towers(DG)	12094	11936
10.	Local body	241	225
10.	Others	1028	856
	<b>Total</b>	<b>87018</b>	<b>64843</b>

As on 31.03.2015, there are 29744 red, 7990 orange and 27109 green category industries/institutions operating in the State

### **Comprehensive Environmental Pollution Index (CEPI):**

MoEF, Government of India vide Office Memorandum No. J-11013/5/2010-IA.II (I) dated 13.01.2010 had declared Baikampady Industrial cluster in Dakshina Kannada District and Bhadravathi industrial cluster in Shivamogga District as critically polluted areas with CEPI score 73.68 and 72.33 respectively and Raichur, Bidar and Peenya industrial areas are classified as severely polluted clusters ranking 53, 54, 66 respectively. In view of this, Karnataka State Pollution Control Board in co-ordination with the Central Pollution Control Board and industries located in and around Baikampady industrial cluster and Bhadravathi industrial cluster had developed separate action plans for both the clusters with an objective for the enhancement of pollution control measures to bring down the prevailing pollution loads. Final action plans were submitted to CPCB during January 2011. Based on the actions initiated on Action Plans submitted, MOEF has lifted the moratorium vide Memorandum dated 23.05.2011.

Further, as per the advice of the CPCB, the KSPCB has constituted Local Area Committee (LAC) for regular follow up and to review the implementation of the Action Plans. Similarly, the Central Pollution Control Board has conducted monitoring of Baikampady Industrial cluster under CEPI programme during Feb-Apr 2013 and reassessed the CEPI score. The CEPI score has marginally decreased from 73.86 to 67.62, which calls for review of action plan and its implementation besides monitoring of surface water quality, ground water quality and ambient air quality within the cluster area. Keeping in view of the above, the tenure of LAC in respect of Mangalore industrial cluster is extended up to 31.03.2017 for effective implementation of the action points and the action plan is being reviewed regularly. The Central Pollution Control Board has conducted monitoring of Bhadravathi Industrial cluster

under CEPI programme during Feb-Apr 2013 and reassessed the CEPI score. The CEPI score has come down from 72.33(2009) to 45.27 (2013).

The severely polluted areas viz. Peenya, Raichur and Bidar are kept under surveillance and action is taken to get the pollution control measures implemented effectively. The Board is developing separate action plans for these areas based on the Central Pollution Control Board guidelines.

CPCB is in the process of amending/revising the criteria for evaluation of CEPI wherein the source score has been reduced from existing 30 to 20. Pathway score has been increased from existing 20 to 50 and Receptor score has been decreased from existing 30 to 10. For assessment of the environmental quality of the area, i.e, CEIP score, the concept of SNLF i.e.; a surrogate number which represents the level of exposure is proposed.

A workshop was held at Bengaluru on 07.11.2015 inviting the stake holders and the IIT, Chennai & IIT- Delhi subject experts and the opinion/comments has been forwarded to CPCB for consideration.

A State level monitoring committee has been constituted under the chairmanship of Additional Chief Secretary & Development commissioner, Government of Karnataka, Bengaluru vide Govt. order No: FEE 168, EPC 2014 Bengaluru dt: 25.11.2014 to prepare Remedial Action plan for abatement of Pollution and improvement of Environment quality.

### **Environmental compliance by some of the identified industrial sectors:**

Mining, Thermal Power, Petro Chemicals, Sponge Iron, Chemical & Pharmaceutical industries and Stone crushers are some of the focus areas of concern in terms of pollution load and their impact on environment.

**Pollution control status in mining sector:**

Mining is one of the main industrial activities in Karnataka. The major minerals being mined are Iron Ore, Limestone and Dolomite. Iron Ore mining is mainly confirmed to Bellary Chitradurga & Tumakuru District and the Limestone mining is located mainly in the district of Kalaburgi, Yadgir, Bagalkot, Belagavi & Vijayapura. During 1980's major mining activity was started in Chikkamagalur District with the setting up of Kudremukh Iron Ore Company Limited (KIOCL) and the same is now closed. In recent time, due to high demand in the market, large scale mining has taken place in Bellary, Chitradurga & Tumakuru District.

In Karnataka 753 mines are covered under the Pollution Control Acts and only 194 are operating as on 31.03.2015. Initially, KSPCB started covering only few major mining companies under the Water & Air Acts like National Minerals Development Corporation (NMDC), Donimalai, and KIOCL, as they were using water for mining activity and discharging tailings. These mines were also covered under the Air Act keeping in view emissions from crushers, D.G.Sets and other point and non-point sources.

In 1994, the Govt. of India notified the Environmental Impact Assessment Notification under the Environment (Protection) Act 1986. This notification made it mandatory for certain projects including mines to obtain prior Environmental Clearance (EC) from Ministry of Environment & Forests (MoEF), Govt. of India (GoI). All mining projects irrespective of area have covered under this notification. No objection certificate (NOC)/ Consent for Establishment (CFE) was a prerequisite for applying to MoEF for EC. Therefore, from 1994 onwards, KSPCB started receiving applications from mines seeking NOC/CFE. The applications were considered with reference to the Rapid Environment Impact Assessment (REIA) reports and IBM approved mining plan which incorporates Environmental Management Plan (EMP) to take care of runoff, waste dumps, provision of check dams, etc., which submitted along with the

application and the NOC/CFE were issued from water & air pollution control point of view only. In the EIA notification 2006 and its amendment dated 07.10.2014, the mining area upto 50 hectares is grouped under "B" category requiring Environmental Clearance from State Environment Impact Assessment Authority (SEIAA). Mines having area more than 50 hectares is grouped under "A" category requiring EC from MoEF.

**Action initiated by KSPCB for control of pollution in mining activity:**

KSPCB has taken steps to strictly implement the provision of water (Prevention & Control of Pollution) Act 1974, and Air (Prevention & Control of Pollution) Act 1981 irrespective of the size of mining area. The Hon'ble Supreme Court has constituted Central Empowering Committee (CEC) for resumption of mines. The mines have been categorized as A, B and C categories. The Hon'ble Supreme Court during September 2012 have given directions to restart A and B category mines as per the Reclamation and Rehabilitation (R & R plan) approved by the CEC. The CEC has approved 27 mines under A category and 63 mines under B category. The details relating to production, water & air pollution control measures adopted by the mines, compliance to previous consent conditions, etc., are verified thoroughly while issuing consents for operation. Further, the Board stipulates and advices the following pollution control measures while issuing consents to the mining activity in line with the R & P Plan.

- To provide check dams, gully-traps etc., to prevent the runoff from carrying the fine particles of ore and silt.
- Fines, Sub-grade ore, mineral rejects, over burden and side burden etc., to be stored as dumps in the mine lease area and to be stabilized.
- Retaining walls have to be provided to stabilize the dumps.
- Forestation has to carry out on the slopes of the dumps.
- Sprinkling of water constantly in the mine lease area including approach roads.
- To metal and asphalt the roads inside the mine lease area as well as the approach road to the mines.

- To transport ore in a covered truck in wet conditions always.
- Even at Stock yards, moisture contents have to be maintained to prevent the dust nuisance.
- Providing conveyor belts within the mine lease area for ore transportation to avoid fugitive emissions due to movement of trucks.

### **Pollution Control Status in Sponge Iron Sector:**

In Karnataka 37 Sponge Iron units are operating. Most of the units are located in the district of Bellary (25), Koppal (8), Dharwad (2) Tumakuru (1) & Chitradurga (1). All the units use Coal based technology.

The Ministry of Environment and Forests (MoEF), GoI has notified standards for sponge iron units vide Notification No.GSR 414(E) dated: 30.05.2008. As per the Notification, the chimney height for the Kilns is calculated based on the fuel consumption and the Sulphur content of the fuel. Further a minimum chimney height of 30 m. is stipulated for all de-dusting facilities.

Sponge iron units are not significant from water pollution point of view and water is used only for domestic and cooling water is completely recycled. However, these units are not significant from water pollution but very significant from air pollution point of view. The main sources of air pollution from these units are kiln and de-dusting facilities, loading and unloading of raw materials, crushing and processing of raw materials, storage of raw material, and solid waste vehicle movements. Following conditions are stipulated and implemented by the Board to mitigate air pollution from these industries.

Storage of raw materials within the closed sheds.

- Bag filter for all raw material processing and de-dusting facilities.
- Electrostatic precipitator (ESP) to the Kiln with interlocking between the working of kiln and the ESP.
- Metal led roads within the premises.
- Sprinkling of water in raw materials storage, process area and in roads raw materials transportation.
- Regular monitoring of ambient air quality.

### **Pollution Control Status in Stone Crushers:**

There are 3449 Stone Crushing units in Karnataka state and is as on 31.03.2015, 1251 are in operation, The Karnataka State pollution Control Board is covering the Stone Crushing activity under Air (Prevention & Control of Pollution) Act 1981, The State Government has passed an ordinance on 07-09-2011 called The Karnataka Regulation of stone Crusher, Ordinance 2011, later enacted as The Karnataka Regulation of Stone Crusher Act 2011 on 05-10-2012. Further amendment to Act and Rules Was notified on 26.12.2013 and 06.02.2014 respectively.

According to the above said act Rules, all crushers shall have to be operated in the safer zones only except the crushers established for temporary period for specific govt. Development projects with specific time frame. The licensing authority of the district/individual crusher shall identify the safer zones and the licensing authorities shall declare and issue notification for them after fulfilling of following distance and other siting criteria. The conditions for declaring safer zones stone crusher are:

- 200 mtrs. away from National Highway or State Highway
- 100 mtrs. away from Major District road (MDR) or other roads.
- 500 mtrs. away from Revenue village, temple, schools.
- Away from boundary of municipal corporation, city municipal corporation, town municipal corporation.
- Minimum of 1 acre land.

### **Other highly polluting industries:**

There are 236 industries under the 17-category highly polluting industries in the State, of which 210 are in operation. The wastes are treated and disposed as per the norms of the Board. The industries, Mysore Paper Mills Limited and Visvesvaraya Iron and steel Ltd are permitted to discharge the treated effluents to Bhadra River. The West Coast Paper Mills at Dandeli is permitted to discharge effluent into Kali River and Harihar Polyfibers and Grasim division at Harihar are permitted to discharge the effluents to Tungabhadra River. The treated



effluents from these industries are meeting the defined standards.

Apart from these industries, no other industry is permitted to discharge effluents to rivers. The policy is to ensure that industrial effluents are treated to the standards prescribed by the KSPCB and to use the treated effluent for irrigation/gardening/green-belt development.

**(A) Water quality management:**

The Karnataka State Pollution Control Board is monitoring the quality of water in the State. Water samples from lakes, rivers, ponds, bore well, open wells and sea are analyzed for monitoring the water quality. Discharge of domestic sewage and trade effluents from the industries are the major sources of water pollution. Therefore, the Board is regularly monitoring these sources from time to time as prescribed in the Act/guidelines framed by Central Pollution Control Board. Regular inspections and sample collections are made to analyze the quality of water.

The Board is monitoring and analyzing river water samples at 83 locations in the State. According to the analysis report, rivers and lakes are susceptible to pollution mostly due to industrial, domestic effluent discharge and agricultural runoff. The results of samples drawn in the 83 stations located in all rivers across the State shows that the quality of water falls in category 'C' which means the water is potable after treatment and disinfection. River water quality is related to seasonal variations like rainfall and flow of the river.

**Inference on the River Water Quality Monitoring:**

CPCB has specified water quality criteria depending on the designated best use and activities in the river. The classifications are:

Class "A" – Drinking water source without conventional treatment but after disinfection.

Class "B" – Out door bathing (organized).

Class "C" – Drinking water source with conventional treatment followed by disinfection.

Class "D" – Propagation of wild life, fisheries.

Class "E" – Irrigation, Industrial Cooling, Controlled Waste disposal.

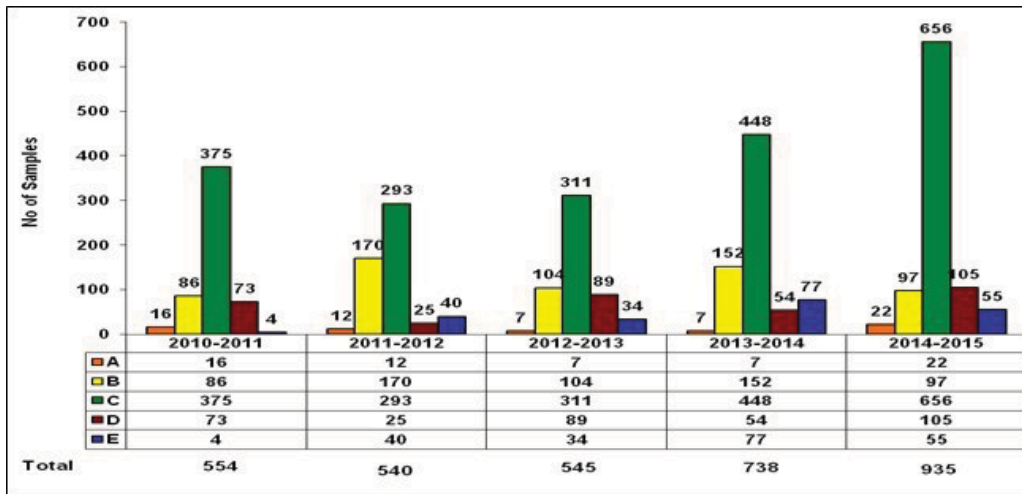
Monitoring of the major rivers under various programmes indicates that the major pollutants in these water bodies are mainly organic and bacterial contaminants. This is mainly due to domestic waste discharged into the rivers from towns and villages located on the river banks. Secondly, the quality has a bearing on the flow.

At the following three locations, the treated industrial effluents are permitted for discharge into the rivers. The water quality at these locations about 100 meters downstream of the treated effluent discharge point are as under;

- a) Mysore Paper Mills treated effluent into Bhadra River near Bhadravathi, Shivamogga district. Bhadra river water quality downstream of Bhadravathi conforms to Class-D
- b) Harihara Poly Fibres and Grasilene Division treated combined effluent into Tungabhadra River near Harihar, Haveri District. Tungabhadra river water quality downstream of Harihara Poly fibres conforms to Class-D.
- c) West Coast Paper Mills Ltd treated effluent into Kali River near Bangur Nagar near andeli, Uttara Kannada District.

Kali river water quality, monitored quarterly indicates that at the downstream of the industry it conforms to Class-B in the month of April, Class 'A' in the month of July and Class-C during the rest of the period.

**Figure 8.5: Classifications of River Water Quality as Per Gems & Minars Programme During the Year 2010-15**



The Board has analyzed 11475 samples from the discharge of organizations (including industries) and other waste water generating units identified. The same are being monitored with inspection and sample analysis. The Board is initiating action to ensure compliance from the concerned organizations, wherever the samples are not meeting the prescribed standards.

Out of 219 local bodies in the State, only 55 have established sewage treatment plants (STP). Out of 55 STPs established so far, 16

STPs are in Bengaluru and 39 are in different locations in the State. The remaining local bodies are being pursued to install the sewage treatment facilities in order to avoid pollution of nearby water bodies due to discharge of sewage.

In order to control pollution of water bodies, 9 Common Effluent Treatment Plants (CETP) have been established in the State at different places for treatment of trade effluents generated from homogeneous type of industries in the small scale sectors.

**Observing Ganesh Festival - Eco-Friendly Way**



- KSPCB has evolved guidelines for observing the festival in environmental friendly way.
- KSPCB has taken up mass awareness to encourage
  - Use of clay for idol making rather than plaster of paris
  - Paint less idols for worship as far as possible
  - Use water soluble and non-toxic natural dyes
- Mobile idol immersion tankers deployed during the festival by the Board
- BBMP has created separate idol immersion pools within the lake area
- KSPCB monitors water quality before and after festival.
- Efforts of KSPCB has reduced the sale of painted idols considerably thus preventing pollution to that extent.

**(B) Air Quality Management:**

The Karnataka State Pollution Control Board is monitoring the air quality in the State in accordance with the provisions of the Air (Prevention and Control of Pollution) Act, 1981. The main sources of air pollution are (i) vehicular emissions (ii) industrial emissions and (iii) open burning of waste in the public place.

**Table 8.24: Major sources of air pollution in Bengaluru City**

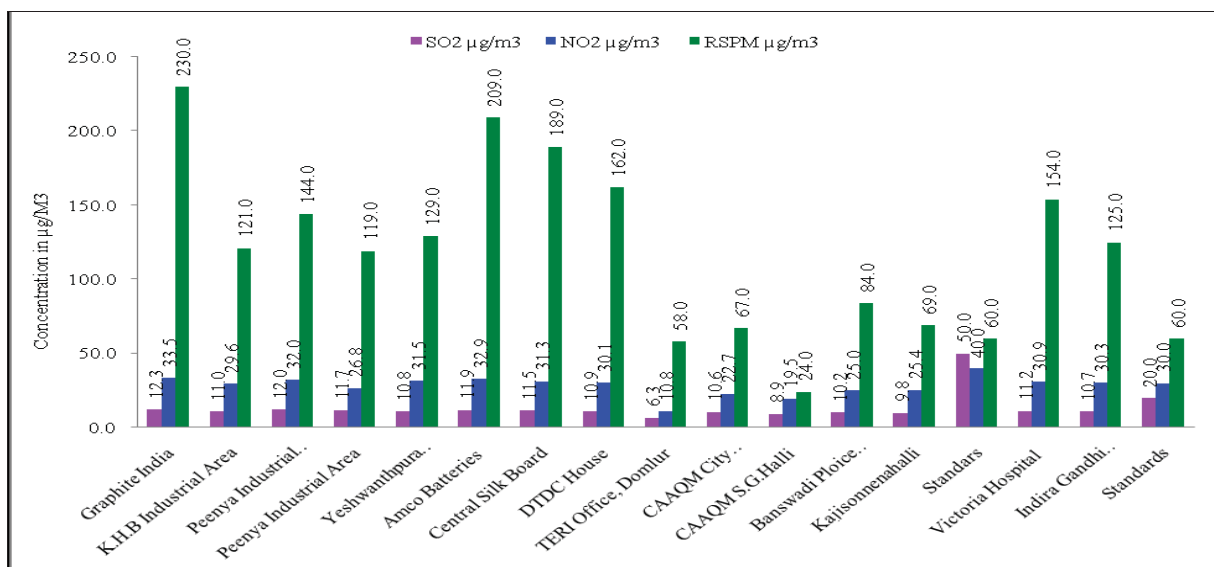
Sl. No.	Source	PM10 (TPD)	% Contribution
1.	Transport	22.4	42
2.	Road dust	10.9	20
3.	Domestic	1.8	3
4.	DG Set	3.6	7
5.	Industry	7.8	14
6.	Hotel	0.1	-
7.	Construction	7.7	14
	Total	54.3	100

About 1.47 crore vehicles were registered in the State as on 31.3.2015. (Source: rto.kar.nic.in). Emission from the vehicles is monitored in accordance with the Motor vehicle Rules. The vehicles are being checked and penalties are being imposed by the traffic police and RTO for non-

compliance of standards prescribed. The KSPCB takes up the issue with the concerned authorities as and when the air pollution levels exceeds the prescribed limits. One such measure implemented is supply of Sulphur free petrol in Bengaluru City.

KSPCB is monitoring the ambient air quality of Bengaluru city at 15 stations, 13 stations under the National Ambient Air Quality Monitoring Programme (NAMP) and 02 stations under the Continuous Ambient Air Quality Monitoring programme (CAAQM). Monitoring is done twice-a-week for 24 hours at 13 Stations under NAMP and 24 hours through-out the year at 2 stations under CAAQM. According to the revised national ambient air quality standards (of 16-11-2009), 3 parameters are monitored viz Respirable suspended particulate matter (RSPM), Sulphur dioxide (SO<sub>2</sub>) and Nitrogen dioxide (NO<sub>2</sub>). The data measured is compared with the revised national ambient air quality standards. Average observed values of air pollutants in the 15 stations in Bengaluru city is depicted in Figure 8.6.

**Figure 8.6: : Annual Average values of air pollutants in Bangalore city for the year 2014-15 Ambient Air Quality monitoring station – 15 ( Including two CAAQMS)**



The Board has monitored the ambient air quality of Bengaluru city at 15 locations including two Continuous Ambient Air Quality Monitoring Stations (CAAQMS) and using manual equipment's, the parameters Respirable Particulate Matter, Sulphur dioxide and Nitrogen dioxide are measured in the manual stations. In the CAAQMS apart from the above Carbon Monoxide is monitored.

During the next financial year it is planned to monitor for additional parameters; Ammonia, Lead, Arsenic, and Nickle.

Two continuous ambient air quality monitoring stations (CAAQMS) one at City Railway station and other at Regional Office complex at S.G Halli. Monitoring is being carried out on 24x7 for PM10 (RSPM), SO<sub>2</sub>, NO<sub>2</sub> and CO and the data is sent to CPCB, New Delhi electronically and also the data is entered in the Board Website.

The summary of air quality monitoring is as follows:

The ambient air quality at the monitoring stations indicates the higher concentration of RSPM when compared to National Ambient Air Quality standards at 12 locations. At one location, all three monitored parameters are within the limits.

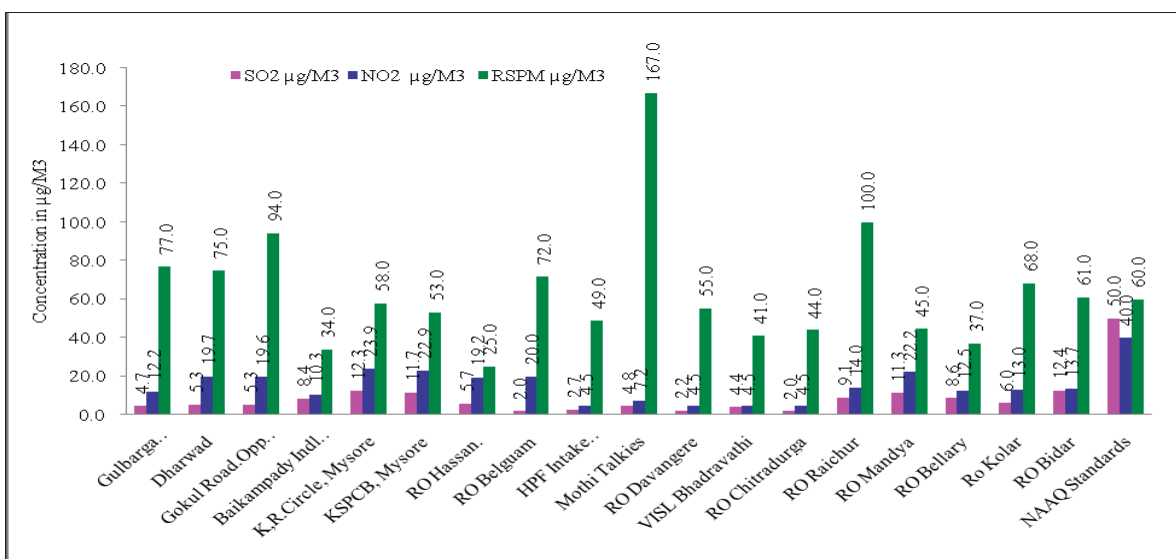
The RSPM concentration values varies from 67 µg/M<sup>3</sup> to 230 µg/M<sup>3</sup>.

The Board has issued directions under Section 31(A) of the Air Act to the commissioner for Transport and Road Safety and Commissioner for Bruhat Bengaluru Mahanagara Palike to take up ameliorative measures to address the problem of urban air pollution.

During the reporting period the Board is monitoring the ambient air quality in the State in all the major cities under the National Ambient Air Quality Monitoring Program. Viz Mysore-2 stations, Hubli-Dharwad-2 stations, Davanagere-2 stations, one each at Bhadravati, Mandya, Hassan, Mangalore, Karwar, Belagavi, Kalburgi, Bidar, Raichur, Bellary, Kolar, Ranebennur-Haveri, VISL-Shivamogga & Chitradurga.

The monitoring stations cover the Industrial Area, Mixed Urban Area and Sensitive Area. Monitoring is being carried out on 24 hourly for RSPM, SO<sub>2</sub>, and NO<sub>2</sub>, the data is sent to CPCB, New Delhi electronically and also the data is uploaded in the Board's Website. The data is also shared with the line Departments to take necessary corrective measures wherever the air quality is affected.

**Figure 8.7: Annual Average values of air pollutants in major districts of Karnataka for the 2014-15 Ambient Air quality monitoring at 15 major cities of Karnataka State**



The RSPM values have exceeded the national limit in Kalburgi, Davanagere, and Ranebennur in Haveri District, Hubli, Dharwad, Belagavi, Raichur and Kolar. Increase in the RSPM level is attributed to the construction activities and other civil works in other urban areas, vehicular movement and road dust. Annual average values of air pollutants at different locations in the districts is depicted in chart above.

Industrial air emissions are regularly monitored by the KSPCB through

inspections and samples collections. Wherever the samples are not complied with the standards prescribed, actions are being taken to set right the problem by strict enforcement of law.

### (C) Noise quality Monitoring:

The Karnataka State Pollution Control Board is monitoring the noise level in 10 stations located at various places in Bengaluru under National Ambient Noise Monitoring Programme (NANMP)



**Table 8.25: Noise monitoring stations installed and monitoring in Bangalore**

Sl. No.	Station Name	Type of Area
1	Export promotional Industrial Park, ITPL, White Field Industrail area Bengaluru	Industrial Area
2	Peenya Industrial Area, Ace Manufacturing System, Bengaluru -	Industrial Area,
3	KSPCB, Parisara bhavan, # 49 Church Street, Bengaluru.	Commercial area
4	BWSSB site No. 137. Kadubidnahalli, Bengaluru	Commercial Area
5	Yeshwanthpur, Police Station, Bengaluru	Commercial Area)
6	KSPCB office Building, Nisarga Bhavan S.G.Halli, Bengaluru.	Residential area
7.	Madival lake, BTM II <sup>nd</sup> stage, Bengaluru	Residential area
8	TERI Office, Domlur, Bengaluru	Residential Area)
9	Indira Gandhi Institute of Child Health, ( NIMHANS)	Sensitive Area
10	RVCE Mysore Road ,Bengaluru	Sensitive Area

**I. Noise monitoring stations at Industrial Areas.**

The Board has established two continuous noise monitoring station in two industrial areas

- i. White Field Industrial area (Graphite India), Bengaluru.
- ii. Peenya Industrial Area, Bengaluru.

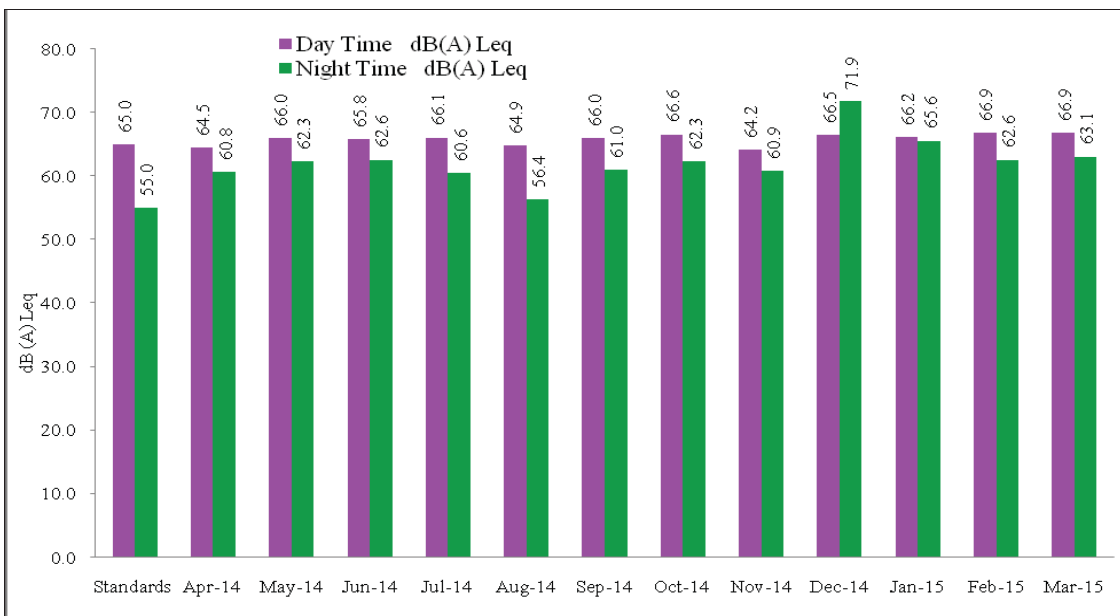
The measured day and night noise levels are well within the day limit of 75 dB (A) and night limit of 70 dB (A).

**II. Noise monitoring stations at Commercial area.**

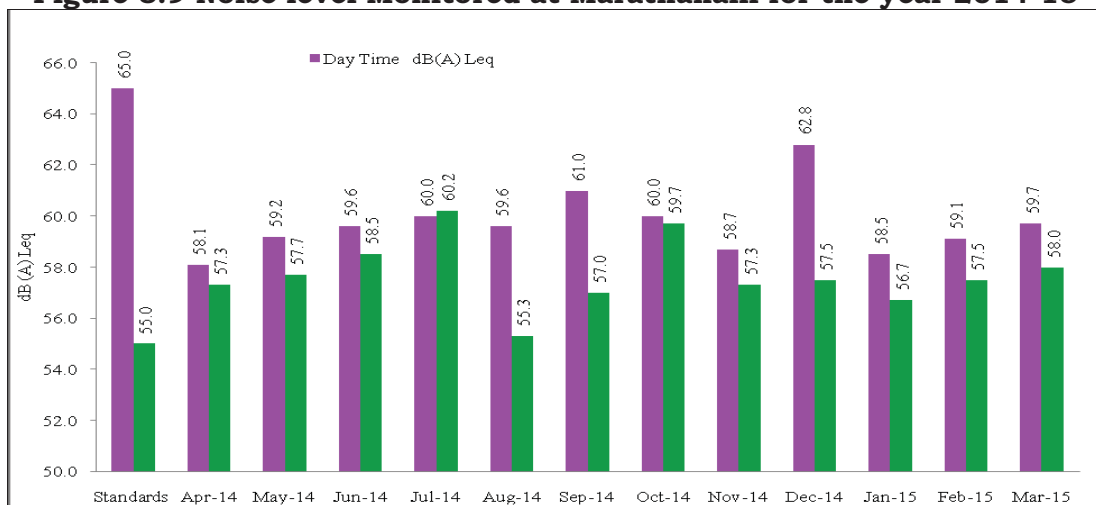
The Board has established three continuous noise monitoring station in three commercial areas of Bengaluru city

- i) KSPCB, Parisara Bhavan, # 49 Church Street, Bengaluru.
- ii) BWSSB, Site No.137. Kadubidnahalli (Marathahalli), Bengaluru.
- iii) Yeshwanthpur, Police Station, Bengaluru

**Figure 8.8 Noise level Monitored at Parisara Bhavana for the year 2014-15**



**Figure 8.9 Noise level Monitored at Marathahalli for the year 2014-15**



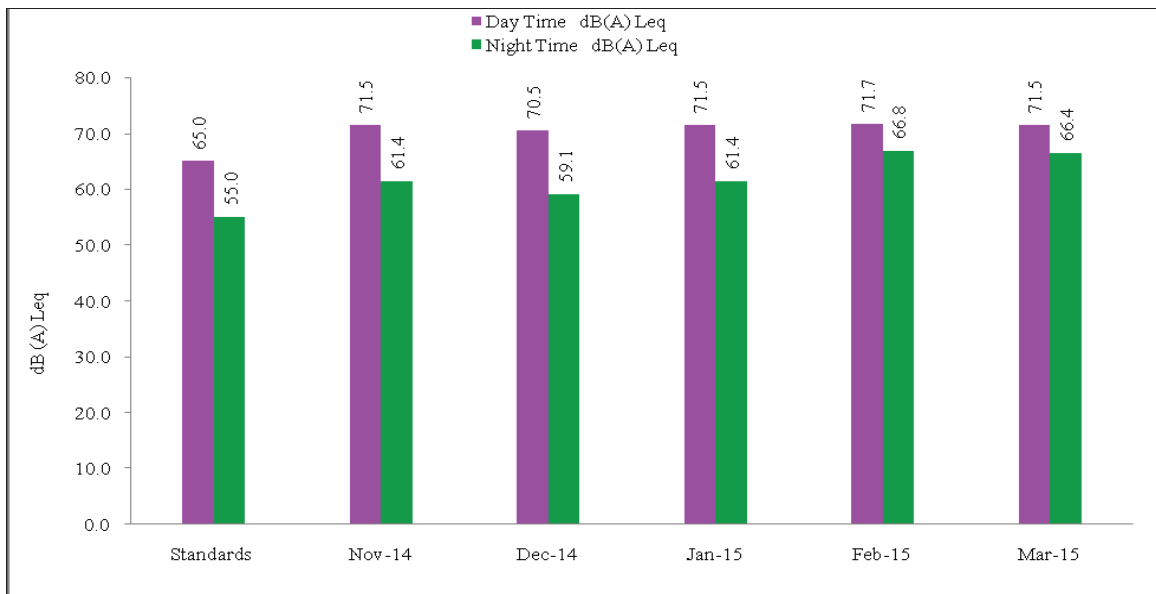
The measured day time noise levels have exceeded the national day limit of 65 dB(A) by in the range of 0 to 9.7 % and in the night time the measured noise levels have exceeded the national night limit of 55 dB(A) by in the range of 4.9 % to 14.5 % .

The Board has established three continuous noise monitoring station in three Residential areas Bengaluru city

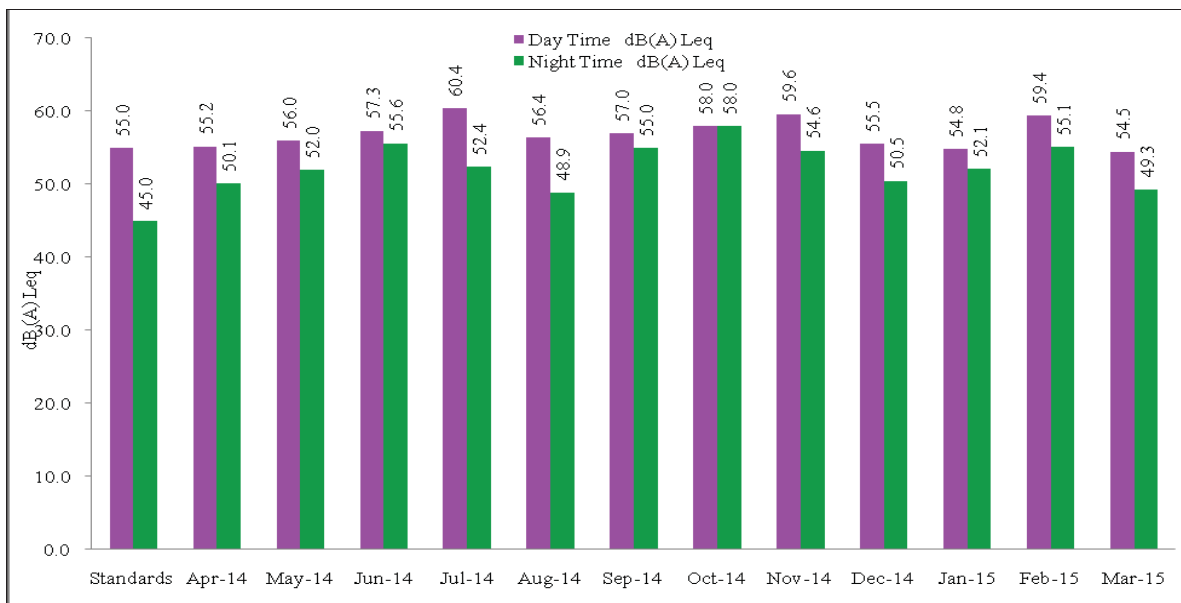
- i. KSPCB, Nisarga Bahavan, S.G Halli, Bengaluru.
- ii. TERI Office Domlur, Bengaluru.
- iii. BTM Layout, Bengaluru.

**III. Continuous Noise Monitoring Stations at Residential areas of Bangalore.**

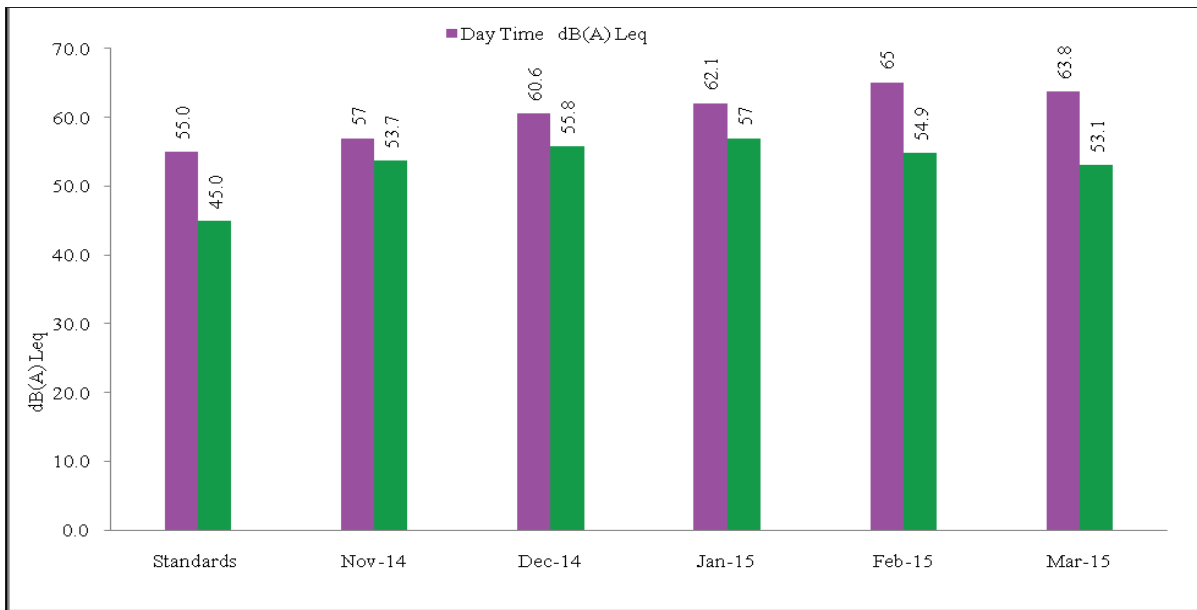
**Figure 8.10 Noise level Monitored at Yeshwanthpur for the year 2014-15**



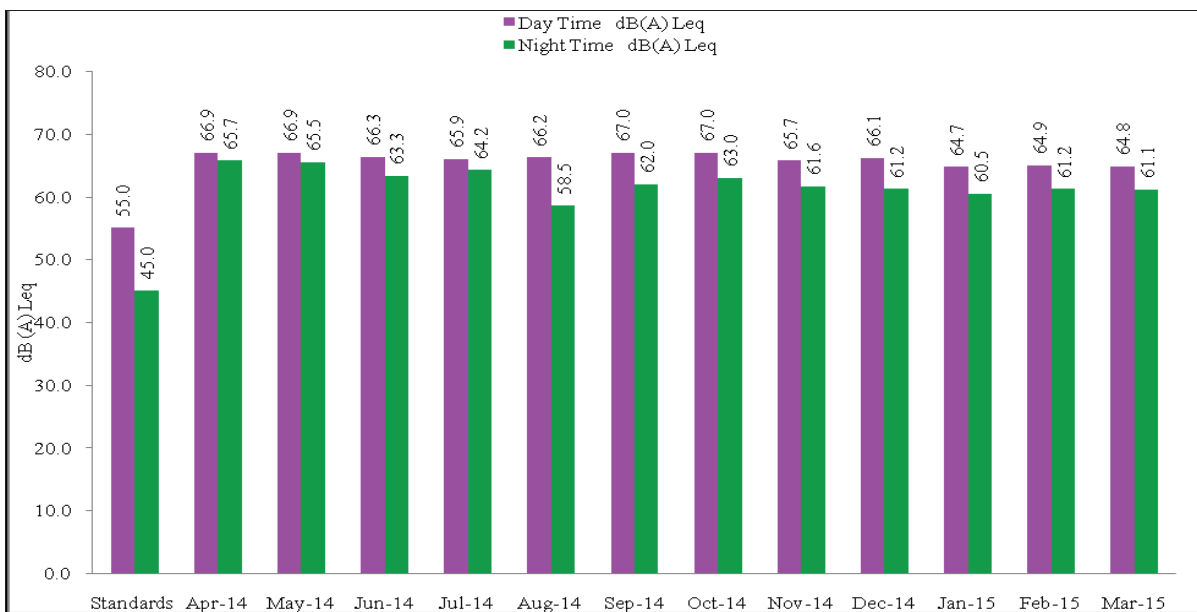
**Figure 8.11 :Noise level Monitored at Nisargha Bhavana for the year 2014-15**



**Figure 8.12 Noise level Monitored at TERI Office, Domlur for the year 2014-15**



**Figure 8.13 Noise level Monitored at BTM Layout for the year 2014-15**



The measured day time noise levels have exceeded the national day limit of 55 dB(A) by in the range of 3.6 to 20.0 % in the Residential area and in the night time the measured noise levels have exceeded the national night limit of 45 dB(A) by in the range of 17.3% to 38.4%

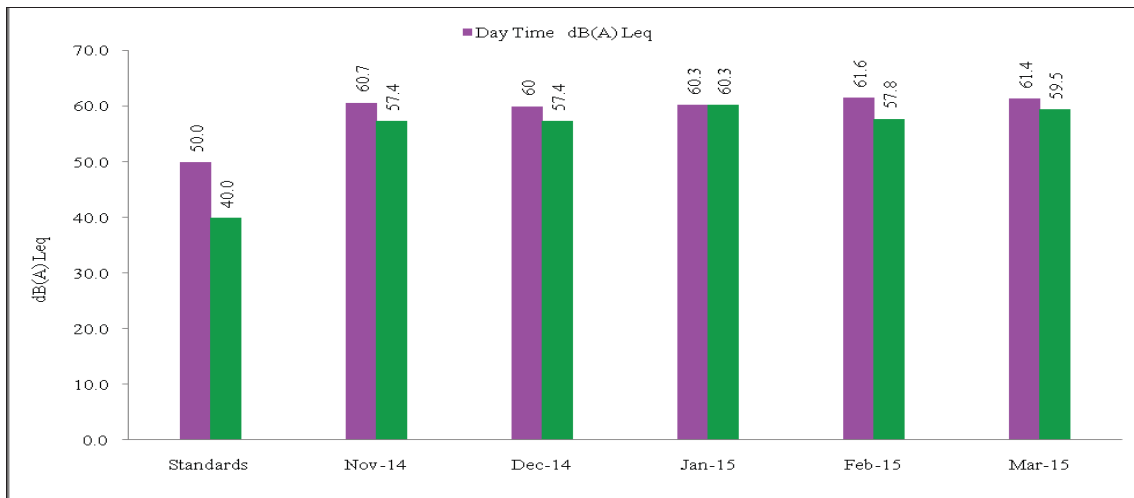
**IV. Continuous noise monitoring stations at Silent Zone / area**

The Board has established two continuous noise monitoring stations in two silent zones of Bengaluru city

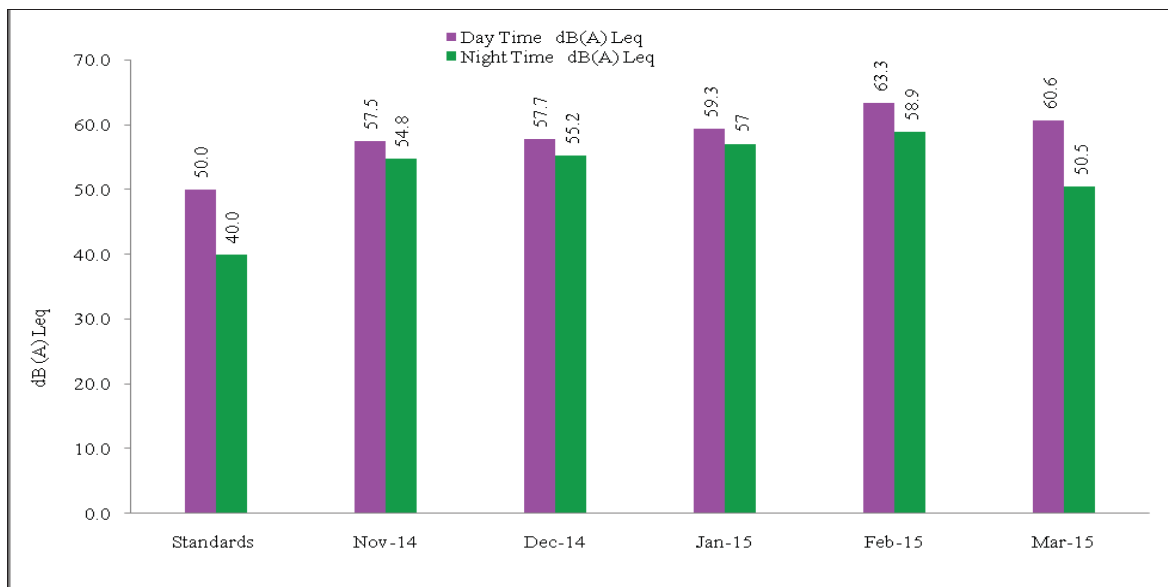
- i) (Indira Gandhi Institute of Children Health Care), NIMHANS, Bengaluru.
- ii) RVCE, Mysore Road, Bengaluru.



**Figure 8.14 Noise level Monitored at NIMHANS for the year 2014-15**



**Figure 8.15 : Noise level Monitored at RVCE Mysore Road for the year 2014-15**



The measured day time noise levels have exceeded the national day limit of 50 dB(A) by in the range of 19.4 % to 21.7 % in the sensitive area and in the night time the

measured noise levels have exceeded the national night limit of 40 dB(A) by in the range of 38.3 % to 46.2 %

**Table 8.26: Noise level data measured at ten Continuous Noise Monitoring Stations in Bengaluru city for the year 2014-15**

Sl. No	Name of the Station	Limits dB(A) Leq	Day Time			L min	Leq	Night Time			% Increase
			Leq	L min	L max			Leq	L min	L max	
1	Peenya, CAAQMS of CPCB	75	59.8	47.9	72.6	70	56.8	49.2	70.2	Within limit	
2	Export promotional Industrial Park, ITPL, White Field Industrial area Bengaluru	75	6/.6	58.0	79.5	70.0	61.6	50.2	76.6	Within limit	
3	Parisara Bhavan, Church Street	65	65.9	54.6	77.7	55	62.5	48.9	74.5	<b>13.6%</b>	
4	Yeshwanthpur Police Station	65	71.3	65.7	78.5	55.0	63.0	53.7	75.8	<b>14.5%</b>	
5	Marathahalli	65	59.6	52.1	78.1	55	57.7	50.9	72.6	<b>4.9%</b>	
6	Nisarga Bhavn	55	57.0	47.3	74.2	45	52.8	42.6	70.8	<b>17.3%</b>	
7	TERIOffice, Domlur	55	61.7	42.0	78.4	45	54.9	36.2	69.7	<b>22.0%</b>	
8	BTM Lay out	55	66.0	57.0	80.7	45	62.3	46.4	74.9	<b>38.4%</b>	
9	NIMHANS IGH Care	50	60.8	47.4	72.2	40	58.5	39.3	72.1	<b>46.2%</b>	
10	RVCE, Mysore Road	50	59.6	52.6	73.8	40	55.3	46.6	69.7	<b>38.3%</b>	

**Note:**

1. Day time shall mean from 6.00 AM to 10.00 PM.
2. Night time shall mean from 10.00PM to 6.00 AM.
3. Silence zone is an area comprising not less than 100 meters around Hospitals, Educational Institutions, Courts, Religious places or any other which is declared as such by the competent authority.
4. dB(A) Leq denotes the time weighted average of the level of sound decibels on scale 'A' which is relatable to human hearing.
5. 'A' decibel is a unit in which noise is measured.
6. 'A' in dB(A) Leq, denotes the frequency weighting in the measurements of noise and corresponds to frequency response characteristics of the human ear.
7. 'Leq' it is energy mean of the noise level over a specific period.

Noise levels in the cities are generally exceeding the standards in most of the core areas due to vehicular movement and honking. The noise level measured in industrial and commercial areas are found to meet the standards.

**(D) Hazardous Waste Status:**

About 3708 operating industries are found to be generating Hazardous Waste of about 2.51 Lakh Metric Tons annually in the State. Out of this 1.2 Lakhs MTPA is recyclable. The remaining waste of around 0.66 Lakh MTPA are sent to incineration and 0.65 Lakh MTPA are sent to landfill. The inert hazardous waste after recycling and incineration are sent to landfilling (TSDF). Treatment, Storage and Disposal Facility (TSDF) for hazardous waste has been established in July, 2008 at Dobbaspeta near Nelamangala in Bengaluru. The Board has permitted 148 re-processors in the State, which includes State owned and private.

**Table 8.27 : Details of total hazardous wastes generated and their disposal**

Type of hazardous waste	State (in MTPA)	BengaluruUrban and Rural District (in MTPA)
Landfillable	65362.49	17258.31
Incinerable	65725.10	29615.54
Recyclable	119802.00	29564.79
Total	250889.59	76438.64

**(E) Management and Handling of batteries:**

In the State about 706 Battery handling units are identified by the Karnataka State Pollution Control Board and are being monitoring regularly. As per extended producer's responsibilities, the battery manufacturing industries need to take back the old batteries from the dealers when the new batteries are sold.

**(F) Plastic Waste Management:**

As per Plastic Waste (Management and Handling) Rules, 2011, the Karnataka State Pollution Control Board is the prescribed Authority for enforcement of the provisions of these rules related to registration,

manufacturer and recycling of plastic and the municipal Authority are the prescribed Authority for enforcement of the provisions of these rules relating to the use, collection, segregation, transportation and disposal of the plastic waste.

As an initiative in the State, use of plastic carry bags of less than 40 microns is prohibited and the carry bags of higher thickness are priced in order to discourage the usage. Further, the State Government has banned use of plastic in selected places like National Parks, religious places, important parks, etc. To ensure compliance to the above Rules, the State Level Advisory Body has been constituted under the chairmanship of the Principal Secretary, Urban Development Department to monitor the implementation of these Rules.

Recycling of carry bags has been encouraged and the plastic waste collected at the municipal landfill sites are being encouraged to be sent to cement kilns as fuel.

**(G) E-waste management:**

The Karnataka State Pollution Control Board has authorized 50 units for recycling and dismantling of e-waste of capacity 44680.5 MTPA. These recyclers help in reduction of waste to the landfill sites and re-use and recovery of resources.

**(H) Bio-Medical Waste Management:**

The Bio-medical waste generated from the Health Care establishments is being monitored in accordance with the provisions of the Bio Medical Waste (Management & Handling) Rules 1998. The Board has identified 27,211 health care establishments in the State. It is estimated that 82 Tons per day of biomedical waste is generated in the State, which are either sent to 21 common bio-medical waste treatment facilities in the State are disposed in the 9 captive incinerators.

**(I) Municipal Solid Waste Status and Management:**

The Municipal solid waste is being managed in accordance with the provisions of Municipal Solid Waste (Management &

Handling) Rules 2000. Efforts are being made to manage the waste scientifically. Recycling and conversion of waste for useful purpose is encouraged by way of promoting composting/vermi-composting/waste to energy etc. Out of 219 local bodies in the State, 210 urban local bodies (including Bengaluru) are using landfill sites; 1 local body has acquired landfill site but not being used; 8 local bodies has not taken position. Increasing the percent of usage of waste is a challenge that the urban local bodies have to face and succeed in the interest of environment protection. Safe disposal of construction debris without mixing with the municipal solid waste is another aspect the urban local bodies have to attend on top priority.

Scientific disposal of slaughter house waste is another sector which requires priority. In order to achieve this, modern abattoir is planned in major cities of the State. Proposal of establishing modern abattoir at 09 urban local bodies is to be executed in a time bound manner by the local bodies. KSPCB is the first Board to frame guidelines on (1) Buffer zone/No development Zone around landfill site (2) Municipal Solid Waste Management in big campuses/universities (3) Management of construction debris waste and (4) siting of slaughter Houses.

#### **(J) Ozone Layer Protection:**

The 1987 UN Montreal Protocol outlawed chlorofluorocarbon gases (CFCs) that erode Earth's ozone layer, which protects the planet from cancer-causing solar rays. Further expansion of the Antarctic ozone hole has been halted, but full recovery is not expected until mid-century or later. Usage of CFCs is therefore discouraged.

#### **8.1.11 Karnataka Lake Conservation and Development Authority**

Lakes and tanks are fulfilling several demands of many animal & plant species including human needs from ancient times. These tanks, apart from fulfilling the public objectives, are also rendering ecological services by maintaining ecological balance and conservation of wetland biodiversity. In

this regard, Lake Development Authority, which is under the administrative control of Environment and Ecology Department, has been renamed as Karnataka Lake conservation and Development Authority Act, 2014 has been enacted to develop the Lakes coming under the limits of all City Corporations, Bengaluru Development Authority and any water bodies notified by the Government. The act has come into force from 05.06.2015.

#### **A. Vengaihana kere:**

Administrative sanction for Rs. 17.50 lakhs has been accorded for the construction of compound wall of Vengaihana kere lake. In view of urgency, the said subject was placed before E.C. meeting held on 19.03.2015 and decided to entrust the work to KRIDL and Rs. 8.75 lakhs has been released as first installment to the said agency and the work is in progress.

#### **B. Data base on lakes in Bangalore:**

Data base on lakes in Bengaluru city was carried through Geo Spatial technology, which was entrusted to the only Government Agency (Regional Remote Sensing Center South (RRSC-S) ISRO). The said Agency has submitted the DPR for Rs. 32.00 lakhs out of which Rs. 9.00 lakhs has been released as first installment.

#### **C. Bio-Diversity Park in Madivala lake**

Madivala Lake in Begur Hobli is selected for the formation of Bio-Diversity Park at an estimated cost of Rs.24.72 Crore as per the recommendation of Karnataka Jnana Aayoga, for which administrative sanction is accorded and tender process is in progress.

#### **D. Integrated DPR preparation for Yelahanka Puttenahalli lake**

Yelahanka Puttenahalli Lake which is in the custody of Forest Department. During the visit to the said lake by honorable Chief Minister along with Lok Sabha member local MLA instructed to prepare DPR for the restoration.

Hence, action has been taken for preparing the DPR the said works is in progress and a partial amount of Rs. 5.50 lakhs has been released to the agency.

### E. Maintenance of Agara Lake.

To avoid the illegal activities in and around the lake, Home Guards have been deployed in the premises of the lake for 24 hours and also laborers are being used for the maintenance of lake. On an average for the said purpose Rs. 8.00 lakhs will be spent for the year 2015-16 and also the tender process has been completed for the preparation of Detailed Project Reports for the conservation and rejuvenation of said lake at an estimated cost of Rs. 16.10 crore. And the proposal has been submitted to the Government for administrative sanction.

#### 8.1.12 KARNATAKA BIODIVERSITY BOARD (KBB):

Karnataka Biodiversity Board was established vide section 22 of Biological Diversity Act 2002, by Government of Karnataka on 01.08.2003.

Main objectives of the board are:

1. Implementation of Biological Diversity Act 2002 and Karnataka Biological Diversity Rules 2005.
2. Conservation Biological Diversity.
3. Promotion of in-situ and ex-situ conservation of biological resources, incentives for research, training and public education to increase awareness with respect to biodiversity.
4. Planning schemes and programs for the sustainable utilization of Biological Diversity

### A Activities and performance of the Board

#### 1. Constitution of Biodiversity Management Committees (BMCs):

As per section 41 of Biological Diversity act 2002, every local body shall constitute a Biodiversity Management Committee with its area for the purpose of promoting conservation, sustainable use and documentation of Biological Diversity. Total formation of Biodiversity Management Committees till date are as follows:

1. 4536 BMCs have been formed at Gram Panchayat level,
2. 108 BMCs at Taluk Panchayat level
3. 14 BMCs at Zilla Panchayat level.

#### 2. Awareness and Training Programs:

The Biodiversity awareness training program to Government employees, University students, teachers, Non-Government Organizations, panchayats members and general public is being conducted throughout the state. Till date 505 training programs have been conducted.

#### 3. People's Biodiversity Register (PBRs):

PBR is a panchayat level register that documents local biodiversity and local community knowledge on biodiversity including its conservation and traditional uses. The PBRs are prepared in various districts at Gram panchayat level. PBRs are prepared both in Kannada and English. The PBR will help in opposing patenting and other legal matters. Till date 548 PBRs in different BMCs have been prepared.

#### 4. Declaration of Heritage sites:

Karnataka Biodiversity Board has declared the following as heritage site under section 37(1) of Biological Diversity Act 2002.

**Table 8.28 : The heritage sites declared under section 37(1) of Biological Diversity Act 2002**

Sl. No.	Location	Taluk	District	Extent	Remarks
1	Nallur	Devanahalli	Bengaluru (R)	53 acres	400 years old unique Tamarind grove.
2	Hogrekhan	Kadur	Chickmagalur	2508.15 acres	Biodevrsity rich area and a crucial link in the western ghat ecosystem with Bababudanagari and Kemmanagundi.
3	GKVK, UAS,	Bengaluru	Bengaluru (U)	167 ha.	Site of urban Biodiversity
4	Ambaragudda	Sagar	Shivamogga	3857.12 acres	Natural Biodiversity heritage site.

**5. Research Projects/ Studies of the Board:****Table 8.29 : Details of Research /Studies are approved by the Board and ongoing projects**

Sl No	Name of the Project	Name of the Organization
<b>a) The following Research /Studies are approved by the Board.</b>		
1.	Project on Protection, Conservation and Cultivation method for Wild Banana in Kodagu District.	Dept. of Microbiology, Mangalore University, Madikeri.
2.	Establishment of Herbarium and Botanical Museum of the plants of Western Ghats. Survey Identification and preparation of report on sacred groves in Coastal and Western Ghats region. (Cost of the project Rs. 24.00 lakhs per year for 5 years)	Pilukula Nisarga Dhama Society, Science Centre.
3.	Floristic diversity, Ecological Uniqueness and conservation strategies of riparian flora of Netravati river system in Western Ghats range of Dakshina Kannada. (Total Cost of the Project Rs. 82,000)	Director, Centre for Conservation Biology and Sustainable Development, Sirsi
4.	Project on Baseline profiling of Cultural-Heritage Biodiversity Resources in selected Eco-zones of Karnataka. (Total cost of the project Rs.5.00 lakhs)	IINDICUS, Tarikere, Chikkamagaluru district
5.	Developing of a Web-Based Atlas depicting the spatial patterns of Biodiversity of Karnataka.	Ashoka Trust for Research in Ecology and the Environment, Bangalore
<b>b) The following are ongoing projects:</b>		
1	A study on the relation between dispersal requirements of cross-pollinated host trees and dominance hierarchy in bird guilds visiting such trees in the tourism zone of BRT Tiger Reserve	JLR, Bangalore
2	Mapping network of procurement of select plant bio resources	EMPRI, Bangalore
3	Conservation and utilization of deep water Rice Genetic resources of the Varada river course in the Western Ghats of Karnataka State	University of Agricultural Sciences, Dharwad
4	Assessment of population status and removal of bio-resources in forests with special emphasis on Medicinal Plants in Karnataka	KBB, Bengaluru
5	<b>UNEP – GEF MOEF ABS Project:</b> Karnataka Biodiversity Board is implementing the UNEP-FEF-MOEF ABS Project sponsored by Ministry of Environment and Forest, Government of India from October 2014. The main objective of the project is to identify the potential bio resources for ABS agreement, Formation of Biodiversity Management Committees and Preparation of PBRs.	KBB, Bengaluru

**6. Survey of Bio industries and Utilization of bio resources:**

Action was initiated to collect the information of bio resources from bio industries with the involvement of Karnataka Indian Medicine Manufacturers Association

(regd). The information has been collected. A report on Bio industries and use patterns of Bio resource has been prepared and sent to Government of India (National Biodiversity Authority). Till date 105 companies filed the Form-1 applications.

**7. News Letter:**

Karnataka Biodiversity Board has started a News letter by giving details of important activities of the Board and articles from various sources on various issues relating to Biodiversity. The 1<sup>st</sup> quarterly Newsletter was released in programme attended by various dignitaries including the Chairman, National Biodiversity Authority, and Government of India. So far 13 issues have been released.

**8. Biodiversity Award:**

Biodiversity Board has instituted total 11 biodiversity awards in General category and Agro-Biodiversity awards i.e. vegetable, Cereal, fruit and animal diversity. The biodiversity Award is given for excellent work in conservation and sustainable utilization of biodiversity. The Award is given to individuals, Educational Institutions, Non-Government Organisations, Boards and Corporations.

**9. Award from National Biodiversity Authority:**

National Biodiversity Authority and Government of India has conferred **The Best Biodiversity Board Award in India to Karnataka Biodiversity Board for the year 2009-10**, for the overall performance of the Karnataka Biodiversity Board in implementation of Biological Diversity Act 2002 and planning Schemes and programs for Sustainable utilization of Bio-resources.

**10. Details of Publications of Karnataka Biodiversity Board:**

1. Karnataka Biodiversity Act and Rules handbook in Kannada and English.
2. PBR Guidelines.
3. Model PBR – 5 villages.
4. Hand book on formation of BMCs.
5. Karnataka Biodiversity Board Broucher (English & Kannada)
6. Training Materials on Awareness Training (Kannada & English)
7. Survey Report on Coastal Biodiversity of Karnataka.
8. Survey Report on Biodiversity of Nethrani Island.
9. Karnataka State Biodiversity Strategy and Action Plan (KSBSAP).

10. Bird Diversity in Tamarind Grove, Nallur, Devenahalli taluk, Bangalore
11. Malenadige Baa – Kuvempu Memorial Bio Park
12. Trees in Ancient Indian Literature.
13. Synoptic notes on various aspects of Biodiversity Act & Rules. (1 to 8)
14. Quarterly News Letter on Biodiversity.
15. Proceeding of workshop on documentation of local traditional knowledge.
16. National Seminar on Plant Resources of Western Ghats
17. Collection of articles on Biodiversity - Samruddi
18. Proceedings of workshop on Coastal Biodiversity.
19. Research finding into the peculiar features and the complex biodiversity in the Tamarind Grove.
20. Biological Diversity Act – In a Nutshell.
21. Karnataka Biodiversity Vision 2020
22. Biodiversity of Karnataka at a glance,
23. Survey of Bio-industries using Bio-resources in Karnataka
24. Performance of Karnataka Biodiversity Board.
25. Translation of important books of Biodiversity published by National Biodiversity Authority, Zoological Survey of India etc., – English to Kannada language:
26. BMC– An operational Tool Kit, Fauna of Ecosystems of India (Mangroves), ABS Mechanism under Biological Diversity Act, 2002, ABS Terminology, Local Biodiversity Fund – A community dialogue, ABS brochure.
27. Presentations and Displays: MOEF –CC Science Express Train (Biodiversity Special)– Displayed the Poster of Karnataka Biodiversity Atlas.

**8.1.13 Environmental Management policy & Research Institute (EMPRI):**

EMPRI is an autonomous society established under Forest, Ecology & Environment Department, Government of Karnataka and registered under Karnataka Societies Registration Act, 1960 on 17<sup>th</sup> September, 2002. The Institute undertakes scientific research, policy research and offers training on concurrent environmental issues relevant to the society, industry and Government.

### **1 Centre for Climate Change Status of Karnataka State Action Plan on Climate Change:**

Funded by Department of Ecology and Environment, Environmental Management and Policy Research Institute, Bengaluru has prepared a Karnataka State Action Plan on Climate Change (KSAPCC)- 1st Assessment. The report covers key sectors like Agriculture, Animal Husbandry, Water Resources, Biodiversity, Forestry, Urbanization and Health. The KSAPCC has also proposed action plan for every sector as roadmap for the concerned state departments. The state action plan has identified over 200 action items including 31 categorized as priority actions. The estimated total budget proposed for the action plan is Rs.10, 500 Cr out of which Rs. 5,100 Cr is requested from GOI. Steering Committee on Climate Change, MoEF&CC has recommended for the endorsement of the report.

### **2 MoEF&CC Climate Change unit at EMPRI:**

Ministry of Environment, Forest & Climate Change has also established a state unit of climate change in EMPRI under the Capacity Building for Climate Change (CBCC) programme. The purpose of the capacity building at the state level is to strengthen the capacity at State level to address climate issues and to integrate climate change and development imperative in policy, plans and programmes in various sectors. MoEF&CC has provided financial support of Rs. 10 lakhs to engage a consultant at State Nodal unit for climate change to coordinate with MoEF&CC and other stake holders at state level for implementation, updation and monitoring of State Action Plan on Climate Change.

### **3 State Nodal Centre:**

As per the MoEF guidelines, Karnataka state government has designated EMPRI as the Institution to anchor the State's future Scientific and Technical activities on climate change and as the nodal agency for the preparation and updating of the State Action Plans on Climate Change (SAPCC). The 6<sup>th</sup> coordination committee meeting on SAPCC held under the chairmanship of Additional

Chief Secretary and Development Commissioner on 13<sup>th</sup> August, 2014, has designated EMPRI as the nodal agency for providing technical support in conducting research, trainings and capacity building in climate change programs.

A New Scheme on Climate Change has also been announced by Govt. of Karnataka with the budget outlay of Rs. 1 crore in 2015-16 for strengthening the capacity of EMPRI to steer the climate change policy and initiatives of the State by strengthening the existing climate change cell at EMPRI with necessary technical manpower and infrastructure. It is also aims to create and generate awareness among various stakeholders, to evolve strategies and policies for implementation, to impart training, capacity building and manpower development and also to coordinate with different universities, research institutions, Government Departments and NGOs to pursue theme based scientific research on climate change and its impacts. Currently, EMPRI with joint collaboration with various institutes has started the following projects:

1. "Ecological research on soil carbon storage in Karnataka in collaboration with Indian Institute of Science
2. "Urbanization and its effects on lizards: a study from a climate change perspective" in collaboration with Indian Institute of Science
3. "Monitoring the Karnataka coastline for sea turtle nesting sites: Beach monitoring and coastline mapping in collaboration with Dakshin Foundation, Bangalore.
4. "Climate change, urbanization and the housing sector in Karnataka in collaboration with Ashoka Trust for Research in Ecology and the Environment, Bangalore
5. "Agro-forestry as a Climate Change Mitigation and Adaptation Strategy for Karnataka in collaboration with Aranya Climate Change Services Pvt. Ltd, Bangalore.
6. "Butterflies as Climate Change Indicators – a Study in Bengaluru City" by EMPRI
7. "Measurement Of Greenhouse Gas Emissions (CH<sub>4</sub> and CO<sub>2</sub>) from Municipal Solid Wastes Disposal Sites (MSWDS)" by EMPRI
8. "Study the Impact of Climate Change on Incidence of Vector borne & Communicable diseases in Bengaluru City and vulnerability mapping" by EMPRI



As directed by MoEF&CC, EMPRI is also coordinating the state departments to prepare and submit proposals under National Adaptation Fund for climate change. An introductory workshop with GIZ was also organized on September 8, 2015 for the stakeholders to inform them about the detail funding mechanism available under climate change. As per the implementation guidelines provided by MoEF&CC State Government has setup State Level Steering Committee (SLSC) under the Chairmanship of Chief Secretary, relevant stakeholders department and NABARD where Director General, EMPRI is a Member Secretary. A comprehensive proposal from Animal Husbandry department is under scrutiny.

#### **4 Training and capacity building under climate change**

In order to address the issues of climate change and its impacts on various sectors, efforts were made to bring all the stakeholders together on a single platform to encourage discussions designed towards formulating collective and responsible actions. To include climate change and environmental issues in the capacity building programmes of Environmental Management and Policy Research Institute it was decided to identify the training needs through training needs assessment so that appropriate course designs and resource materials including modules can be developed in response to the training needs of different levels of stakeholders. As an outcome of the training needs assessment workshop conducted by EMPRI, the officials suggested for basic workshop on climate science for mid-level officers. It was suggested that, the workshop should focus on science of climate change and vulnerability, mitigation and adaptation methods required sector wise. The training cum workshops on “Climate change- risks, vulnerability and adaptation” conducted during the year 2014-15 was a proactive step taken by Environmental Management and Policy Research Institute, Bengaluru with the financial assistance from Government of Karnataka. This initiative is First of its kind in the country conducted with the intention to create awareness among all stakeholders and also to frame

adaptation/mitigation strategies to combat Climate change in the State of Karnataka. More than 400 officials were trained during the financial year 2014-15.

Under the “Capacity Building for Climate change” funded for state Government under Climate change Action Plan of MoEF, a climate change unit is also established for conducting training programmes and 7 training programmes on “Climate Change & Bio Medical Waste Management” were conducted district-wise for health department officials. Under state Government funding, 2 one-day training programmes on “Climate Change & Bio Medical Waste Management” and 7 one-day training programmes on “Combating Climate change” in various sectors like Forest, Water, Energy, Horticulture & Sericulture, Health & Fisheries have been conducted and planning to organize 4 one-day training programmes for Agriculture, Transport, Urbanization and Animal Husbandry sectors.

An interactive workshop on Implementation plan for Climate Change and Sustainable Agriculture Monitoring, Modelling and Networking – component of National Mission on Sustainable Agriculture was conducted on 08.05.2015 at the Conference Hall, EMPRI, Bengaluru to develop road map for implementing NMSA at state level.

A workshop was conducted for senior level officials of GoK at Hotel Chancery, Bengaluru on 14.08.2015 to debate on the impacts of climate change from a global, national and state perspective and the measures being taken and planned to be taken towards adaptation or mitigation of the impact.

A workshop was organized along with GIZ on 08.09.2015 at EMPRI for finalizing the proposals from the different departments of the GoK for seeking funding under National Adaptation Fund for Climate Change (NAFCC), MoEF.

EMPRI, in collaboration with Global green Growth initiatives (GGGI), Bengaluru Climate Change Initiatives-Karnataka (BCCIK), Centre for Study on Science,

technology and Policy (CSTEP) and Indian Institute of Science (IISc), organized a one day training workshop on Implementation of Karnataka's SAPCC: A green Growth Approach" at Hotel ITC, Windsor Manor, Bengaluru on November 3, 2015. This training was a "first of its kind" initiative in

India to provide inter-sectoral perspective to designing and implementing policies and programmes and to enhance the knowledge and skills of senior officials. In all, 20 training/workshops were organized during 2015-16. The details of trainings organized are as under:

**Table 8.30 : Details of Training Programmes on Climate Change and Bio-Medical Waste Management in Bengaluru Revenue Division for 2015-16 (GoI Scheme)**

Sl No.	Training Programme	Date of the Training Programme	Venue of the training Programme	No. of participants
1.	Climate Change & Bio Medical Waste Management	21.07.2015	Meeting Hall, THO, Davangere	50
2.	Climate Change & Bio Medical Waste Management	23.07.2015	Meeting Hall, DHO office, Chitradurga.	33
3.	Climate Change & Bio Medical Waste Management	25.07.2015	Auditorium, District Hospital, Tumakuru.	76
4.	Climate Change & Bio Medical Waste Management	01.07.2015	DHO Office, Kolar.	75
5.	Climate Change & Bio Medical Waste Management	04.08.2015	DTC, Health & Family welfare, Ramanagaram	63
6.	Climate Change & Bio Medical Waste Management	07.08.2015	Meeting Hall, ZP, Chikkaballapur.	81
7.	Climate Change & Bio Medical Waste Management	11.08.2015	Meeting Hall, EMPRI, Bengaluru Urban Dist.	58
<b>Total 07 Training Programmes</b>				<b>436</b>

**Table 8.31: Details of Training Programmes on Climate Change for 2015-16 (GoK Scheme)**

Sl No.	Training Cum Workshop	Date	Venue	No. of Participants
1.	Climate Change and Sustainable Agriculture Monitoring, Modelling and Networking	08.05.2015	Conference Hall, EMPRI, Bengaluru.	27
2.	Climate Change & Bio Medical Waste Management	13.08.2015	DHO Office, Shivamogga	81
3.	Climate Change & Bio Medical Waste Management	18.08.2015	ArogyaBhavan, Magdhi Road, Bengaluru	52
4.	Workshop on Climate Change for High Level Officers	14.08.2015	Chancery Hotel, Bengaluru.	25
5.	Workshop for Implementation of Karnataka State Action Plan on Climate Change	08.09.2015	Conference Hall, EMPRI, Bengaluru.	23
6.	Training Cum Workshop on Combating Climate Change initiatives in Horticulture and Sericulture Sector.	15.10.2015	Conference Hall, EMPRI, Bengaluru.	40
7.	Training Cum Workshop on Combating Climate Change initiatives in Forest Sector.	20.10.2015	Conference Hall, AranyaBhavan, Bengaluru.	25
8.	Training Cum Workshop on	29.10.2015	Tejaswi Conference	38

Sl No.	Training Cum Workshop	Date	Venue	No. of Participants
	Combating Climate Change initiatives in Energy Sector.		Hall, KSPCB, Bengaluru.	
9.	Implementation of Karnataka State Action Plan on Climate Change in collaboration with GGGI, BCCI-K & C-STEP	03.11.2015	ITC Windsor Manor Hotel, Bengaluru.	76
10.	Training Cum Workshop on Combating Climate Change initiatives in Energy Sector.	07.11.2015	Tejaswi Conference Hall, KSPCB, Bengaluru.	24
11.	Training Cum Workshop on Combating Climate Change initiatives in Water Resource Sector.	01.12.2015	Tejaswi Conference Hall, KSPCB, Bengaluru.	20
12.	Training Cum Workshop on Combating Climate Change initiatives in Health Sector.	04.12.2015	Tejaswi Conference Hall, KSPCB, Bengaluru.	31
13.	Training Cum Workshop on Combating Climate Change initiatives in Fisheries Sector.	08.12.2015	Tejaswi Conference Hall, KSPCB, Bengaluru.	27
Total Number of Participants				489

In order to create awareness among the school children about the pollution on lakes, EMPRI has prepared a comic book on "The Lake Doctors". The comic book was released by Honorable Minister of Forest of Karnataka State on November 3, 2015. The book illustrated how a group of proactive children from a Government School has revived a polluted lake into a healthy lake as part of their "Eco-club" activity.

EMPRI has also planned to organize a quiz programme on climate change for the school children in Doordarshan in current financial year.

#### **5Centre For Lake Conservation A Study on "Comprehensive Assessment of Thippagondanahalli Reservoir Catchment Area and its Preservation Zone":**

As a conservation measure to protect the Thippagondanahalli Reservoir catchment area measuring 1453 sq.km, the Department of Ecology and Environment, GoK issued a Government Order under section 5 of the Environment (Protection) Act, 1986, dated 18th November 2003, by declaring the entire catchment area as ecologically sensitive, classifying into four zones and prohibiting different types of development activities in the catchment area. Accordingly, to study the current status of TGR the Department of

Ecology and Environment entrusted the study to EMPRI with three terms of reference (TOR). Subsequently, in connection to this study the Hon'ble High Court of Karnataka accorded additional ten terms of reference and directed EMPRI to carry out a comprehensive study on "Thippagondanahalli Reservoir Catchment Area".

Further, according to the accorded terms of reference the field visits were carried out by the researchers to understand the present status of the catchment area, developments that have taken place and for identifying the sources of pollution. Remote sensing and GIS analysis has also been carried out to find out the change in land use/ land cover. The properties concerning the Writ Petitions have also been visited and observations recorded along with photographs and GPS readings. Water quality has also been analysed by collecting samples. Both the Rivers Arkavathi and Kumudvathi are non-perennial and major water flow is seen only during monsoon. During summer the Arkavathi River is mostly dry except for the inflow of polluted water. The major reasons for the reduced inflow and deteriorated water quality are found to be massive changes in land use and land cover in the catchment, unplanned urbanization leading to change in drainage patterns, unauthorized obstructions to water flow, lack of

maintenance of the cascading lake system, over exploitation of ground water leading to unsaturated condition of soil, discharge of untreated sewage and industrial waste to the river course. By reviewing national, international guidelines and also from the suggestions given by expert committee we have made recommendations to take preventive measures to protect and conserve the rivers. The study was successfully completed and the interim report was submitted on 27th Apr, 2015 to the Hon'ble High Court of Karnataka and there after the final report was submitted on 21st Sept, 2015 to the Hon'ble High Court of Karnataka. Subsequently the final report was also shared with the concerned stakeholders.

#### **Evolving Sustainable Conservation Strategies for Waterbodies of Mysuru-Nanjangud Local Planning Area:**

To study the current status of the lakes/water bodies' series and to address the issues related to water bodies and to develop strategies to abate the current threats and give an action plan to mitigate the water scarcity problem, the Environmental Management and Policy Research Institute (EMPRI), has initiated a study entitled "Evolving sustainable Conservation Strategies for the Water bodies of Mysuru - Nanjangud Local Planning Area' under the financial assistance from Centre for Infrastructure, Sustainable Transport and Urban Planning (CiSTUP), IISc. Bengaluru.

Future (2031) is selected for the study which covers 276 sq. km. comprising of major and minor water bodies. The main objective of the study is to assess and analyse the current status of the waterbodies in Mysuru - Nanjangud local planning area. The present study area encompasses of two talukas of Mysuru District covering southern part of the Mysuru city, corridor of Mysuru-Nanjangud of Mysuru taluk and Nanjangud taluk. The entire study area comprise of 55 villages from two Talukas, in which, 35 villages of Kasaba Hobli, Varuna Hobli, Jayapura Hobli and Mysuru City Corporation are coming in the Mysuru Tq. of the study area. Whereas, 20 villages of Chikkaiahna chatra Hobli and Kasaba

Nanjangud Hobli are coming in the Nanjangud Tq. of the study area.

The study has addressed the morphological characteristics of water bodies, Unique Identification Code (UID) for all water bodies, hydrological profile, remote sensing and GIS application for the change detection analysis, hydrological modelling, identification of pollution sources, encroachments, physico-chemical analysis, biodiversity analysis, preparation of Catchment Action Plan (CAP), involvement of stakeholders, and preparation of Lake Atlas and finally formulation of conservation strategies with appropriate remedial actions.

During the study a total of 106 water bodies were inventorization (Kere, Katte, Kunte) in the study areas. Out of 106 water bodies it was found that only 69 water bodies existing. The remaining 37 water bodies were found to be extinct and under gone changes in their land use. The study of status of the 106 inventoried water bodies has revealed that 69 existing water bodies have the problems of encroachment, inflow of sewage and effluents, inflow of agriculture, dumping of solid and organic wastes, burning of garbage etc. These are the main causes for pollution of water bodies. In few cases the water bodies have dried up over a long period. Further, breaching of bunds due to expansion of roads, soil excavation and destruction of natural drains etc was observed. All these aspects are contributing to the deterioration of water availability and quality of the water bodies.

Similarly 37 extinct water bodies have undergone changes in their land use pattern (conversion of water bodies to other land use type) i.e. Lake beds either have been converted into play grounds, layouts, parks, schools, bus depot, government departments, agricultural land etc. In few cases tanks exists in the village maps but not traceable on ground.

Presently the study has been completed and approved by Research and Training Advisory Committee (RTAC) of EMPRI and Advisory Committee at Mysore. They have given some suggestions which will be incorporated in the

report and the report will be uploaded in the EMPRI website for comments.

#### **Inventorisation of Waterbodies in the Bengaluru Metropolitan Region:**

Under the financial assistance of the Lake Development Authority (LDA) the EMPRI has taken-up a project entitle as above. The key objective of this study is to identify all the waterbodies (kere, kunte and katte) coming under the Bengaluru Metropolitan Region and to inventory along with their status and prepare a comprehensive database. The study area i.e. Bengaluru Metropolitan Region has a total extent of 8005 km<sup>2</sup> consisting 2862 villages of Bengaluru Urban, Bengaluru Rural and Ramanagara districts.

The work entails the identification of existing and disused water bodies based on the village maps, toposheets and satellite imageries. With the information collected, Lake Health Report Cards are prepared for every lake includes the present situation of the disused water bodies. Water quality study for the existing water bodies will be analysed in the EMPRI water analysis laboratory after the establishment. A Water Analysis Laboratory is being setup at EMPRI to analyse water quality parameters.

The study has been completed in the Bengaluru North and Bengaluru East Taluks of Bengaluru Urban District. In Bengaluru North Taluk, there are 409 water bodies, which include the 115 disused/ non-existing (Land use has been converted) water bodies and further, within the 209 existing waterbodies about 109 water bodies have the possibility of encroachments. In Bengaluru East Taluk, there are 131 water bodies, which include the 77 disused/ non-existing water bodies and further, within the 54 existing water bodies about 14 water bodies have the possibility of encroachments. Presently the study is in progress in the BDA (Bengaluru Development Authority) area as per the objectives.

#### **6Centre For Geo-Informatics**

The application of geospatial technology in different sectors is the demand of current time to take intelligent decisions for sustainable management of natural as well as manmade resources. The growing

awareness and interest in making smart decisions has valued the application of GIS and put forward this technology. Integrated application of geospatial technology and IT strategies are growing rapidly. The application and benefits of GIS are innumerable. GIS technology is one of the solution to meet the huge demand by Government, educational organizations and business for various planning, management and allocation of resources through better understanding complex real world problems more easily by predict the near and far future as well. EMPRI is working on various natural resource conservation projects and programs and almost all projects have GIS components. Some of the completed projects are **“Assessment Derived Conservation Strategies for the Major Lakes of Karnataka- Bengaluru phase I”**, **“Water Safety Plan for Bengaluru- A Quality Based Approach to Water Supply Service Delivery”**, and **“Comprehensive Assessment of Thippagondanahalli Reservoir Catchment Area and its Preservation Zones”**. Currently the Centre is working on the projects **“Evolving Sustainable Conservation Strategies for Water-Bodies of Mysore – Nanjangud Local Planning Area’** and **‘Inventorization of Waterbodies in Bengaluru Metropolitan Region’**. EMPRI provides GIS based solutions to the users at all scales and at different strategic level.

#### **7Centre For Applied Research:**

##### **Mapping the network of procurement of select plant bio-resource:**

The objective of the project ‘Mapping the network of procurement of select plant bio-resource’ is to delve into the aspects of medicinal plants trading that occur for a select list of threatened plants in Karnataka. This intricate network from the source of collection up to the herbal company involves a number of suppliers/traders. The study involved compilation of data from the Form I of the herbal companies registered with Karnataka Biodiversity Board and analysis of the data obtained. Tracing the source of the threatened raw material is very important so as to enable the Karnataka Biodiversity Board to take necessary regulatory actions and conservation

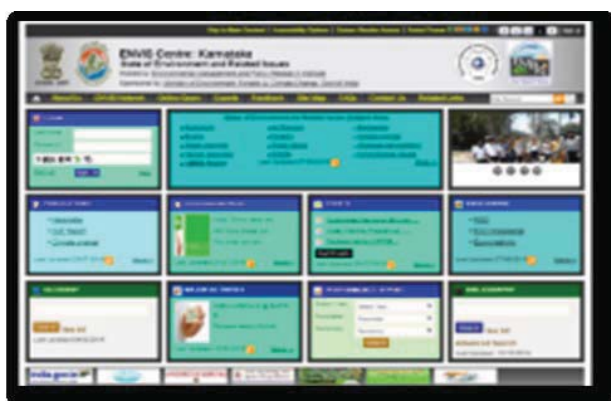
measures that are needed for that particular species. The project tries to locate the source of select list of threatened species and could be a primer for further studies into the economics of trade with respect to other important plant species. The report of this project has been completed and

### **Outreach activities: [Centre for Environment Education & Information]**

### **Environmental Information System (ENVIS) (GOI Funded):**

Ministry of Environment and Forests (MoEF) has notified EMPRI as the nodal agency for ENVIS in Karnataka and has the responsibility of running the ENVIS Centre from 01-01-2008.

### **Following are the components of Karnataka ENVIS Centre:**



#### **ENVIS website:**

#### **Indian State Level Basic Environmental Information Database (ISBEID):**

An environment related database on 17 modules are accessible using the following <http://www.isbeid.gov.in/>

No. of entries done: **14,189** (April 2015 to December 2015)

#### **ENVIS newsletter 'PARISARA'**

ENVIS centre has been publishing a quarterly newsletter 'PARISARA'. Centre has published issue 36 on Bamboos, 37 on man Animal Conflict, 38 on Butterflies of Karnataka (drafting) and issue 39 on Eco-tourism for the year 2015-2016. Available for download on [WWW.KARENVIS.NIC.IN](http://WWW.KARENVIS.NIC.IN)

submitted to Karnataka Bio-diversity Board. It has been presented at the Research and Training Advisory Committee (RTAC) meeting of EMPRI who have approved the same. It has also been presented at the Board meeting of Karnataka Bio-diversity Board.

All the information thus compiled is made available on the website of the ENVIS centre. EMPRI has developed an ENVIS website and hosted at [WWW.KARENVIS.NIC.IN](http://WWW.KARENVIS.NIC.IN)

#### **Bhuvan Portal**

The centre also creates and disseminates content relating to the themes assigned to ENVIS Centres in geo-spatial platform in Bhuvan portal.



#### **EMPRI Library:**

The library is a documented repository of information and it has a collection of over 2400 books. The library also receives more than 18 state/national journals and newsletters covering diverse areas of environment.

#### **Library resources**

- EMPRI Library has more than **170** CD-ROM databases ; 03 Newspapers (1 Kannada, 2 English) subscriptions
- Subscription to the "The Indian Forester" Journal (TIFJ) and archival CD-ROM database (from **1875**)
- EMPRI library has been using the **KOHA** open source software (OSS) for Library automation. The Library has automated 2400 books which includes reference books, text books, reports etc., It can be accessed through our Library OPAC <http://192.168.1.95>

**National Green Corps (NGC) (GoI Funded)::** National Green Corps (NGC) is a national school programme of Ministry of Environment and Forests (MoEF), Government of India (GoI), wherein it is envisaged to form a National Green Army by establishing Eco-Clubs in about 250 schools in each district, across the country. The objective of this programme is to create environment awareness and carry out action based programme for protection and improvement of environment. 8,500 eco-clubs have been formed in NGC schools across the state covering 34 educational districts.

**World Environment Day Celebration:** World Environment Day Was celebrated under the NGC programme on 4<sup>th</sup> June, 2015 with participation from Govt. High School Bagalakunte and Govt. High School Agrahara Dasarahalli of Bengaluru North Educational District and Govt. High School Chamarajapete of Bengaluru South Educational District. Walk for the Environment was conducted for the participating schools and EMPRI employees followed by a drawing competition. Prizes

were distributed for the drawing competition to encourage the children.

The centre along with ENVIS centre will be conducting activities for the Science Express Climate Action Special (SECAS) which will station at Karnataka in March, 2016.

#### **8.1.14. Coastal Regulation Zone Management:**

The coastal stretches up to 500 meters from the HTL (High Tide Line) towards the landward side all along the coast, area up to 12 nautical miles in the sea, river, creeks, bays, estuaries and backwaters up to a point till the tidal influence is felt and the land on either side of these tidally influenced water bodies up to a maximum of 100 meters is declared as "Coastal Regulation Zone" as per the MoEF Notification No. S.O. 19 (E) dated 6th January 2011 which was issued supersession of Notification No.S.O.114(E) dated 18.2.1991. The coastal stretches so declared as CRZ have been classified into 4 zones, viz., CRZ-I, CRZ-II, CRZ-III and CRZ-IV based on the ecological sensitivity and the land use pattern. Norms for regulation of activities in these zones and the institutional mechanism for enforcement of the provisions of this notification have also been built in.

#### **Coastal Karnataka – A Unique Feature**

*Karnataka is endowed with a coastline of around 320 kms with varied geomorphological features mainly in the form of long beaches intersected by lateritic rocky headlands, spits caused by coast parallel rivers, shallow lagoons, limited mud flats and not so wide estuaries supporting a few backwater canals. Fourteen rivers drain their water into the shore waters of Karnataka. The important estuaries include Netravati-Gurupur, Gangolli, Hangarakatta, Sharavathi, Aghanashini, Gangavali and Kalinadi. Formation of sand bars have been found in most of the estuaries. There are a number of barrier spits at Tannirbhavi, Sasihithlu, Udyavara, Hangarakatta, Kirimanjeshwara formed due to migration of coastal rivers. There are around 90 beaches with varying aesthetic potential. Among these the beaches at Someshwar-Ullal, Malpe, St. Meries Island, Belekeri and Karwar are excellent with potential for international tourism.*

*The Karnataka coast stretches across three districts of Dakshina Kannada (62 km of coastline), Udupi (98 km) and Uttara Kannada (160 km).*

*The settlements in the coastal region of Karnataka consists of 22 urban agglomeration and 1044 villages. The Occupational pressure of the region can be attributed to agricultural activities, aqua culture, fish landing and processing, port maintenancing, mining for lime shell, bauxite and silica sand and coir retting. The coast line noted with a major port at Mangalore and Nine minor ports at Karwar, Belekeri, Tadri, Honnavar, Bhatkal, Kundapur, Hangarkatta, Malpe and Old Mangalore. Besides, there are 110 fish landing centers and 150 fishing villages.*

Karnataka State Coastal Zone Management Authority has been constituted under the chairmanship of the Principal Secretary to Government, Department of Forest, Ecology and Environment for ensuring compliance to the provisions of CRZ Notification.

Karnataka State Coastal Zone Management Plan which was prepared in accordance with the provisions of CRZ Notification, 1991 is being revised in accordance with the provisions of CRZ Notification, 2011. Demarcation of High Tide Line (HTL), Low Tidal Line (LTL) and other regulatory lines have been demarcated by the National Hydrographic Office (NHO), Dehradun which is authorized by the Ministry of Environment and Forests, Government of India for this purpose. Draft CRZ maps on the cadastral scale have been prepared and were published for public comments/opinion. The comments/opinions/suggestions obtained are being incorporated in the draft maps. The maps are in the final stage of preparation. Preparation of Comprehensive Coastal Zone Management Plan for the coastal stretches is under way.

#### **8.1.15 State Environment Impact Assessment Authority (SEIAA) A Key to Ensure Sustainable Development**

The Ministry of Environment and Forests, Government of India in exercise of the powers conferred under section of the Environment (Protection) Act, 1986 read with rule 5 of the Environment (Protection) Rules 1986 have issued Notification No. S.O. 1533(E) dated 14th September 2006. Requirement of prior Environmental Clearance have been mandated for the activities that are listed in the Schedule to the notification. Detailed procedure and institutional mechanism has been provided in the Notification. The process of scrutinizing the projects seeking Environmental Clearance comprises of the following four steps.

**Screening:** The process of determining whether or not the project or activity requires further environmental studies for assessment of its impact on the environment and to arrive at the mitigative measures.

**Scoping:** The process by which the Expert Appraisal Committees determine detailed and comprehensive Terms of Reference (TOR) addressing all relevant environmental concerns for the preparation of Environment Impact Assessment (EIA).

**Public Consultation:** The process by which the concerns of local affected persons and others who have plausible stake in the environmental impacts of the proposed project are ascertained with a view to take into account all the material concerns in the project. Public consultation normally have two components comprising of (a) public hearing and (b) response from the concerned persons having plausible stake in the environmental aspects of project in writing. The opinion, suggestions and the concerns that emerge from the public consultation are to be incorporated in the Environment Impact Assessment Report and the same has to be appropriately addressed.

**Appraisal:** The process of detailed scrutiny of the projects along with relevant details by the expert Appraisal Committee and making categorical recommendations to the regulatory Authority concerned either for grant of Environmental Clearance on stipulated terms and conditions or rejection of the application together with reasons for the same.

The Regulatory authority concerned viz., the State Level Environment Impact Assessment Authority in the State level for 'B' category activities or the Ministry of Environment and Forests, Government of India at Central level for 'A' category activities takes appropriate decision either to grant or reject Environmental Clearance taking into account the recommendation made by the Expert Appraisal Committees.

The notification also provide for deemed clearance in order to ensure timely decision making by the concerned regulatory authority and to avoid possible hardship to the entrepreneurs in case of undue delay if any. The notification has built in sufficient provisions to ensure fair and transparent decision making process.



### **State Level Environment Impact Assessment Authority (SEIAA), Karnataka**

Pursuant to the EIA Notification, 2006, State Level Environment Impact Assessment Authority and the State Expert Appraisal Committee were constituted during June 2007 for a period of three years. The Authority and committees were then reconstituted on the recommendations of the State Government.

The SEIAA, Karnataka received 1356 number of applications between 1.4.2015 to 31.12.2015 Out of these applications 1531 applications have been disposed including the application received during the previous year.

The Authority has followed a transparent procedure and all their proceedings are posted in the website <http://seiaa.kar.nic.in>, <http://seiaakarnataka.gov.in>.

Detailed scrutiny of the proposals with respect to the use of natural resources and the possible impact on the environment is being done. The projects that are considered for issue of Environmental Clearance are imposed with strict conditions to ensure environment safety and sustainable development.

## **8.2 WATER RESOURCES:**

Irrigation is an important source of raising productivity in agricultural sector. Expansion of both the ground water and surface water resources has helped to increase the cultivated area under irrigation in the state over time. The net irrigated area has increased considerably

from 13.62 lakh hectares in 1980-81 to 26.43 lakh hectares in 2000-01 and to 35.56 lakh hectares in 2013-14 **Table 8.32**. Similarly, gross irrigated area which was 16.76 lakh hectares in 1980-81, has increased to 41.12 lakh hectares in 2013-14. The gross irrigated area as percentage of total cultivated area has doubled from 16% in 1980-81 to 33.5% in 2013-14.

**Table 8.32 - Trends in Irrigated Area in Karnataka (Area in lakh hectares)**

Year	Gross Cultivated Area	Gross Irrigated Area	Net Irrigated Area	Gross Irrigated Area as % of Gross Cultivated Area
1980-81	106.60	16.76	13.62	16
1990-91	117.59	25.98	21.13	22
2000-01	122.84	32.71	26.43	27
2001-02	116.70	30.89	26.83	26
2002-03	115.32	28.41	27.05	25
2003-04	114.50	27.02	28.38	24
2004-05	128.07	33.28	29.06	26
2005-06	130.27	36.32	29.70	28
2006-07	124.38	36.03	29.46	29
2007-08	128.93	37.89	31.32	29
2008-09	123.68	39.42	32.38	32
2009-10	128.73	40.96	33.91	32
2010-11	130.62	42.79	34.90	33
2011-12	120.59	41.37	34.40	34
2012-13	117.48	40.07	34.20	34
2013-14	122.67	41.12	35.56	32

Source: Directorate of Economics & Statistics, GOK

**Table 8.33** presents source-wise irrigation for the year 2013-14. Among all irrigation sources, tubewells/borewells accounted for the highest proportion of 37 per cent of the net irrigated area followed by canals (35%) and dugwells (12%). The share of tanks, which were historically a major source of irrigation, has accounted for about only 4% of the net irrigated area.

### 8.2.1. Irrigation Potentials Created through Major and Minor Irrigation Projects

The surface water (canal) irrigation projects are classified into major, medium and minor irrigation projects based on the cultivated command area generated by them. The irrigation potential (anticipated) has increased by 2.45% in 2015-16. The

cumulative irrigation potential under major and medium irrigation and minor irrigation projects is expected to reach 39.77 lakh hectares in 2015-16 (**Table 8.34**). **Appendix 8.1** highlights irrigation potential created since VII Five Year Plan.

### 8.2.2. Year wise allocation and Expenditure on Major & Medium Irrigation Projects:

Expenditure on major and medium irrigation projects was Rs. 9768.08 crores for plan and for projects pending approval in 2014-15. The amount of expenditure anticipated in 2015-16 is Rs. 11515.42 crores. Expenditure incurred upto December 2015 is 4202.07 crores (**Table 8.35**). **Appendix 8.2** highlights investment in irrigation projects since 1998-99

**Table 8.33- Source-wise Irrigation during 2013-14 (Area in lakh hectares)**

Source	Irrigated Area		% share to Net Irrigated Area
	Gross	Net	
Canals	14.69	12.53	35.24
Tanks	1.66	1.54	4.33
Wells	4.61	4.123	11.59
Tube/BoreWells	15.59	13.22	37.18
Lift Irrigation	1.05	0.93	2.61
Other Sources	3.52	3.22	9.052
Total	41.12	35.56	100.00

Source: Directorate of Economics & Statistics, Government of Karnataka

**Table 8.34: Irrigation Potential Created - Cumulative area in lakh Ha**

Source	2013-14	2014-15	2015-16 (Anticipated)
Major and Medium Irrigation	26.97	27.85	28.61
Minor Irrigation (Surface water)	10.89	10.97	11.16
Total	37.86	38.82	39.77

Source: Water Resource Department, GOK.

**Table 8.35: Year wise Allocation and Expenditure of Irrigation Sector (Rs. in crores)**

Year	Allocation	Expenditure
2009-10	3144.08	2787.62
2010-11	4640.17	3394.10
2011-12	6029.25	3930.68
2012-13	6044.27	5294.50
2013-14	8007.36	6527.75
2014-15	10000.90	9768.08
2015-16 *	11515.42	4202.07

Source: Water Resource Department, GOK. (\*Upto Dec-2015)

### 8.2.3 Krishna Bhagya Jala Nigam Projects:

The Upper Krishna Project stage I and II has been completed in 2012-13 and completion report has been submitted to Central Water Commission (CWC). In addition to above Nigam has been entrusted additional projects. The estimated cost of additional ongoing project works is Rs.8431.65 crores. The expenditure incurred is Rs 4035.67 crore. The potential created up to December 2015 is 57157 Ha. The command area and potential created up to December 2015 are given below in **Table 8.36**

### 8.2.4. Upper Krishna Project Stage - III

The Krishna Water Disputes Tribunal-II has passed an award in December, 2010 allocating 177 TMC of water to Karnataka State. Out of this, 130.90 TMC is the share of UKP Stage -III. It is proposed to provide irrigation for 5.30 lakh hectares of command area falling under Vijayapura, Bagalakote, Kalaburagi, Yadagiri, Rayachuru, Koppal

and Gadag districts of Northern Karnataka

### Other Schemes and Programmes

#### (a) Sonthi Lift Irrigation Scheme (LIS):

Sonthi LIS implemented in Gulbarga and Yadgir districts aims at providing irrigation water for 16,800 hectares on the left flank of river Bhima. The estimated cost of the project is Rs.673.90 crore. KBJNL has submitted a proposal to CWC, New Delhi for approval. The environmental clearance has been received from MOEF. The project has been approved by Central TAC and the same has been forwarded to Planning Commission for Investment Clearance and proposed to be taken under Accelerated Irrigation Benefit Programme for availing central Assistance.

#### (b) Improvement of Water Use Efficiency in NLBC command of UKP:

Government of India has launched National Water Mission with a major objective of improving water use efficiency.

**Table: 8.36 KBJNL Projects, (Rs. In Crores/Area in hac)**

Project Components	Revised Cost	Cum. expenditure up to December 2015	Command Area (in H.A)	Potential Created up to December 2015
NRBC DY 9A( Includes Wadavatti, Arkeru)	225.00	165.06	15250	4767
Ramthal Lift Irrigation Scheme-Including drip irrigation.	995.00	818.03	38728	24493
Sonthi Modified	673.90	270.32	16000	4674
Sonna LIS	9.78	9.78	1050	950
Rolli mannikeri LIS	22.00	20.89	2450	2350
Tegi Siddhapur LIS. (2010)	47.70	47.70	3000	3000
Thimmapur LIS (2006)	142.71	140.84	20100	16923
Nandawadagi LIS	1530.00	0.07	36100	0
Filling of tanks in Bijapur,Bagalkot (2009)	109.00	102.16		
Filling of additional tanks in Bijapur,Bagalkot	8.92	8.19		
Filling up of tank- Anachi LIS-	35.00	19.88		
Filling up of tank- Sankh LIS-	65.00	0.06		
Filling up of tank- Bhuyar LIS-	145.00	0.08		
Filling up of tank- Mamdapur,Sarwad,Bableshtar,Bhutnal,Begum talab & Tidagundi in Bijapur Dt.	197.00	33.34		
Manjra Barrages	281.45	274.80		
Budhihal-Peerapur LIS	192.00	0.04		
NLBC-ERM	3752.18	2124.43		
<b>Total</b>	<b>8431.64</b>	<b>4035.67</b>	<b>132678</b>	<b>57157</b>

Source: Water Resource Department:



Krishna Bhagya Jala Nigam Limited (KBJNL) has proposed a project for improving of water use efficiency in Narayanapur left bank canal command area under the UKP covering cultivated area of 4.09 lakh hectares of NLBC, SBC, MBC, IBC and JBC spread over Bijapur, Gulbarga and Yadgir districts. The project targets for achieving water use efficiency by 25% and the estimated project cost is Rs.3752.18 crore. It initiative will considerably benefit agricultural sector of the aforementioned three districts.

The Planning Commission has approved the project on 08-10-2013 and shall be completed by the financial year 2016-17 and plan accounts would be closed by 31st December 2016. Accordingly the works is in full swing and up to March 2015, an amount of Rs.2124.43 crores has been spent on works. The Government of India has sanctioned an amount of Rs.270.00 crores as Central Assistance under Accelerated

Irrigation Benefit Programme during the year 2014-15 and Rs.70.00 crores has been released.

### 8.2.5. Command Area Development

The Command Area Development (CAD) programme promotes on-farm development works like construction of field channels, land leveling/shaping and realignment of field boundaries, wherever necessary, adoption of Warabandi and construction of field drains etc. In 2015-16 the anticipated expenditure is Rs.502.01 crore, out of which Rs.116.52 crore was spent in 2015-16 upto November 2015. The central assistance for Command Area Development Authorities (CADAs) in 2015-16 is anticipated to be Rs.68.52 crore. In addition, KBJNL, Karnataka Neeravari Nigam Limited (KNNL) and Cauvery Neeravari Nigam Limited (CNNL) have been carrying out CADA works with an anticipated central assistance of Rs. 37.83 crores. The physical progress made by the CADAs is shown in **Table 8.37**.

**Table 8.37 - Area under Command Area Development Programme in Karnataka, (Area in 000'hectares)**

Items of work	2013-14	2014-15	2015-16 (Up to Nov-15)
Construction of field irrigation channels	56.627	442.97	312.65
Construction of field drains & leveling	134.676	585.24	242.47
Land Reclamation	5.363	8.467	1.050

Source: Water Resource Department, GOK.

### 8.2.6 Karnataka Neeravari Nigam Projects:

**Table 8.38 Details of potentially oriented projects coming under KNNL with present status are as follows**

Sl. No.	Projects	Ultimate Potential (in Ha)	Cumulative potential Created (in Ha)*	Status
1	Ghataprabha Stage-III	310823	308326	Dam works, Ghataprabha left bank, Right bank and Chikkodi branch canal works are completed, some lining works and FIC works are under progress.
2	Markandeya	14448	14383	Project is completed. FIC works are under progress.
3	Dudhganga	15167	4800	Nidhori branch canal is completed. Bidari branch canal is under progress. Dattawada Branch canal runs both in

**Table 8.38 Details of potentially oriented projects coming under KNNL with present status are as follows**

Sl. No.	Projects	Ultimate Potential (in Ha)	Cumulative potential Created (in Ha)*	Status
				Maharastrata and Karnataka. Since Maharastrata Government has not taken up works. Karnataka portion is to be tackled. Kurandawad branch canal works has to be taken up by the Maharastrata Government
4	Hippargi	74742	74428	Construction of Barrage works are completed. Lifts works are nearing completion. Construction of canal, distributary, laterals and minors are completed. FIC and R & R works are under progress.
5	Sri Rameshwar LIS	13800	13800	Lift works, canal and power supply to LIS works are completed. FIC works are under progress.
6	Sri Veerbhadeshwara LIS	17377	0	Tender called
7	Basaveshwara (Kempwad)	27474	0	DPR is under approval stage.
8	Tubachi and Babaleshwara LIS	42500	0	Headwork works are under progress.
9	Malaprabha	220028	213537	Dam works, Malaprabha left bank, Right bank works are completed, some lining works and FIC works are under progress.
10	Shiggaon LIS.	13500	9900	9900Ha sprinkler irrigation works are completed. Diversion weir works are under progress. Estimates are under preparation for remaining 3600 Ha drip irrigation works.
11	Savanur LIS	15500	0	Headwork works are under progress.
12	Upper Tunga Project	80494	70558	Dam works are completed. Canal and FIC works are under progress.
13	Vani vilas sagar reservoir	12135	12135	Project completed.
14	Bhadra reservoir (modernization)	105570	105570	Project completed. Modernization works are nearing completion.
15	Bennithora Project	20234	19978	Dam and canal works are completed. For modernization works fixing agency through tender is under finalization.
16	Bhima Lift	24292	21442	Barrage works are completed. Canal and FIC works are under progress.
17	Karanja	29227	23493	Except lift work all other works are nearing completion.
18	Singatalur	107380	25887	Barrage and Right bank canal works are completed. Left bank canal works are under progress. Irrigation through drip system is under consideration and estimates are under preparation.
19	Tungabhadra Project (Modernization)	362938	362938	Project is completed. Modernization works are under progress.
20	Vijayanagar canal	11222	11222	Project is completed. Action is being

**Table 8.38 Details of potentially oriented projects coming under KNNL with present status are as follows**

Sl. No.	Projects	Ultimate Potential (in Ha)	Cumulative potential Created (in Ha)*	Status
				taken to take up modernization works.
21	Varahi Project	15702	3765	Diversion weir works are completed. Canal and FIC works are under progress.
22	Upper Bhadra Stage	225515	0	Works are taken up in 3 packages and works are under progress.
23	Anjanapura (Modernization)	6736	6732	Project is completed. Modernization works are under progress.
24	Ambligol (Modernization)	3200	3200	Project is completed. Modernization works are under progress.
25	Dharma (Modernization)	7692	7692	Project is completed. Action is being taken to take up modernization works.
26	Gondi (Modernization)	4465	4465	Project is completed. Action is being taken to take up modernization works.
27	Tunga (Modernization)	8704	8704	Project is completed. Action is being taken to take up modernization works.
28	Hagaribommanahalli Project	2965	2965	Project completed
29	Upper Mullamari Project	3279	3279	Project completed
30	Kanakanala Project	2064	2064	Project completed
31	Maskinala Project	3001	3001	Project completed
32	Hattikuni Project	2145	2145	Project completed
33	Gayatri	2367	2305	Project completed
34	Chandranpalli Project	5223	5223	Project completed. Modernization works are under progress.
35	D.B.kere	4280	4280	Project completed
36	Jambadahalla	2429	2429	Project completed
37	Hebbe kere diversion to Madaga Tank	4270	4270	DPR is under scrutiny
38	Shantisagar kere	2891	2891	Project completed
39	Madaga-Masuru kere	2855	2855	Project completed
40	Chichadi LIS	2718	0	Headworks and initial 5Km canal works are under progress. Estimates are under preparation for the remaining canal network works.
41	Bellary Nala Project	8200	0	Works are under progress.
42	Venkateshwara LIS	7200	0	Tender called
43	Harinala	3480	3480	Project completed
44	Dandavathi	3642	0	Due to forest land acquisition problem works are not started.
45	Basapura LIS	2267	890	1st stage works are completed. 2nd stage works are under progress.
46	Guddada Mallapur LIS	5261	4101	Works are nearing completion.
47	Gandorinala	8094	7943	Dam and canal works are completed. FIC works are under progress.
48	Lower Mullamari Project	9713	9400	Works are nearing completion.
49	Amarja	8903	8798	Canal and FIC works are nearing completion.

**Table 8.38 Details of potentially oriented projects coming under KNNL with present status are as follows**

Sl. No.	Projects	Ultimate Potential (in Ha)	Cumulative potential Created (in Ha)*	Status
50	Chulkinala Project	4047	4047	Project completed.
51	Hirehalla	8206	8206	Project is nearing completion and R & R works are under progress.
52	Rajolibanda Project	2380	2380	Project completed.
53	Y Kaggal LIS	2689	0	Revised estimate for balance works are under scrutiny.
54	Alavandi-Betageri	2425	0	Under tendering process.
55	Olabellary LIS	2542	0	Tender called
56	Murgodu LIS	1939	0	DPR is under scrutiny.
57	Kinaye Project	1200	0	Dam works are under progress.
58	Itagi-Sasalwad LIS	1983	1983	Project completed
59	Sanyasi Koppa	1791	1350	Works are nearing completion
60	Thiluvalli LIS	1011	0	1st stage works are completed. 2nd stage works tender is under finalization.
61	Haihole	1170	1170	Project completed
62	Bhimasamudrakere	1235	1235	Project completed
63	Saudagar Project	1417	1417	Project completed
64	Narihalla Project	1417	1417	Project completed
	Total	1923564	1422479	

\*Note: upto December 2015 since inception

### Modernization Projects:

To increase the irrigation efficiency and to save water KNNL has taken up Modernization works under various Projects. Bhadra canal network, Tungabhadra Left Bank Canal and network, Anjanapur, Ambligol, Chandrapalli, Hattikuni projects Modernization works are under progress. thora, Gondi, Vijayanagar channel, Tunga anicut and Ghataprabha left canal Modernization works are programmed to be taken up and are in different stages of implementation.

### 8.2.7 Minor Irrigation (Surface Water)

Irrigation works with an atchcut up to 2000 hectares are classified as minor irrigation

works. They have the definite advantage of providing immediate benefits from the potential created. Minor irrigation works with an atchkat up to 40 hectares come under the control of Zilla Panchayats. In 2014-15 expenditure on minor irrigation works was Rs 1041.71 crores for construction of new tanks, anicuts, pickups, lift irrigation schemes and repairs & improvements of existing structures. This includes works under SCSP and TSP. Fresh irrigation facility in an atchkat of 29,562 hectares is created and irrigation facility has been stabilized in 13,421 hectares in 2013-14. The development of surface water irrigation from 2008-09 is given in **Table 8.40.**



**Table 8.39: Tank filling proposals are as follows**

Projects	No of tanks	Status
Yettinahole Project	527	Construction of 8 weirs under 5 packages on turnkey basis are under progress. Stage II works estimates are under progress.
Ubrani Amruthapura LIS	146	This project comprises of 2 stages and works under both stages completed & project commissioned.
Tunga Lift	32	The works are assigned on turnkey basis and works are under progress.
Davanagere 22 Tank (Rajannahalli LIS)	25	The works are entrusted on Turnkey basis and works are nearing completion. Estimates are under preparation for additional 3 tank fillings.
Kaginele tank filling project	22	Fixing agency through tender process is under finalization.
Filling up of 22 tanks from Hiranyakeshi River	22	Tender called
Filling up of 10 tanks of Huvina Hadagali Tank	10	Works are under progress.
Filling up of Kadapur tank from Krishna River	1	Works are nearing completion
Filling up of Shirgaon Basavanna tanks from Dudhganga	1	Works are nearing completion
Potentially oriented projects with tank filling component.		
Upper Bhadra Project	367	Works are taken up in 3 packages and works are under progress.
Shiggaon LIS	13	9900Ha sprinkler irrigation works are completed. Diversion weir works are under progress. Estimates are under preparation for remaining 3600 Ha drip irrigation works.
Savanur LIS	11	Headwork works are under progress.
Murgodu LIS	3	DPR is under scrutiny.
Total No of Tanks	1180	

**Table 8.40 - Development of Minor Irrigation from Surface Water**

Year	Expenditure (Rs. lakh)	PotentialCreated(hectares)
2008-09	39593.92	16,040
2009-10	59408.24	17299
2010-11	82384.52	15889
2011-12	110038.45	21720
2012-13	102710.48	32769
2013-14	98632.20	36108
2014-15	104170.82	29562
2015-16*	61077.31	19374

Source: Department of Minor Irrigation \* (UptoDec.2015)

Government has established Karnataka Jala Samvardhane Yojana Sangha (JSYS) within the framework of Registration of Societies Act, 1960 to develop and strengthen minor irrigation tanks with community participation. It will promote capacity building, provide strategic resources and logistic support for training and orientation, promote and undertake efforts for integrated, multi-dimensional interventions in related sector and ensure timely and adequate flow of funds from all possible sources, including World Bank. This programme was continued with the state funds as the period of World Bank funding ended in February, 2012.

### **8.2.8 Karnataka Integrated and Sustainable Water Resources Management Investment Program (KISWRMIP):-**

Asian Development Bank (ADB) has come forward with a Multi-tranche Financing Facility (MFF) for Karnataka Integrated and Sustainable Water Resources Management Investment Program (KISWRMIP) estimated to cost \$ 225 Million. The ADB loan component share is \$ 150 Million & State share is \$75 Million. Project 1, estimated at \$48 million, is expected to be completed by September 2018. Project 1 financing comprises \$31 million from ADB's ordinary capital resources, \$16.6 million from the Government of Karnataka (GOK), and \$400,000 of beneficiary contribution. The loan signing for Project-1 was held on 7th May 2015 was declared effective on 13th July 2015 and loan closing is scheduled for 31 March 2019. The program comprises of the following;

1. Strengthening of basin institutions for IWRM,
2. Modernization of Irrigation system infrastructure and management
3. Operationalization of program management system

As a first step in the implementation of ADB assisted program, the Government vide letter dated 19-04-2013 have issued a GO, constituting Managing Director, KNNL as Project Director for the implementation of Gondhi modernization and for the

implementation of all the related activities of ADB's investments into the project. Further, the Govt of Karnataka vide GO No WRD:50:MBI:2012, Bengaluru, dated:09.10.2013 has accorded approval for Implementation of KARNATAKA INTEGRATED AND SUSTAINABLE WATER RESOURCES MANAGEMENT INVESTMENT PROGRAM (KISWRMIP) with the Loan assistance of Asian Development Bank (ADB).

As part of implementation process of the IWRM under tranche-1, following activities are initiated. The contract for Project Support Consultant (PSC) Services was signed on 20th November 2015.

1. For Gondhi modernization work, tender process is initiated and financial bid is cleared in the 18th Tender Scrutiny Committee of KNNL. Approval of KNNL Board is in process.
2. For installing flow measurement devices in 6 projects in K-8 sub-basin (Gondhi, Bhadra, Upper Tunga Project, Singtalur LIS, Vijayanagara Channels and Tungabhadra Project) The tenders were invited for the above said work through International Competitive Bidding (ICB) in accordance with ADB's Single-Stage Two Envelope bidding procedure. The contract is awarded and contract is signed on 23rd November 2015.
3. For taking up CADA activities in Gondhi command area, topographic survey is taken up and completed.

### **8.2.9 Cauvery Neeravari Nigama Projects:**

The Cauvery Neeravari Nigama Limited (CNNL) is established by the Government of Karnataka in 03.06.2003 under Companies Act 1956 as a special purpose vehicle to accelerate the implementation of Cauvery Basin Projects in Karnataka. The Cauvery basin in Karnataka is 34,273 Sq.Kms which constitutes about 17.99% of the geographical area of 1,91,791 Sq.Km in Karnataka. Major Rivers flowing in this basin are Harangi (50 KM), Hemavathy (245 KM), Lakshmanatheertha (131 KM), Kabini (230 KM), Shimsha (221 KM), Suvarnavathi (88 KM), Arkavathy (161 KM) and the main river

Cauvery (381 KM). The Cauvery Basin is spread in 11 districts.

Main Objective of the CNL are: to complete the works of the ongoing Irrigation projects including Lift Irrigation works, and such works of Minor Irrigation and CADA (Command Area Development Authority). Also to maintain, operate, improve or modernize the irrigation projects including Lift Irrigation works and such works of Minor Irrigation and CADA in the Cauvery Basin entrusted to it by the Government of Karnataka.

#### 1. Allocation and Expenditure:

Total grant of Rs 1831.21 Crores has been allocated by the Govt for the year 2015-16. The overall expenditure for all the projects coming under CNL upto end of December 2015 is 457.43 Crores. It is programmed to create a physical potential of 3347 Ha in the

current year. The details programme and expenditure under different heads of account is given in Table 8.40(a)

#### 2. Physical and Financial Progress of On-going Major and Medium Projects:

There are totally 29 potential oriented schemes taken up under the jurisdiction of Cauvery Neeravari Nigam Ltd, Out of which 5 are Major schemes, 17 Medium irrigation schemes and 7 allied schemes. Most of the works are physically completed and the two major Potential oriented works which are in progress are Hemavathy project and Yagachi project, the lift irrigation schemes which are in progress are Kyathanahalli lift irrigation schemes, Kachenahalli Lift irrigation schemes and Malalur lift irrigation schemes.

Three zones viz., Irrigation (S) zone, Mysuru, Hemavathy Canal Zone, Tumkur and Hemavathy Project Zone, Gorur are coming under the jurisdiction of CNL

**Table 8.40(a) :Details of programme and expenditure under different heads of account,(Rs in Crores)**

Head of Account	Programme for year 2015-16	Expenditure upto Dec.2015
Potential oriented works	143.80	70.20
Modernisation of anecut canals	98.50	141.05
Drinking water schemes	99.00	9.23
Improvements to canal system	179.50	23.91
SCP	198.62	22.03
TSP	76.16	14.23
SDP	25.00	34.95

**Table 8.41: The Total Achkat created with overall expenditure of the projects, (Rs in Crores, Potential in Ha)**

Name of Zone	Name of the Project	Status	Programme for completion of project	Cumulative Expenditure upto December 2015	Cumulative Potential created upto Dec. 2015
Irrigation (S) zone, Mysuru	D.D. Urs Canal	Physically Completed		553.51	31741
	Kabini Project	physically completed		958.16	44222
	Harangi Project	Physically completed		713.18	53520
	Taraka Project	Physically completed		95.95	7040
	Arkavathy	Physically completed		204.56	6226

Name of Zone	Name of the Project	Status	Programme for completion of project	Cumulative Expenditure upto December 2015	Cumulative Potential created upto Dec. 2015
	Uduthorehalla Project	Physically Completed		233.88	6213
	Iggalur Project	Physically Completed		90.63	4196
	Manchanabele Project	Physically completed		97.56	2432
	K.R.S. Modernization	Physically completed		483.77	2125
	Nanjapura LIS	Physically Completed		76.72	4049
	Bannahalihundi LIS	Physically completed		22.45	1774
Hemavathy Canal Zone, Tumkur	Hemavathy Canal Project	On-going	2015-16	1682.03	123859
Hemavathy Project Zone, Gorur	Hemavathy Project	On-going	2015-16	1930.99	126149
	Yagachi Project	On-going	2015-16	482.88	12647
	Huchanakoppalu LIS	Nearing Completion		58.07	3360
	Kamasamudra LIS	Physically Completed		66.30	3682
	Kachenahally LIS	On-going	2015-16	77.42	3074
	Votehole Project	Physically Completed		66.41	7487
	Malalur LIS	On-going	2015-16	2.60	485

### 3. The details of on-going projects are as below:

**Hemavathy Project:** The project envisages construction of a composite dam across Hemavathy River near Gorur village in Hassan taluk of Hassan District. The planned utilization from this project is 56.67 TMC. The ultimate potential to be created under this project is 283592 Ha under flow and lift component. The taluks benefitted by the project Hassan, Alur, Arkalagud, Holenarsipura, Channarayapatna of Hassan District; Mandya, K.R.Pet, Pandavapura, Nagamangala of Mandya District; K.R.Nagara of Mysore District and Somwarapete of Kodagu District; Turevekere, Tumkur & Tiptur, Gubbi and Kunigal taluk. Dam and allied works are completed, canal lining works in progress. Potential created upto March 2015 is 250008 Ha. Potential of 1008 Ha is programmed for the year 2015-16.

**Yagachi Project:** The project envisages the construction of a composite dam across Yagachi River a tributary of Hemavathy near

Chikkabyadagere village in Belur Taluk of Hassan District. The planned utilisation from this project is 5.74 TMC to create an ultimate potential 17274 ha including Kyathanahalli LIS. The taluk benefitted by this project are Hassan, Belur and Alur of Hassan District.

**Kyathanahalli LIS** - Ist stage works are physically completed and 2nd Stage tender under process. Tenders of Kamasamudra branch canal are under process. The irrigation potential created under this project since inception to the end of March-2015 is 12647 Ha. Potential of 2101 Ha is programmed for the year 2015-16.

**Kachenahalli LIS:** The project envisages to lift 0.73 TMC of water in III stages from Hemavathy River near Kachenahalli Village in Channarayapatna taluk of Hassan District. Administrative approval accorded with a condition to complete I & II stage LI Schemes on priority and to take up III stage LIS depending on the availability of water.

The ultimate potential to be created is 5100 ha. which comprises of 563 ha from I stage, 2675 ha from II stage and 1862 ha. from III stage respectively. The taluks benefited by this project are Holenarasipura, Hassan, Arasikere and Channarayapatna taluk of Hassan District. In stage I work completed and potential of 563 Ha created. In stage II, Rising main and Electro-mechanical works are in progress. Earth work excavation for Dandiganahalli and Bijamaranahalli branch canals are completed.

The total irrigation potential created to the end of March 2015 since inception is 3074 ha from 1st stage and 2nd stage as against the total contemplated potential 5100 Ha. The potential target for the year 2015-16 is 238 Ha. The project is proposed for completion during 2015-16.

**Malalur LIS:** This project envisages to lift water in 2 stages from Birinji halla of Chikkamagalur Taluk to irrigate 485 Ha atchkat. First Stage :- Intake canal, jack well, rising main & ridge cistern works are completed. Sub-station works are under progress. Open canal runs for a length of 8.20 Km, out of which 6.50 Km length is completed.

Second stage :- Intake canal, jack well & ridge cistern works are completed. Rising main, pumping machinery & pump house works are under progress. 4.03 Km length of canal is completed. Tender for aquaduct work is approved, work order is yet to be issued. Electrical works :- Tender for power supply is approved. These works will be completed during 2015-16. The total irrigation potential created to the end of March 2015 since inception is 485 ha. The project is proposed for completion during 2015-16.

**Modernisation of Anecut canals:** Apart from these, it is proposed to take up Improvements of Canal system and Drinking water schemes and Modernisation of Anecuts canals, which are constructed way back in centuries. Totally modernisation of 22 anecut channels are taken up under CNL with the total estimated cost of Rs 1557.10 Crores. Out of which 8 works are completed, 10 works are on-going; one work under tender process and tender of one work is approved. The remaining two anecuts's DPR is under preparation. The cumulative expenditure incurred up to end of Dec. 2015 is Rs.1015.28 Crores.

**Table 8.42 Modernisation of Anecut canals:**

Sl. No	Anecut canal	Length proposed for modernization (in Km)	Estimated cost (in Cr)	Contract Value (in Cr)
I	COMPLETED WORKS			
1	Sreeramadavara	167	288.39	276.29
2	Mandagere	81	110.01	160.75
3	Hemagiri	36	30.99	44.00
4	Shimsha Left Bank Canal	37	6.86	9.69
5	Kattepura (Krishnaraja)	117	88.50	121.39
6	Madhavamanthri	29	19.00	20.39
7	CDS Extension	26	17.00	19.39
8	D.J Anecut	11	2.95	3.15
	Sub Total - I	503	563.70	655.05
II	ONGOING WORKS			
1	Chamaraja	102	132.00	163.30
2	Mirle & Ramasamudra	68	64.00	81.52
3	Rajapameshwari	38	26.50	29.99
4	Devaraya	36	21.00	23.73
5	Kudlur	22	4.30	4.16
6	Keetur	14	2.10	1.76

Sl. No	Anecut canal	Length proposed for modernization (in Km)	Estimated cost (in Cr)	Contract Value (in Cr)
7	Virija	70	83.00	105.68
8	Ramaswamy	87	80.00	89.74
9	Rampura	55	43.50	52.14
10	Halasur	72	35.00	35.75
	Sub Total - II	562	491.40	587.77
III	TENDER UNDER PROCESS			
1	Chikkadevarayasagara	104	240.00	
	Sub Total - III	104	240.00	
IV	TENDER APPROVED			
1	Hullahalli	72	99.00	
	Sub Total - IV	72	99.00	
V	DPR UNDER PREPARATION			
1	Hanagodu series	310	148.00	
2	Bangaradoddi	8	15.00	
	Sub Total - V	318	163.00	
	Grand Total	1559	1557.10	1242.82

#### Improvements of Canal system:

- Improvements to canals under reservoirs has also been taken up to improve the system efficiency. 25 Nos. of modernization work at a cost of Rs.2636.25 Cr has been taken up in CNNL. Out of which 3 works are completed, 7 No of Modernisation works namely Kabini Left bank canal 0-25.25 km, Harangi Right bank canal lining ch:0-25 km, Harangi Left bank canal ch 14.74-27 km, Harangi Left bank canal Dys 0-18, Improvements to canal network in VC system under KRS project-phase I, Taraka LBC: 10-30 km, D-42 of KRBC (Santemarahalli & Honnur Dys) are under progress.
- Tender is under process for the Taraka right bank canal ch: 0-10 km.
- DPR has been administratively approved and action has been taken to invite tender for 2 works namely Nugu High level canal ch: 0-87.51 km & Taraka Left bank canal from ch: 30-50 km.
- DPR yet to be administratively approved by the Govt for Harangi Right bank canal from ch: 25-138 km, Taraka right bank canal from ch: 10-36 km, & Marehalli canal & Shimsa right bank canal ch:0-20.24 km.
- DPR is under preparation for the following 9 works namely Modernisation

of Sahukar Chennaiah canal, HRBC, HRBHLC under Hemavathy project, Improvements to canal network in VC system under KRS project-Phase II, Providing lining to Dy-45, 46 & 55 under Kabini Right bank canal, Harangi Left bank canal from ch: 27-90 km, Kanva Canals, RBLL canals under KRS project, Suvarnavathy Left & right bank canal, & Markonahalli left & right bank canal & Chikkahole Left and right bank canal.

- Re-modelling of Hemavathy Left Bank Canal 0-72 km, tender approved.

#### Vishweshwaraiah canal network improvements.

It is proposed to take up the improvements to Vishweshwaraiah canal networks for an approximate length of 1000.80 Km. Out of this, a length of 452.00 Km is identified on priority to take up the improvement works. These improvement works are taken up in 5 packages comprising of 11 estimates. All the works of these 5 packages are in progress. The cumulative expenditure of all these 5 packages is Rs 223.48 Crores. The work is proposed for completion during 2015-16. DPR is under preparation for the work of Improvements to canal network in VC system under KRS project-Phase II.

#### Drinking water supply schemes:

To alleviate the severe drinking water problems of the drought prone areas, 30

Drinking water schemes under the jurisdiction of CNNL has been taken up. It is proposed to fill 530 tanks to benefit 1281 villages coming under Mysore, Tumkur, Hassan, Ramanagara, Chamarajanagara & Mandya district. The total requirement of water is 6.723 TMC. Out of 30 schemes, 4 schemes namely Doddaguni, Gulur Hebbur, Honnavalli, Kergodi Rangapura are completed & 2 schemes namely Alambur & Kanva DWS are physically completed & commissioned. 16 schemes namely Vajranakatte, Bellavi, Chikkanayakanahalli, Halebeedu-Madehalli, Nugehalli, Shivasandra, Elechakanahalli, Chikkanandi, Kanathur, Dabbehatta, Hagalavadi, Chelur, Kodyala, Mattikere, Alilughatta & Bikkegudda are under progress. The remaining 6 schemes namely Gandhigrama, Neralekere tank, Sriranga, Arkalagudu, Hiresave shraavanabelagola and Sathanur Kailancha Drinking water scheme are under tender process. 3 new schemes also proposed namely Suttur DWS & Jayapura Lift schemes, whose DPR's are under preparation, DPR of Kodavathi Lift Scheme is yet to be prepared. The total estimated cost of the Drinking water schemes taken up (30 no's) is 1647.89 Crores. The total expenditure incurred upto Dec. 2015 is Rs.628.14 Crores.

#### **Rejuvenation of Arkavathy river:**

Arkavathy River is a part of Cauvery river. This river originates in Nandi Hills and after traversing a distance of around 190 Km join river Cauvery at confluence point in Kanakapura Taluk. Hesaraghatta reservoir and after joining of Kumudwathi river, Tippagondanahalli reservoir have been constructed to provide drinking water supply to Bengaluru city, it is proposed to take up rejuvenation works in Hesaraghatta, Kumudwathi and Arkavathi catchment areas from the originating point of Arkavathy river to Tippagondanahalli reservoir. The works of this project are in progress, the total expenditure incurred upto Dec. 2015 is 18.93 Crores and proposed for completion during 2015-16.

#### **Status of Mokedatu project called under Global expression of Interest:**

- Global Expression of Interest for qualifying the consultant for the Preparation of DPR with respect to Mokedatu Project was invited on 25.10.2014.
- In response to the notification, 5 consultants responded, out of which, only 3 bidders were pre-qualified and RFP document was issued on 09.07.2015
- Out of the 3 pre-qualified bidders, only one bidder namely WAPCOS Ltd. And DHI (India), Water & Environmental Pvt. Ltd. has submitted the bids.
- The technical bid was opened on 06.08.2015 and the same has been evaluated.
- The above consultant has made a presentation with regard to the approach and methodology before the Expert Committee chaired by Prof. Subramanya, IIT, Kanpur (constituted vide Nigam order dated 20.08.2015) on 09.09.2015.
- Due to high rates quoted by the single tenderer M/s WAPCO's Ltd, the Tender scrutiny committee has opined to reject the tender. The same has to be placed before the Board for further decision.

#### **8.2.10. The National Hydrology Project:**

The National Hydrology project was taken up with World Bank assistance in 1996-97. It envisages setting up of a reliable and well-designed network for the collection of hydrological and meteorological data for surface and ground water. The project estimate was revised to Rs. 34.86 crores and it was closed in December, 2003. The Hydrology Project Phase- II has allocated a provision of Rs.23.53 crore for the above purpose. This has been divided into two components viz., (i) surface water component with Rs. 9.09 crore and (ii) ground water component with Rs.14.44 crore.

Hydrology Project - II is a follow up action project of World Bank Aided Hydrology Project-I, wherein infrastructure for collection of data was established. The data so collected is now proposed for utilization in the new Hydrology project- II. The main components are:

1. Institutional strengthening, which includes consolidation of hydrology project-I activities, awareness creation, dissemination and knowledge sharing

and implementation support.

2. Vertical extension, which includes development of hydrological design aids, development of decision support system and implementation purpose driven studies.

The cumulative progress achieved from inception to November 2015 is Rs.1025.00 lakh.

#### **8.2.11. Accelerated Irrigation Benefit Programme (AIBP) & Prime Minister's Special Package:**

Under AIBP, 15 projects are being implemented by using Central Assistance in Karnataka. **Tables 8.43** present the progress achieved under the AIBP programme. For the current year, 15 major and medium irrigation projects under AIBP have been proposed for central assistance. The cumulative expenditure incurred under AIBP projects till December - 2015 is Rs. 11828.19 crore and the anticipated expenditure during

2015-16 is Rs.12161.03 crore.

#### **8.2.12. Special Development Programme(SDP) & Hyderabad Karnataka Region Development Programme(HKRDP):**

State Government is committed to eradicate regional imbalance by implementing the recommendations of Dr. Nanjundappa Committee Report. For the completion of on-going major and medium irrigation projects in backward, more backward and most backward areas, budget allocation to Water Resources Department under Special Development Plan (SDP) & HKRDP in 2014-15 was proposed to Rs.379.50 crores. Financial progress of Rs. 1060.50 crores has been achieved.

The budget allocation to Water Resource Department for 2015-16 under Special Development Plan is Rs. 245.00 crore, out of which Rs.119.22 crore has been spent upto December 2015.

**Table 8.43 - Accelerated Irrigation Benefit Programme (AIBP) & Prime Minister's Special Package, (Rs. in crores)**

Name of Project	CA received (Cumulative)	Remarks
UKP Stage-I Phase-III	1380.67	Completed
UKP Stage-II	1655.73	Completed
Ghataprabha	544.82	Completed
Malaprabha	502.38	Completed
Karanja	189.03	Foreshore LIS & R&R works is nearing completion
Guddada mallapura	79.35	Nearing Completion
Bhima LIS	297.87	Under Progress.
Varahi	99.64	Under Progress.
Maskinala	3.22	Completed.
Hirehalla	64.24	Completed.
Gandorinala	116.94	Completed.
Hipparagi	734.96	Under Progress
Votehole	0.29	Completed
Modernisation of Bhadra	196.45	Nearing Completion
Dudhaganga	7.50	Nearing Completion
ERM of Bheema samudra Tank	3.48	Under Progress
Total	5876.57	

Source: Water Resource Department, GOK.



### 8.2.13 New Initiatives, Challenges & Outcome:

- i) Modernization of irrigation infrastructure on three irrigation sub projects within the selected K-8 sub-basin (Gondi subproject under Project-1, Vijaynagara and Tungabhadra left bank canal under Project-2);
- ii) Strengthening asset management and main system operation and maintenance (O&M); and
- iii) Capacity building of 120 inclusive water user cooperative societies (WUCS) with women representation for improved operation, maintenance and water management within the command area of selected irrigation sub projects and an additional 3000 WUCS state-wide.

### 8.2.14 The indicators for the output by 2020 are-

- (i) 300 km of irrigation canal will be modernized
- (ii) Rolling main-system asset management plans implemented annually starting 12 months after project financed modernization works are finished in 3 selected irrigation systems
- (iii) At least 90% of Water Users's Co-operative Society (WUCS) confirm receipt of agreed water service
- (iv) More than 75% of WUCS are operating and maintaining handed-over irrigation systems, including fee collection and accounting,
- (v) At least 30% of WUCS management boards are women.

### Activities to be undertaken will include

- (i) The installation of telemetry equipment for hydrological measurements within the sub-basin
- (ii) Preparation of feasibility studies for the identified irrigation sub projects
- (iii) Implementation of civil works for canal modernization
- (iv) Capacity building for KNNL, CADA and WUCS in improved system management.

### 8.2.15 Challenges (KBJNL)

- The height of Almatti Dam has to be raised from FRL 519.60 mtr to FRL 524.256 mtr.
- During the implementation of Upper Krishna Project Stage – III it is estimated that 20 villages and part of Bagalkot town will be getting submerged. Accordingly, 90,640 acres of land will be submerged in the back waters and about 37,000 acres of land is required for providing Rehabilitation and Infrastructure. Around 86,538 project displaced families both in urban and rural areas are to be shifted and resettled.
- As per present Land acquisition and Rehabilitation and Resettlement Act it is estimated that Rs. 4389.92 Crores is required. As per the right to fair compensation and transparency in LAQ and R&R Act 2013 it is estimated that Rs.10,901.38 crores is required for Land acquisition and Rehabilitation and Resettlement.
- Mobilization of funds for completing all ongoing and fresh works within the time frame of five years will require huge funds. Mobilizing funds for the schemes is a challenge

### 8.2.16 Outcome (KBJNL):

- Under Upper Krishna Project Stage – III, it is proposed to provide irrigation facilities to 5.30 lakh hectares of land in drought prone areas of Bijapur, Bagalkot, Gulbarga, Raichur, Koppal, Gadag & Yadgir districts by taking up 9 irrigation schemes.
- As per article 371(J) following are the districts benefited from the Upper Krishna Project Stage – III Gulbarga, Yadgir, Raichur and Koppal districts.
- Government has accorded administrative approval for implementation of Micro-Irrigation System as a Pilot project under 2<sup>nd</sup> Stage of Ramthal (Marol) LIS which increases irrigation.

## 8.3 Mining Sector

### 8.3.1. Karnataka's Mineral Resources

Karnataka State is abundant in mineral resources which covers an area of 1.92 lakh sq.km. The state is having valuable minerals

deposit such as iron ore and manganese in Bellary, Chitradurga, Tumkur, Uttara Kannada and Chikmagalur districts. Besides these ores, chromium (chromite) deposits in Hassan and Mysore districts, Aluminum (Bauxite) reserves in Belgaum, copper (malachite) reserves in Hassan, Chitradurga and Raichur are also found. State is rich in industrial minerals such as kyanite, soapstone, corundum and a wide variety of ornamental stones such as granite, gneisses, pink porphyries and felsites deposits. Karnataka has more than 40,000 sq. kms. of green stone belt which are a treasure trove of several mineral deposits and also indicates the occurrence of polymetallic deposits, diamond and gold.

In the State, the Department of Mines and Geology, is responsible for the effective and efficient administration of these mineral resources which are raw materials for various industries. Locating mineral deposits, which are not readily open on the surface is the thrust area of exploration. To achieve this, department has granted more number of reconnaissance permits and prospecting license to National and International exploration companies for taking up exploration activities.

### 8.3.2. Mining and Mineral industries

During 2015-16, upto December 2015 the Department of Mines and Geology has granted 1 mining lease for limestone over an extent of 519 hectares where as in the previous year the department has executed total 6 mining lease over an extent of

1000.73 hectares (03 mining leases for limestone over an extent of 983.03 hectares, 01 mining lease for limestone & dolomite over an extent of 4.85 hectares 01 mining lease for limeshell over an extent of 8.31 hectares & 01 mining lease is sanctioned for laterite over an extent of 4.54 hectares) and renewed 03 mining lease for Iron ore over an extent of 2159.89 hectares.

During 2015-16 upto December 2015, 16 quarry leases for ornamental stones and 166 leases for building stone have been sanctioned where as in 2014-15, 30 leases for ornamental stone were sanctioned and in 2013-14 a total of 13 Quarry leases for ornamental stone have been granted.

The Department of Mines and Geology has realized revenues of Rs.1318.93 crores as against the target of Rs.1474.74 crores upto December 2015 and as against the annual target of 2048.26 crores for the year 2015-16. Details of royalty collections from 2013-14 to 2015-16 are provided in **Table -8.44**.

### 8.3.3. Policy initiatives

#### Karnataka State Mineral Policy 2008

The Mines and Minerals (Development and Regulation) Act, 1957 (MMDR Act), lays down the legal frame-work for the regulation of mines and development of all minerals other than petroleum and natural gas. These two set of rules were framed under the act to deal with major minerals (state governments are free to deal with mineral concessions related to minor minerals).

**Table 8.44: Details of Royalty Collections (Rs. in crore)**

Year	Target	Achievement	Major Mineral (Ore and other industrial minerals)	Minor Mineral (Building Stone +Ornamental Stone + Sand)
2013-14	1411.91	1366.99	743.04	623.95
2014-15	1750.00	1794.61	925.94	868.67
2015-16*	2048.26	1318.93	625.12	693.81**

Source: DCB Section, Mining and Geology Department

\*(upto Dec 2015), \*\*(as per MPR)

- The Mineral Concession Rules, 1960 (MCR) deals with regulating grant of reconnaissance permits (RP), prospecting licenses (PL) and mining leases (ML) in respect of all minerals other than atomic minerals and minor minerals.
- The Mineral Conservation and Development Rules, 1988 (MCDR) deals with conservation and systematic development of all minerals except coal, atomic minerals and minor minerals.
- The Draft Mines and Minerals (Development and Regulation) Bill, 2011 has been approved by Cabinet on 30th September 2011.
- FDI is permitted cent percent for the automatic route to explore and exploit all non-fuel and non-atomic minerals in India.
- FDI is permitted cent percent for the automatic route to process all metals as well as for metallurgy.
- Optimization of state's geological potential by scientific and detailed prospecting.
- Providing transparency in granting mining concessions.
- Notification of mineral based area to avoid clash of interest between mineral exploitation and other development activities.
- Promote indigenous utilization of minerals.
- Evaluate the mineral resources including the coastal and sea belt.
- Review mining areas granted to public/private companies to adhere to mining plan discourage unproductive holding.
- The formation of New Karnataka State Mineral Policy 2014 is under progress at the Government level.
- Government of India executed the Mines and Minerals (Development and Regulation) Act with effect from 12.05.2015 on 27.03.2015.

In order to implement the developmental and environment restoration works in mines affected areas of Iron ore in Chitradurga, Bellary and Tumkur districts a new body, Karnataka Mining Environment Restoration

Company (KMERC) has come into existence on 21-06-2014 under the Chairmanship of Smt. Latha Krishna Rao, Additional Chief Secretary, GOK.

### **Karnataka State Sand Policy 2011**

State government has formulated Karnataka Minor Mineral Concession rules 1994 (KMMCR 1994) and as per the order of the Supreme Court of India and model guidelines of Government of India, amendments were made to KMMCR 1994.

On December 9, 2014 a notification was issued and new rules had been framed regarding this policy. Deputy commissioners and tahsildars were given more powers to check unauthorised extraction and sale of sand as per the new rules. The Public Works Department has been given powers to extract sand from riverbeds, to stock and sell through tender.

The policy envisaged setting up sand monitoring committees at district and taluk levels to monitor illegal sand mining which is rampant in parts of the state.

The district-level committees have been given powers for fixing retail prices of sand & taluk committee will identify the sand mining blocks and mining allowed in the blocks through tenders by Public Works Department.

In the proposed Karnataka Minor Mineral concession rules the special attention is being given the following.

- The identification of sand blocks is being the responsibilities of taluk committee.
- The each 33 sand blocks so identified by the taluk committee are marked as one unit. Out of which 1, 7, 14, 21 & 27 blocks are reserved for scheduled caste, second block reserved for scheduled tribe by lottery system and these reserved blocks are disposed through tender cum auction [(Rule 31-T)]
- The method of disposal of confiscated sand deposits is being narrated under rule (31-U of Sub rule (3))
- 25% of the collected royalty released to the concerned Grama Panchayaths through a appropriate budget provision.

- The power are delegated to all Zilla and taluk committee members and to the officers of the lower cadre of respective department members and provisions were made to book complaints against the illegal sand mining activities and to take legal action [Rule 31 (R)12]
- The minimum extent to be fixed for grant of permission to all minor mineral quarrying and incorporated new scheduled II-A.
- The utilization of corpus fund amount by District Sand Monitoring Committee for expenditure purpose during the control of the illegal sand mining activity in the state.

#### **WORKING PATTERN**

- Public Works Department in the District shall deal with the sand extraction; transportation, storage and disposal through mineral dispatch permit at the rates specified by the District Committee from time to time and apportion the proceeds in accordance with sub-rule(7). [Rule 31-R of sub rule [3]].
- Use of JCB/Dredger and Mechanized boats in sand Quarrying is prohibited throughout the state.
- Provided that the loading equipments like dumpers, tractor mounted loaders may be used on the river banks, only for loading without destabilizing the river banks.”
- Sand mining permission shall be for a period of two years, which is inclusive of Non-mining periods like rainy season, flood or any natural calamities for which no extension is allowed.
- The District Committees and Taluk Committees shall regulate, monitor and take legal action against any contravention of these rules. All the members of the District and Taluk Committee and the subordinate officers of the member departments authorized by the District committee may exercise the powers under section 4(1) (1A), 21 and 22 of the Mines and Mineral (Development and

Regulation) Act 1957 and sub rule (3) of Rule 43 and file a complaint with jurisdictional court.”

Upto December-2015, 743 sand blocks had been identified in the State. In Bangalore city and Bangalore Rural, Mysore, Tumkur, Dakshina Kannada and Belgaum districts sand blocks was identified as these are in much demand. The availability of sand stood at 11.2 million tonnes against a demand for 23 million tonnes a year. The new sand policy approved by the state government that provides for a levy of Rs.10 on every cubic metre sand sold to revive the environment damaged by it. It also allows to levy Rs.20 as an administrative fee at district levels.

#### **Crusher Policy**

Karnataka Regulation of Stone Crushers (Amendment) Rules, 2014 was published as required by sub-section (1) of section 18 of the Karnataka Regulation of Stone Crushers Act, 2011 (Karnataka Act 08 of 2012) in Notification No.CI 20 MMN 2014 dated 21.01.2014 in Part IVA of Special Karnataka Gazette dated 21.01.2014 inviting objections and suggestions from persons likely to be affected thereby within fifteen days from the date of its publication in the Official Gazette, dated 06.02.2014 Part IVA, No.85

#### **Novel Projects / Programmes**

##### **A. Comprehensive Computerization of Mineral Administration**

The department has adopted a new system called Comprehensive Computerization of mineral Administration (CCOMA), which provides real time services to leaseholders and other stakeholders in the mining industry in Karnataka. The system consists of a centralized database containing information related to leaseholders, end users, payment transactions, updated mineral rates, issuance of e-permits, demand register information, weigh bridges etc. The system is designed keeping in view the framework of the mining industry and to widen the ambit of e-Governance. The project which has tremendous potential has extensively and effectively applied information and communication technologies for mineral administration.

**Table 8.45 - Revenue from royalty to the Government**

Sl. No	PARTICULARS	2013-14	2014-15	2015-16 (upto Dec. 2015)
1	Quantity e-auctioned (MMT)	28.35	19.51	18.89
2	Material value of e-auctioned iron ore(Rs in Crores)	6460	5519	2834
3	Royalty @ 10% paid to DMG till date (Rs in Crores)	609.15	671.96	433.30
4	FDT @ 12% paid to Forest department till date (Rs in Crores)	617.50	577.67	332.30
5	Total Commercial Tax recovered & paid to Dept. till date (Rs in Crores)	329.69	306.02	169.92
6	PWD Toll fee (Rs in Crores)	43.17	29.40	4.07

The new system provides seamless service capturing data related to production at individual mines, e-auction transactions and payments from buyers who participate in e-auction and also dispatch and monitoring of mineral transport up to the destination. The portal has also started e-services for lease owner registration, permit system (major/minor minerals), monthly /annual returns, rake permit system for rail transportation, online lease application and demand &

collection system. Thus system has reduced the scope of using fake permits, and has made monitoring and tracking royalty payment convenient and accountable.

A major achievement through the application of this system relates to Sale of iron ore through e-auction. The quantity of iron ore e-auctioned and the material value & royalty obtained from it are compared for the year 2012-13 and 2013-14 with the current year and the figures as follows:

### **B. Curbing of illegal mining and transportation**

The department has notified the amended rules under Section 23-C of Mines and Minerals (Development and Regulation) Act, 1957, called The Karnataka (Prevention of illegal mining, transportation and storage of minerals) Rules, 2010 to curb illegal mining and transportation. End user registration, proportionate validity of the tripsheets, establishment of checkposts is some of the salient features. During the year 2015-16, the squad teams which have been formed, have been continued in order to control illegal mining and transportation throughout the State.

### **C. Salient features:**

The department has adopted a new system of e-permitting online through Integrated Lease Management System (ILMS), in which (n) Code has offered integrated software development and portal application modules such as, e-Permit, e-return, Demand Collection & Assessment, M Pass through

SMS for Non specified Minor Minerals, Weigh Bridge Integration and other related modules covered in a single portal for stakeholders of Geology & Mining in Karnataka. The overall intention is to introduce a controllable mechanism and framework for transportation of minerals such as Iron Ore, Manganese Ore, and Granite etc.

### **8.3.4 Status of mining in the state:**

As on Dec 2015 the State's mining sector have registered 12019 Quarry Leaseholders, 1118 Mining Leaseholders, 91271 Stockiest, 592 Weigh Bridges Integrated with Online e-Permit System for Iron ore in ILMS. For FY 2015-16, approximately, 1918 Bulk Permits, 11,25,775 Trip sheets, 2799 Rake Permits have been generated. A special paper has been developed to make the system foolproof against misuse. M-permits have been issued for leaseholders of non specified minor minerals who have inadequate IT infrastructure at their disposal, thereby promoting transparency.

**Table 8.46- Stakeholders Coverage**

Stake Holder	As on (Dec, 2015)
Lease Holders (Major Minerals)	1118
Lease Holders (Minor Minerals)	12019
Weigh Bridge Integration in ILMS for FY 2015-16	592
Stockist/ Buyer registered in ILMS	91271
Indian Bureau of Mines	1- Controlling Agency
District Deputy Directors/ Senior Geologists	34- (Implementing Authority)
	250- Personnel belong to Dy. Director/ Senior Geologist Office
Directorate of Mines & Geology	1- Overall Planning and Governing Body

### A. Implementation of R&R Plan for mining-affected districts:

As per the Hon'ble Supreme court orders dated 5.8.2011 and 26.08.2011 in S.L.P (civil) No. 736667/2010, the State is committed to develop and implement suitable Reclamation and Rehabilitation (R&R) plans for mining affected districts of Bellary, Chitradurga and Tumkur. The State Government has assigned this task to the Indian Council of Forestry Research and Education (ICFRE). The main objective of the project is to prepare R&R plan and to implement the plan after the approval of mining leases by the Central Empowered Committee (CEC). Based on ICFRE's R&R plans, the Central Empowered Committee (CEC) has approved R&R plans for 91 ('A' & 'B' category mines). ICFRE has prepared R&R plans of 15 'C' category mines till date. The Hon'ble Supreme Court in its order dated 20.4.2012, has directed the Ministry of Environment and Forests to re-visit the statutory clearances earlier granted by it in the light of R & R Plan and in its Order dated 03/09/2012, & 28/09/2012, has allowed mining operations in category 'A' and category 'B' mines to resume mining operation after the clearance of the R&R plan by CEC and, after obtaining other statutory clearances from various organizations.

### B. The broad objectives/parameters of R&R plan are as under.

1. To carry out time bound R & R plan the area under illegal mining by way of mining pits, over burden/waste dumps etc. outside the sanctioned lease area.
2. To ensure scientific and sustainable

mining after taking into consideration the mining resources assessed to be available within the lease area.

3. To ensure environment friendly mining and related activities and complying with the various standards stipulated under the various environmental /mining statues e.g. air quality, noise / vibration level, water quality, scientific over burden/waste dumping, stabilization of slopes etc.
4. For achieving 2 and 3 above, fixation of permissible annual production, and
5. Regular and effective monitoring and evaluation.

ICFRE has submitted 94+15 (i.e A,B + C category mines) Reclamation and Rehabilitation (R & R) reports on mining leases. The permissible production for all 94 mining leases is 29.96 MMTS per annum for iron ore and 0.395 MMTS per annum for manganese ore. Hitherto CEC has approved R & R plans for 91 (A+B) mines.

The production limit is going to be changed or enhanced as and when ICFRE submits its R & R for all the A,B,C categories of mines after due approval of CEC.Honorable Supreme Court of India in its order dated 30.07.2015 directed the State Government to conduct e-auction of 15 Category 'C' mines within the time lines setout in the said Order. Auction process has to be conducted in accordance with the provisions of MM (DR) Amendment Act 2015 and the Mineral (Auction) Rules 2015 as per applicable laws. The estimation of reserves/ resources has been done by M/s.MECL. The Department Mines & Geology has constituted a technical

committee to establish reserve value of 15 'C' category mines (1<sup>st</sup> phase) under the Chairmanship of Additional Director (Mineral). The auctioning procedures will be followed and the time table for tender process has commenced in December - 2015.

### **C. Computerization of Mineral Administration**

The Department has taken up a project to build a geo database on GIS application system on mapping mineralized zones, developing mineral atlas, data on existing leases which will be helpful to process the mining applications online. The main objective of the project is to delineate the mineral belts on various potential zone in the State by adopting remote sensing techniques marking the free hold areas for the benefit of the entrepreneurs. The data will be loaded to the department website. The existing data displayed on the website will be utilized by industries for filing of online application for quarry lease from elsewhere. The project has been implemented as per Government Order CI.311MMN:2014 Dated: 16.08.2014.

### **D. Check posts**

13 Integrated composite check posts have been established involving Forest, Police, Transport, Commercial Tax, PWD and Department of Mines and Geology. It has been intended to computerize these composite check posts including already working 15 important check posts of the Department. Presently constructions of 8 modern checkposts have been completed at Malappanahatti & D.B.Kere Cross (Chitradurga district), Somanahalli & Chowdlapura (Tumkur district), Bannihatti, Metriki, Kallahally & Kakubalu (Bellary district). Further construction work at Sagaranaahalli (Tumkur district), Ubbalagundi, Bandri & B.Gonal (Bellary district), Lakkihalli & 'D' Madakeripura (Chitradurga district), Mukka (D.K district) Siddarampura (Raichur District) are under progress. Proposal to establish 3 new checkposts viz. Lakkur (Bangalore Rural district), Koginalli (Belgaum) and Alipura (Bellary district) are under progress.

### **i. Procurement of advanced instruments**

It is also proposed to procure RFID & GPS instruments to curb illegal transportation of minerals. RFID reader have been installed in 4 check posts viz, Bannihatti, kakabalu, and Kallahalli of Bellary district and Malapanahatti of Chitradurga district. 6RFID reader have been installed in check post and Service provider n-code solution has received work order for installation of RFID reader in 15 mines in Bellary District.

### **ii. Action Plan 2015-16**

The Department of Mines & Geology, being an important scientific and technical organization, has several prime functions in the field of mineral administration and mineral investigations. The objective of the Department, in the field of mineral administration is to regulate and control the mining and quarrying activities, keeping in view the need for mineral conservation and scientific mining / quarrying. Royalty for the minerals is collected based on the amount of minerals utilized / transported. RPs/ PLs/ MLs & QLs are granted for extraction of major and minor minerals.

The department supports mineral exploration and development by employing modern techniques and concepts for categorizing the resources in terms of grade and industrial utility. The department implements policies for identification of mineral resources by surface geological mapping and drilling. Apart from this, the Department undertakes Mineral beneficiation studies to build up potential. Further, in co-ordination with other National Research Institutes and Universities, special geological studies have been undertaken to assess the impact of mining / quarrying activities on the environment so as to achieve the zero waste mining and achieve the optimum utilization of natural resources.

The Department has 6 ongoing schemes and the details of these schemes, Budgetary out lay for 2015-16 and Expenditure upto the end of December 2015 are given in Table 8.47.

**Table 8.47 - On-going Schemes of the Plan Monitoring Wing of the Department of Mines & Geology, (in lakhs)**

Sl. No	Name of the Scheme & Head of Account	Revised Budgetary outlay for 2013-14	Expenditure, 2013-14	Budgetary outlay for 2014-15	Expenditure 2014-15	Budgetary outlay for 2015-16	Expenditure upto Dec, 2015
1.	Composite Scheme 2853-02-102-0-01	272.00	227.50	449.55	347.06	Scheme shifted to Non-plan	0
2.	Training of officers and staff of the Department 2853-02-102-0-10	5.00	4.85	5.00	4.85	5.00	1.09
3.	Publication Wing in the Department 2853-02-102-0-11	5.00	4.66	5.00	4.13	5.00	2.21
4.	Mineral Conservation cell in the Department 2853-02-102-0-14	5.00	3.60	5.00	4.07	1000.00	0
5.	Environmental Geological Wing of the Department 2853-02-102-0-15	5.00	3.75	305.00	303.94	500.00	0.39
6.	Modernization 2853-02-001-0-01 sub head 125	1395.56	1183.77	2045.56	3046.95	5100.00	2441.15
7.	Filling up of Stone Quarry Pits 2853-02-102-0-17	0	0	0	0	2000.00	0
	<b>Total</b>	<b>1687.56</b>	<b>1428.13</b>	<b>2815.11</b>	<b>3711.00</b>	<b>8610.00</b>	<b>2444.84</b>



#### **8.4. Climate Change & Mitigation Measures**

##### **Karnataka State Action Plan on Climate Change:**

Funded by Department of Ecology and Environment, Environmental Management and Policy Research Institute, Bengaluru has prepared the Karnataka State Action Plan on Climate Change (KSAPCC)- 1st Assessment. The report covers key sectors like Agriculture, Animal Husbandry, Water Resources, Biodiversity, Forestry, Urbanization and Health. The KSAPCC has also proposed action plan for every sector as roadmap for the concerned state departments. The state action plan has identified over 200 action items including 31 categorized as priority actions. The estimated total budget proposed for the action plan is Rs.10, 500 crore out of which Rs. 5,100 Crore is requested from Govt. of India. Steering Committee on Climate Change, MoEF&CC has recommended for the endorsement of the report.

##### **A. MoEF&CC Climate Change unit at EMPRI:**

Ministry of Environment, Forest & Climate Change has also established a state unit of climate change in EMPRI under the Capacity Building for Climate Change (CBCC) programme. The purpose of the capacity building at the state level is to strengthen the capacity at State level to address climate issues and to integrate climate change and development imperative in policy, plans and programmes in various sectors. MoEF&CC has provided financial support of Rs. 10 lakhs to engage a consultant at State Nodal unit for climate change to coordinate with MoEF&CC and other stakeholders at state level for implementation, updation and monitoring of State Action Plan on Climate Change.

##### **B. State nodal centre:**

As per the MoEF&CC guidelines, Karnataka state government has designated EMPRI as the Institution to anchor the State's future Scientific and Technical activities on climate change and as the nodal agency for the preparation and updating of the State Action

Plans on Climate Change (SAPCC). The 6<sup>th</sup> coordination committee meeting on SAPCC held under the chairmanship of Additional Chief Secretary and Development Commissioner has designated EMPRI as the nodal agency for providing technical support in conducting research, trainings and capacity building in climate change programs.

A New Scheme on Climate Change has also been announced by Govt. of Karnataka with the budget 2015-16 for strengthening the capacity of EMPRI to steer the climate change policy and initiatives of the State by strengthening the existing climate change cell at EMPRI with necessary technical manpower and infrastructure. It also aims to create and generate awareness among various stakeholders, to evolve strategies and policies for implementation, to impart training, capacity building and manpower development and also to coordinate with different universities, research institutions, Government Departments and NGOs to pursue theme based scientific research on climate change and its impacts. Currently, EMPRI with joint collaboration with various institutes have initiated the following projects:

1. "Ecological research on soil carbon storage in Karnataka in collaboration with Indian Institute of Science.
2. "Urbanization and its effects on lizards: a study from a climate change perspective" in collaboration with Indian Institute of Science.
3. "Monitoring the Karnataka coastline for sea turtle nesting sites: Beach monitoring and coastline mapping in collaboration with Dakshin Foundation, Bengaluru.
4. "Climate change, urbanization and the housing sector in Karnataka in collaboration with Ashoka Trust for Research in Ecology and Environment, Bengaluru.
5. "Agro-forestry as a Climate Change Mitigation and Adaptation Strategy for

Karnataka in collaboration with Aranya Climate Change Services Pvt.Ltd, Bengaluru.

6. "Butterflies as Climate Change Indicators – a Study in Bengaluru City" by EMPRI.
7. "Measurement of Greenhouse Gas Emissions (CH<sub>4</sub> and CO<sub>2</sub>) from Municipal Solid Wastes Disposal Sites (MSWDS)" by EMPRI
8. "Study the Impact of Climate Change on incidence of vector borne & communicable diseases in Bengaluru City and vulnerability mapping" by EMPRI

As directed by MoEF&CC, EMPRI is also coordinating the state departments to prepare and submit proposals under National Adaptation Fund for climate change. An introductory workshop with GIZ was also organized for the stakeholders to inform them about the detail funding mechanism available under climate change. As per the implementation guidelines provided by MoEF&CC. State Government has setup State Level Steering Committee (SLSC) under the chairmanship of Chief Secretary, relevant stakeholders department and NABARD where Director General, EMPRI is a Member Secretary. A comprehensive proposal from Animal Husbandry department is under scrutiny.

### **C. Training and capacity building under climate change:**

In order to address the issues of climate change and its impacts on various sectors, efforts were made to bring all the stakeholders together on a single platform to encourage discussions designed towards formulating collective and responsible actions. To include climate change and environmental issues in the capacity building programmes of Environmental Management and Policy Research Institute it was decided to identify the training needs through training needs assessment so that appropriate course designs and resource materials including modules can be developed in response to the training needs

of different levels of stakeholders. As an outcome of the training needs assessment workshop conducted by EMPRI, the officials suggested for basic workshop on climate science for mid-level officers. It was suggested that, the workshop should focus on science of climate change and vulnerability, mitigation and adaptation methods required sector wise. The training cum workshops on "Climate change- risks, vulnerability and adaptation" conducted during the year 2014-15 was a proactive step taken by Environmental Management and Policy Research Institute, Bangalore with the financial assistance from Government of Karnataka. This initiative is First of its kind in the country conducted with the intention to create awareness among all stakeholders and also to frame adaptation/mitigation strategies to combat Climate change in the State of Karnataka. United Nations convened Climate Change convention in Paris from 30th November to 11th December, 2015. The main objective of the convention is to hold the increase in the global average temperature to well below 2 degree Celsius above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5 degree Celsius above pre-industrial levels, which significantly reduce the risks and impacts of climate change. **Appendix 8.4** will highlight the Paris Agreement on Climate Change.

Under the "Capacity Building for Climate change" funded for state Government under Climate change Action Plan of MoEF, a climate change unit is also established for conducting training programmes and 7 training programmes on 'Climate Change & Bio Medical Waste Management' were conducted district-wise for health department officials. Under State Government funding 2 one-day Training programmes on 'Climate Change & Bio Medical Waste Management' and 7 one-day training programmes on 'Combating Climate change' in various sectors like Forest, Water, Energy, Horticulture & Sericulture, Health & Fisheries have been conducted and planning to organize 4 one-day training programmes for Agriculture, Transport, Urbanization and Animal husbandry sectors.

An interactive workshop on implementation plan for Climate Change and Sustainable Agriculture Monitoring, Modelling and Networking-component of National Mission on Sustainable Agriculture was conducted in Bengaluru to develop road map for implementing NMSA at state level.

A workshop was conducted for senior level officials of GoK in Bengaluru to debate on the impacts of climate change from a global, national and state perspective and the measures being taken and planned to be taken towards adaptation or mitigation of the impact.

A workshop was organized along with GIZ at EMPRI for finalizing the proposals from the different departments of the GoK for seeking funding under National Adaptation Fund for Climate Change (NAFCC).MoEF.

EMPRI, in collaboration with Global green Growth initiatives (GGGI), Bengaluru

Climate Change Initiatives-Karnataka (BCCIK), Centre for Study on Science, Technology and Policy(CSTEP) and Indian Institute of Science (IISc), organized a one day training workshop on Implementation of Karnataka's SAPCC: 'A green Growth Approach' in Bengaluru. This training was a 'first of its kind' initiative in India to provide inter-sectoral perspective to designing and implementing policies and programmes and to enhance the knowledge and skills of senior officials. In all, 20 training/workshops were organized during 2015-16.

In order to create awareness among the school children about the pollution on lakes, EMPRI has prepared a comic book on "The Lake Doctors". The book illustrated how a group of proactive children from a Government School has revived a polluted lake into a healthy lake as part of their 'Eco-club' activity.EMPRI has also planned to organise a quiz programme on climate change for the school children in Doordarshan in the current financial year.

# INDUSTRY

# 9

## 9.1 Introduction

Karnataka has been spearheading the growth of Indian industry, particularly in terms of high-technology industries in the areas of electrical and electronics, information & communication technology (ICT), biotechnology and, more recently, nanotechnology. The industrial structure of Karnataka presents a blend of modern high-tech capital goods and knowledge intensive industries on the one hand and traditional consumer goods industries on the other. Given this, this chapter throws light on the industrial growth of Karnataka in 2014-15 as well as the industrial policy initiatives taken by the Government, among others.

## 9.2 Trends in Industrial Production

Trends in industrial production can be analyzed by considering the changes in the index of industrial production (IIP). Towards calculating the index, the weights of different

sectors and sub-sectors are assigned based on their contribution to Gross Value Added (GVA) of industry in the base year. The manufacturing sector has the highest weight of about 81.1% followed by electricity sector (11.8%) and the mining sector (6.9%).

The general index of industrial production (IIP) of Karnataka covering mining, manufacturing and electricity sectors for 2014-15 stood at 181.15. The sector wise indices for the period from 2012-13 to 2014-15 with base year as 2004-05 are presented in Table 9.1. The overall organized industrial sector of Karnataka has registered 2.06% growth in 2014-15 as compared to 2013-14. Within the organized industrial sector, Manufacturing sector recorded highest growth of 2.93% followed by the electricity sector (1.91%) and mining sector registered negative growth of (-26.16%). Contraction in mining activities and deceleration in manufacturing output moderate growth was observed in industrial sector.

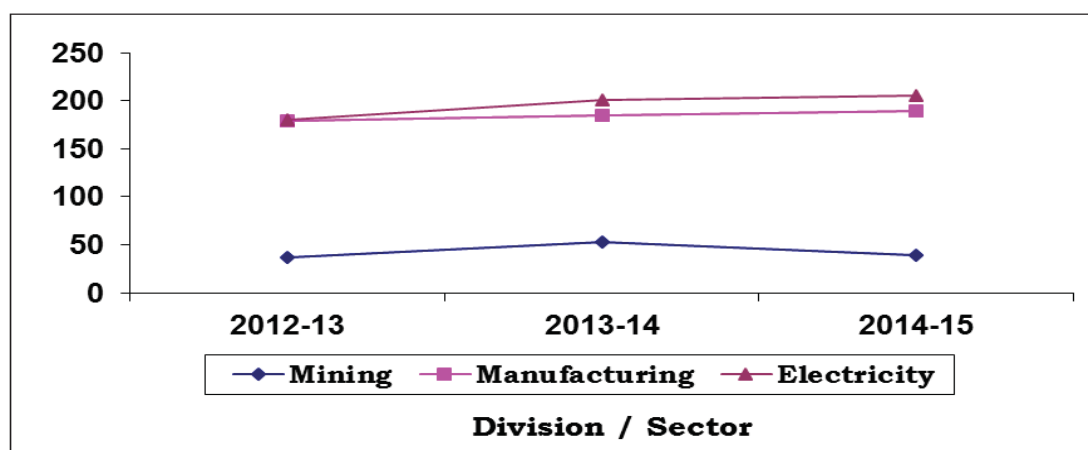
**Table 9.1 : Index of Industrial Production of Karnataka: 2012-13 to 2014-15**  
**Base Year: 2004-05**

Sector	Weight	2012-13	2013-14	2014-15
Mining	69.8321	36.42** (-26.85)	53.05** (45.66)	39.17* (-26.16)
Manufacturing*	811.3591	179.19 (8.56)	184.44 (2.92)	189.85 (2.93)
Electricity	118.8089	180.59 (5.70)	201.34 (11.49)	205.19 (1.91)
General Index	1000.000	169.38 (7.41)	177.49 (4.79)	181.15 (2.06)

Note: 1) Figures in brackets indicate percentage changes over the previous year.

2) \* Provisional figures. 3) \*\*Index revised as per IBM, Nagpur data

Source: Directorate of Economics & Statistics.

**Figure 9.1: Index of Industrial Production of Karnataka-2012-13 to 2014-15**

The average annual growth rates for the overall organized industry mainly for mining, manufacturing and electricity sectors for the period from 2005-06 to 2014-15 with base year as 2004-05 are presented in Appendix 9.1. The compounded average growth rate (CAGR) for this period for the entire organized industry was about 6.1% whereas it was 6.6% for manufacturing and 7.4% for electricity. A decline of 8.9% was seen in the output of the State's mining sector.

The quarterly growth in IIP under major sectors for the three quarters from 2013-14 to

2015-16 with base year 2004-05 along with the sector-wise weights is given in Table 9.2. The Mining sector has once again recorded continuously negative growth rate of 42.36%, 54.70% & 52.46% respectively, whereas Manufacturing sector experienced positive growth in the three quarters and Electricity sectors experienced negative growth in the first and third quarters and positive growth in second quarter as a result of which positive growth of 1.10% & 1.55% were observed for first two quarters and negative growth of 1.02% were observed for the General Index.

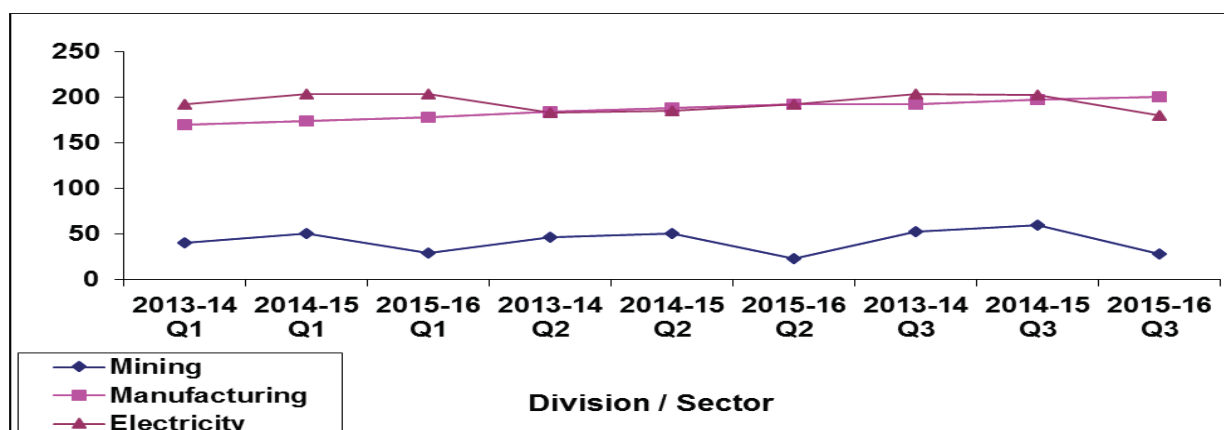
**Table 9.2 : Quarterly Growth in IIP: 2013-14 to 2015-16, (Quarters I, II and III), Base Year: 2004-05**

Period/Sector	Mining	Manufacturing **	Electricity	General
Weight	69.83	811.36	118.81	1000.00
2013-14Q1 April 13- June 13	40.39* (23.74)	170.12 (4.43)	192.07 (5.91)	163.67 (4.92)
Q2 July 13 – Sept. 13	46.26* (41.38)	184.63 (2.52)	182.98 (15.83)	174.77 (4.54)
Q3 Oct. 13 – Dec. 13	52.60* (53.85)	192.29 (3.83)	203.33 (12.12)	183.85 (5.55)
2014-15 Q1 April 14- June 14	51.20* (26.76)	173.85 (2.19)	203.57 (5.99)	168.81 (3.14)
Q2 July 14 – Sept. 14	51.08* (10.41)	188.04 (1.85)	185.75 (1.51)	178.20 (1.96)
Q3 Oct. 14 – Dec. 14	60.32* (14.67)	197.47 (2.69)	202.29 (-0.51)	188.46 (2.50)
2015-16 Q1 April 15- June 15	29.51** (-42.36)	178.03 (2.40)	203.40 (-0.08)	170.67 (1.10)
Q2 July 15 – Sept. 15	23.14** (-54.70)	192.91 (2.59)	192.15 (3.45)	180.97 (1.55)
Q3 Oct. 15 – Dec. 15	28.67** (-52.46)	201.03 (1.80)	180.36 (-10.84)	186.53 (-1.02)

1.\* Revised as per IBM data. \*\* Provisional

2. Figures in the brackets indicate %age over the corresponding quarter during the previous year.

Source: Directorate of Economics & Statistics.

**Figure 9.2: Quarterly Growth in IIP: 2013-14 to 2015-16, (Quarters I,II and III )**

### 9.3 Industrial Growth by Use-Based Classification

Industrial growth is given in terms of use-based classification of industries for four broad groups of organized manufacturing industries is (i) Basic goods, (ii) Capital goods, (iii) Intermediate goods, and (iv) Consumer goods consisting of durables and non-durables. Among the four broad groups, the consumer goods industry sector accounts for the highest weight followed by the basic goods industry. Within the consumer goods industry sector, non-durables account for 24.8% and durables account for 3.7% of the total weight of 28.5%. These weights indicate relative importance of the different groups in the manufacturing industry of Karnataka.

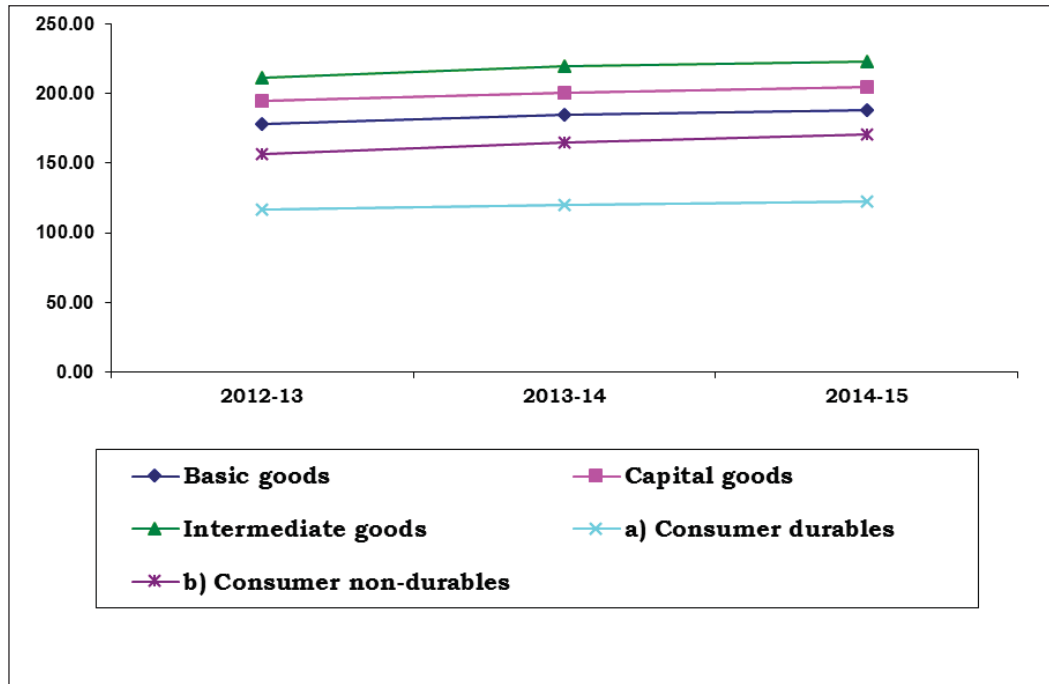
Comparative growth rates of the four broad industrial groups and the two sub-groups of consumer goods from 2012-13 to 2014-15 with base 2004-05 are given in Table 9.3. For 2014-15, among the four broad groups, Consumer goods registered the highest growth of 5.83% followed by Basic goods at 1.91% Capital goods at 1.70% & Intermediate goods 1.54%. For the period 2005-06 to 2014-15, with the revised base year as 2004-05, the CAGR for all the groups was 6.62% of which Basic goods stood at 6.53%, Capital goods at 7.41%, Intermediate goods at 8.35% and Consumer goods at 5.08%. Details of the compounded growth rates are presented in Appendix 9.2.

**Table 9.3 - Index of Industrial Production for Organized Manufacturing Industry in Karnataka - Use-based Classification: 2012-13 to 2014-15 Base Year: 2004-05**

Sl. No.	Industry Group	Weight	2012-13*	2013-14*	2014-15*
1.	Basic goods	219.8377	178.14 (15.85)	184.64 (3.64)	188.17 (1.91)
2.	Capital goods	132.8699	194.69 (1.38)	200.95 (3.21)	204.37 (1.70)
3.	Intermediate goods	173.5747	211.07 (12.46)	219.67 (4.07)	223.05 (1.54)
4.	Consumer goods	285.0769	153.37 (4.05)	155.13 (1.14)	164.17 (5.83)
	a) Consumer durables	37.4330	116.51 (-36.62)	120.36 (3.30)	122.14 (1.48)
	b) Consumer non-durables	247.6439	156.70 (10.43)	165.20 (5.42)	170.53 (3.22)
Total (Manufacturing sector)		811.3591	179.19 (8.56)	184.44 (2.92)	189.85 (2.93)

Note: 1. Figures in brackets indicate percentage change over the previous year. 2. \* Provisional Figures.  
Source: Directorate of Economics and Statistics.

**Figure 9.3: Index of Industrial Production for Organized Manufacturing Industry in Karnataka - Use Based Classifications 2012-13 to 2014-15**



#### 9.4. Industrial Growth by Two Digit Industrial Classification

At the two digit NIC-04 level, manufacturing industry sector has been sub-divided into 22 major industry groups. Among the major industry groups, Basic Metals have the highest weight of 119.93 followed by Chemical and chemical products (107.89) & Food products & beverages (71.90). These three groups contribute more than 1/3<sup>rd</sup> of total weight (811.36), for the base year 2004-05.

During 2014-15, among the two digit level industries, highest index is observed in group 22- Publishing & Printing Materials (328.99) followed by group 34- Motor vehicles, Trailers and semi – Trailers (241.59), group 20- Wood and Wood products (240.02), group 29- machinery equipment (227.10) and, group 35- Other Transport Equipment (219.26). The indices for two-digit level industries from 2006-07 to 2014-15 with base year 2004-05 are given in Appendix 9.3. It is observed that the growth rate has decreased during 2008-09 & has sudden shoot up in 2009-10 &

observed a fluctuation in 2011-12 & 2012-13, decreased during 2013-14 & 2014-15.

#### 9.5 Organised Manufacturing Sector

The Annual Survey of Industries (ASI) presents detailed statistics on the manufacturing sector of the organized industrial sector. Table 9.4 presents ASI statistics for registered factories for 2011-12 and 2012-13 for Karnataka and All-India. Karnataka accounted for 5.29% of the total number of registered factories in 2012-13 in the country. The contribution of registered factories of Karnataka stood at 6.66% of total fixed capital, 6.63% of total output, and 6.35% of Gross Value Added (GVA) in the same year. The share of Karnataka in total registered factories has marginally increased whereas total input and total output has increased in 2012-13 as compared to 2011-12. However, the relative contribution of Karnataka's registered factories to the national industrial performance in terms of, gross and net value added and profits has increased during the same period.

**Table 9.4 - Selected Key indicators of Registered Factories: Karnataka & All-India (Rs. crore)**

Particulars	2011-12*			2012-13		
	Karnataka	India	% share	Karnataka	India	% share
Industries (No)	11,460	2,17,554	5.27	11,753	2,22,120	5.29
Fixed Capital	1,31,921	19,49,550	6.77	1,45,151	21,80,260	6.66
Working Capital	51,205	5,91,078	8.66	48,751	6,03,411	8.08
Total Output	3,37,673	56,93,694	5.93	3,99,508	60,25,945	6.63
Total Input	2,82,127	47,89,526	5.89	3,35,596	50,18,665	6.69
Gross value added	55,545	9,05,208	6.14	63,912	10,07,279	6.35
Net value added	46,203	7,57,883	6.10	53,479	8,51,948	6.28
Profit	20,464	3,85,678	5.31	24,487	4,44,262	5.51

Source: Central Statistics Office (CSO), GOI \* Revised data as per CSO, GOI

According to ASI 2012-13 with NIC-2008, the major industrial groups in the registered factory sector of Karnataka in terms of value of output are (i) Coke & Refined Petroleum Products (17.57%), (ii) Food Products (13.53%), (iii) Basic Metals (11.52%), (iv) Other manufacturing materials (8.58%), (v) motor vehicle, trailers & semi trailers (7.52%), (vi) Machinery equipment (6.98%) and (vii) Others (5.49%). These seven industry groups together accounted for more than 71.19% of the total value of output of registered factories of Karnataka in 2012-13. Details are presented in Appendix 9.4.

The important indicators per registered factory based on ASI results for 2011-12 and

2012-13 are presented in Table 9.5. Karnataka compares favorably with all-India in terms of all the indicators – per factory investment, employment, output and gross value added. Though registered factories of Karnataka, on an average are more capital intensive than that of all-India, they are also more employment-intensive and generated more value added as well as output.

The selected economic indicators per worker for Karnataka and All-India are given in Table 9.6. Total output per worker, annual wages per worker and total input per worker reveal that Karnataka was better-off than the all-India, while the State lagged behind with all India for Net value added in 2012-13.

**Table 9.5 - Important Indicators per Factory**

Indicator	Unit	2011-12*		2012-13	
		Karnataka	India	Karnataka	India
Investment in fixed capital	Rs. Lakh	1151.15	896.12	1235.01	981.57
Employment	No.	79.05	61.73	73.36	58.30
Value of output	Rs. Lakh	2946.54	2617.14	3399.21	2712.92
Gross Value Added	Rs. Lakh	484.69	416.08	543.79	453.48

Source: Central Statistics Office (CSO), GOI \* Revised data as per CSO, GOI

**Table 9.6 – Selected Economic Indicators of Industries (2008-09 to 2012-13)**

Year	Labour productivity (Net value added per rupee in wages)		Total input per worker (Rs.lakh)		Total output per worker (Rs. Lakh)		Annual wages per worker (Rs.)	
	Karnataka	India	Karnataka	India	Karnataka	India	Karnataka	India
2008-09	9.9	8.8	29.6	30.3	37.8	37.3	71,120	68,103
2009-10	7.7	8.4	32.5	33.1	40.1	40.6	83,218	75,277
2010-11	6.8	8.3	38.9	38.8	46.9	47.2	97,406	86,449
2011-12*	6.5	7.6	39.9	45.9	47.8	54.6	99,948	95,662
2012-13	6.0	7.7	50.0	49.0	60.0	59.9	1,34,364	1,10,327

Source: Central Statistics Office (CSO), GOI \* Revised data as per CSO, GOI



## 9.6 Unorganized Manufacturing Sector

The unregistered or unorganized manufacturing sector is an important component of Karnataka's manufacturing industry. The National Sample Survey Organization (NSSO), Ministry of Statistics & Programme Implementation, Government of India conducts periodic surveys covering unorganized sector at the national level and collect data. The previous survey (67<sup>th</sup> round) covering unorganized manufacturing enterprise was conducted by NSSO in 2010-11. The highlights of the State wise results of 67<sup>th</sup> round of NSSO survey covering unorganized manufacturing enterprises are given in Table 9.7. Karnataka accounted for 4.37% of total number of unorganized

manufacturing enterprises and 4.33% of the total unorganized manufacturing employment in the country in 2010-11.

In addition to the manufacturing sector, service sector enterprises play a crucial role in Karnataka's economy. The highlights of results of NSSO survey covering service sector enterprises (excluding trade) under the 67<sup>th</sup> round in 2010-11 are presented in Table 9.8. The table gives figures for number of enterprises and number of workers as well as GVA per enterprise and GVA per worker. Karnataka accounted for 4.9% of the total service sector enterprises and 4.8% of the total service sector enterprise workers in the Country. In terms of GVA per worker, Karnataka stood first in the country.

**Table 9.7- Unorganized Manufacturing Enterprises 2010-11**

State	Number (lakh)		Annual Gross Value Added (Rs.)	
	Enterprises	Workers	Per Enterprise	Per worker
Andhra Pradesh	16.20	31.04	74012	38634
Bihar	4.48	7.51	68434	40816
Chhattisgarh	1.65	3.52	68379	32018
Gujarat	14.17	32.15	131406	57903
<b>Karnataka</b>	<b>8.61</b>	<b>15.09</b>	<b>87299</b>	<b>49801</b>
Madhya Pradesh	8.84	15.35	42714	24603
Maharashtra	13.85	32.19	146553	63069
Orissa	6.15	12.66	44786	21762
Rajasthan	6.27	12.20	110024	56590
Tamilnadu	16.52	35.14	117350	55178
Uttar Pradesh	23.41	52.26	64716	28992
All India	197.12	348.88	89900	44347

Source: National Sample Survey Organization, GOI.

**Table 9.8- Service Sector Enterprises (excluding trade) 2010-11**

State	Number (lakh)		Annual Gross value added (Rs.)	
	Enterprises	Workers	Per enterprise	Per worker
Andhra Pradesh	56.00	122.12	97420	44675
Bihar	23.09	34.37	77072	51774
Chhattisgarh	6.76	16.61	90076	44755
Gujarat	36.35	69.70	117228	61137
<b>Karnataka</b>	<b>28.11</b>	<b>53.90</b>	<b>146583</b>	<b>76459</b>
Madhya Pradesh	25.94	44.41	73604	42997
Maharashtra	51.56	101.37	149063	75824
Orissa	24.45	49.32	55235	27378
Rajasthan	21.42	37.82	117647	66649
Tamil Nadu	44.67	90.65	146494	72191
Uttar Pradesh	83.83	157.79	78537	41729
All India	576.73	1079.79	108951	58193

Source: National Sample Survey Organization, GOI

### 9.7 Micro, Small & Medium Enterprises

Micro, Small & Medium Enterprises (MSMEs) form an important and growing segment of Karnataka's industrial sector. As per the MSME Act 2006, MSME units have been categorized broadly into those engaged in manufacturing and those providing/rendering services. Under the Act, Micro, Small and Medium Enterprises (MSMEs) are classified as under

During 2014-15, 28742 MSME Units have been registered in the State with an investment of Rs. 279291.24 lakh by providing employment to 175469 persons. Details of year wise registration of MSMEs in the State, persons employed in the registered MSME enterprises and employment per unit during 2013-14 to 2015-16 up to December are given in Table 9.9.

As compared to 2013-14, there is a 10.69% increase in the number of units registered, 2.02% increase in investment and 4.85 % increase in number of persons employed during 2014-15. During the first Nine months of the current year (April to Dec.2015), 19208 units have been registered with an investment of Rs. 289810.21 lakh by providing employment to 146225 persons. When compared to previous year for the same period (April to Dec.2014), there is a decrease of -2.60 % in the number of units registered under MSME with 51.01% increase in investment and 19.57 % increase in the employment generated. Details of the MSMEs registered in Karnataka are provided in Table 9.10. The number of units registered every year in Karnataka has been increasing since 2007-08. Details are in Appendix 9.5

Enterprises	Investment in Plant & Machinery (Manufacturing)	Investment in Equipment (Service)
Micro	Up to Rs. 25 lakh	Up to Rs. 10 lakh
Small	Above Rs.25 lakh up to Rs.5 crore	Above Rs.10 lakh up to Rs.2 crore
Medium	Above Rs.5 crore up to Rs.10 crore	AboveRs.2 crore up to Rs.5 crore

**Table 9.9: Micro, Small & Medium Enterprises: 2013-14 to 2015-16 (Up to December 2015)**

Year	MSME units	Employment	Employment per unit
2013-14	25966	167347	6.44
2014-15	28742	175469	6.10
2015-16 (up to December 2015)	19208	146225	7.61

Source: Directorate of Industries and Commerce.

**Table 9.10: Details of MSMEs registered in Karnataka 2011-12 to 2015-16 (Up to December 2015)**

Year		2011-12	2012-13	2013-14	2014-15	2015-16 (Up to Dec.15)
MICRO	Units (Nos.)	19610	22169	23229	26005	16622
	Invt. (Rs. lakh)	43650	66019	79416	87609	172324
	Empl. (Nos.)	86216	105029	110070	121599	109111
SMALL	Units (Nos.)	1370	1981	2661	2661	2494
	Invt. (Rs. Lakh)	91266	116791	144096	138516	100520
	Empl. (Nos.)	34400	46029	46741	47311	34762
MEDIUM	Units (Nos.)	41	56	76	77	92
	Invt. (Rs. Lakh)	24724	34041	61545	53168	16965
	Empl. (Nos.)	7771	4493	10536	6563	2352
TOTAL	Units (Nos.)	21021	24206	25966	28742	19208
	Invt. (Rs. Lakh)	159641	216851	285056	279291	289810
	Empl. (Nos.)	128387	155551	167347	175469	146225

Source: Directorate of Industries and Commerce

Out of 28742 units that were registered in Karnataka during 2014-15, about 23.53% (i.e. 6765 units) of the units were related to manufacturing of wearing apparel, dressing and dyeing of fur which occupied the top

position followed by Manufacturing of wood, products of Wood, Cork, Articles of Straw & Plating Materials, except furniture around 11.16 % registration. Details of the top ten products in which units were established during 2014-15 are given in Table 9.11.

**Table 9.11: Top-10 products (by number of units) registered in 2014-15**

Sl. No	Products	NIC-2008	No. of Units	Investment (Rs. Lakhs)	Employment (Nos.)
1	Manufacturing of Wearing Apparel; dressing and Dyeing of Fur	14	6765	46267.88	35798
2	Manufacturing of wood, products of Wood, Cork, Articles of Straw & Plating Materials, except furniture	16	3209	10493.38	11116
3	Manufacturing of Textiles	13	2769	22218.86	16855
4	Manufacturing of Food Products and Beverages	10	2345	32599.36	17921
5	Manufacturing of fabricated Metals Products, Except Machinery and Equipment	25	2042	23705.45	12452
6	Manufacturing of Other Non-Metallic Mineral Products	23	1305	15344.99	10143
7	Manufacturing of Chemical & Chemicals Products	20	1281	19856.79	9849
8	Manufacturing of Machinery and Equipment N.E.C	28	1244	22304.49	11198
9	Manufacturing of Furniture, Manufacturing N.E.C	31	1127	4527	4312
10	Publishing, Printing and Reproduction of recorded Media	18	795	10073.79	5201
Grand Total during 2014-15 (63 Classification)			28742	279291	175469

Source: Directorate of Industries and Commerce.

During 2014-15 Manufacturing of Wearing Apparel; dressing and Dyeing of Fur occupied the top position in terms of investment accounting for about 16.56% of the total investments followed by Manufacturing of Food Products and Beverages with 11.67 % investment. Details of the top ten products classified by investments are provided in Table 9.12.

In terms of employment also, Manufacturing of Wearing Apparel; dressing and Dyeing of Fur stood first by generating about 20.40 % of the total employment closely followed by Manufacturing of Food Products and Beverages with about 10.21 % employment. Details of employment generated in the units registered during 2014-15 are given in Table 9.13.

**Table 9.12: Top-10 products (by investment) of units registered in 2014-15**

Sl. No	Products	NIC-2008	No.of Units	Investment (Rs. Lakhs)	Employment (Nos.)
1	Manufacturing of Wearing Apparel, dressing and Dyeing of Fur	14	6765	46267.88	35798
2	Manufacturing of Food Products and Beverages	10	2345	32599.36	17921
3	Manufacturing of fabricated Metals Products, Except Machinery and Equipment	25	2042	23705.45	12452
4	Manufacturing of Machinery and Equipment N.E.C	28	1244	22304.49	11198
5	Manufacturing of Textiles	13	2769	22218.86	16855
6	Manufacturing of Chemical & Chemicals Products	20	1281	19856.79	9849
7	Manufacturing of Other Non-Metallic Mineral Products	23	1305	15344.99	10143
8	Manufacturing of Rubber and Plastic Products	15	537	12401.85	4234
9	Manufacturing of wood, products of Wood, Cork, Articles of Straw & Plating Materials, except furniture	16	3209	10493.38	11116
10	Publishing, Printing and Reproduction of recorded Media	18	795	10073.79	5201
Grand Total during 2014-15 (63 Classification)			28742	279291	175469

Source: Directorate of Industries and Commerce.

**Table 9.13: Top-10 Products (by employment generated) of units registered in 2014-15**

Sl. No	Products	NIC-2008	No.of Units	Investment (Rs. Lakhs)	Employment (Nos.)
1	Manufacturing of Wearing Apparel; dressing and Dyeing of Fur	14	6765	46267.88	35798
2	Manufacturing of Food Products and Beverages	10	2345	32599.36	17921
3	Manufacturing of Textiles	13	2769	22218.86	16855
4	Manufacturing of fabricated Metals Products, Except Machinery and Equipment	25	2042	23705.45	12452
5	Manufacturing of Machinery and Equipment N.E.C	28	1244	22304.49	11198
6	Manufacturing of wood, products of Wood, Cork, Articles of Straw &Plating Materials, except furniture	16	3209	10493.38	11116
7	Manufacturing of Other Non-Metallic Mineral Products	23	1305	15344.99	10143
8	Manufacturing of Chemical &Chemicals Products	20	1281	19856.79	9849
9	Publishing ,Printing and Reproduction of recorded Media	18	795	10073.79	5201
10	Other Business Activities	66	518	3436.22	4554
Grand Total during 2014-15 (63 Classification)			28742	279291	175469

Source: Directorate of Industries and Commerce.

## 9.8 Selected Industrial Sectors

### 9.8.1. Status of Implementation of Food parks:

I. Food Karnataka Ltd., has been nominated as the nodal agency to look after the implementation at the following Food Parks in the State. Ministry of Food Processing Industries, Govt of India, under the 10<sup>th</sup> five year plan had approved the establishment of food parks in Malur (Kolar District) Hiriya (Chitradurga District) Bagalkot (Bagalkot District) and Jewargi (Gulbarga District) to give impetus to value addition to agriculture and horticulture produce. The status of implementation of these food parks are as detailed below:

**1. M/s. Innova Agri Bio Tech Park Limited, Malur:** This Food Park is being developed in an area of 87 acres of land in KIADB Industrial Area Malur, Kolar District. Development of land and laying of roads, drains etc, have been completed Common infrastructure facilities such as cold storage, ware house, sorting, grading, dal processing, packaging plant have been developed. To

compliment the activities a gamma irradiation facility has been installed and the same is in the process of getting accreditation from USFDA. 44.73 acres in the park has been allotted/earmarked to 13 food processing units. The balance land available for allotment is 4.26 acres. The total project cost reported by the company as on 30.11.2012 is Rs. 1949.30 lakhs. The Government of India and Government of Karnataka have sanctioned and disbursed grant of Rs. 400 lakhs each respectively (Total Rs. 800 Lakhs).

**2. M/s. Green Food Park Limited, Bagalkot:** This Food Park is being developed in an area of 100 acres of land at Navnagar KIADB Industrial Area, Bagalkot. Land development, laying of roads, drains, etc. Completed a common infrastructure facilities such as cold storage grading, sorting, packaging machines, weigh bridge facilities have been installed and completed. The civil works for the buildings ware house, administrative block and R&D centre have been completed. The implementing agency has allotted 53 acres of land for 15 food processing units/ companies and the balance land available for allotment is 2.75 acres. The total project cost reported by the company as

on 08.09.2014 is Rs. 2241.05 lakhs. The Government of Karnataka has released an amount of Rs 400 Lakhs and Government of India has released an amount of Rs. 300 Lakhs so far as against the total sanctioned amount of Rs. 800 lakhs. (Rs. 400 Lakhs Government of Karnataka and Rs.400 Lakhs Government of India) subsidy was given.

**3. M/s. Akshaya Food Park Limited, Hiriyur:** This Food Park is being developed in an area of 106 acres and 37 guntas of land at Huchavanahally village, Hiriyur Taluk, Chitradurga District. Land development and laying of roads, drains etc, have been completed. Common facilities such as cold storage, warehouse, sorting, grading, Dal processing and two lines of packaging machines for food-grains, oilseeds and spices been installed The total project cost is reported by the company as on 23.2.2011 Rs. 1886.89 lakh. The Governments of India and Government of Karnataka have, sanctioned and disbursed grant/un-secured loan of Rs. 400 lakhs. each respectively

**4. M/s. Jewargi Agro Food Park Limited, Jewargi:** This Food Park is being developed in an area of 105 acres of land. Land development laying of roads, drains is completed. The warehouse is under construction. The total project cost reported by the company as on 21.11.2014 is Rs. 1586.73 lakh. So far the Government of Karnataka has released Rs. 300 Lakhs and Government of India has released Rs. 200 lakh each as against Rs 400 lakhs from Government of Karnataka and Rs 400 Lakhs from Government of India. The balance amount has been mobilized by the implementing agency.

**II. Food Parks under the State Scheme:** As part of the State Budget 2008-09, the Government of Karnataka had approved the establishment of food parks in six districts i.e., Bangalore (Rural), Tumkur, Shimoga, Davanagere, Bijapur and Belgaum.

The present status is as under:

**1. Shimoga Food Park:** M/s. LMJ International Limited has been selected as the developer for establishing the food park in an

area of 100 acres of land at Sogane Village in Nidhige Hobli, Shimoga District. In view of the very slow progress of the earlier food parks, the Government has withheld handing over of land to the developer

**2. Bijapur Food Park:** 75 acres of land acquired by the Deputy Commissioner, Bijapur at Ittangihala in Bijapur District has been allotted to Food Karnataka Limited for the proposed food park. The Government is yet to decide on whether to call for bids for the selection of developers in view of Luke worm progress of other food parks.

**3. Spice Park at Byadagi Haveri District:** The State Government has approved the establishment of a Spice Park at Byadagi in Haveri district. In the meantime it was learnt that Spice Board, Government of India is contemplating to develop Spice Park in Haveri district is the land being allotted by State Government to Spices Board.

### 9.8.2 Textiles Industries

#### Karnataka Nuthana Javali Neethi 2013-18

- Karnataka is the first State in the Country to launch State Textile Policy.
- “Nuthana Javali Neethi 2013-18” has been announced vide G.O.No. Vakai 44 JaKaiYo 2012, Dated: 31-10-2013 is being implemented after completion of Suvarna Vastra Neethi 2008-13.
- Targets of the proposed policy are as under.
  - ~ Attraction of investments in Textile sector to the tune of Rs.8,000 crores.
  - ~ New employment opportunities to 4 lakhs people.
- A budgetary provision of Rs.1000 crores has been proposed for Nuthana Javali Neethi 2013-18 for the policy period of 5 years.
- Nuthana Javali Neethi 2013-18 has got the following specialities compared to other States.
  - ~ Maximum Financial Assistance is being provided to MSME sector, 15% to 20% of investments with a ceiling of Rs.2.00 crores.

- ~ Power subsidy at the rate of Re.1/- per unit to all the industries in the entire gamut of Textile value chain.
- ~ Existing industries are also assisted with subsidy of 15% to 20% with a ceiling of Rs.1.00 crore.
- ~ Sick co-operative spinning mills are assisted with subsidy of 20% with a ceiling of Rs.2.00 crores.
- ~ Textile industries are provided with capital subsidy as well as interest subsidy.
- ~ Financial assistance to the tune of 40% with a ceiling of Rs.20.00 crores is provided to Textile industries to facilitate themselves with infrastructural facilities under Textile parks in Green Field and Brown Field zones.
- ~ Training will be provided to 3 lakhs unemployed people in skill development centres established by Government.

- ~ More emphasis will be given for development of technical Textile sector.
- ~ Financial assistance of Rs.10.00 crores will be provided for setting up of centre of excellence for the overall development of Textile sector in the State.

- These specialities of Nuthana Javali Neethi 2013-18 are not available in any of the other States.
- With this background, Nuthana Javali Neethi 2013-18 of Karnataka is expected to become a special and historical policy for the development of Textile sector in the State.

Details of handloom weavers and looms in the State are given in Table 9.14 while details of powerloom weavers and looms are given in Table 9.15. Details of production and employment in the cooperative powerloom and handloom sectors are given in Table 9.16.

**Table 9.14: Handloom Weavers and Looms in Karnataka**

Sl.No	Particulars	Rural	Urban	Total
1	Total Weaver households	33854	3826	37680
2	Weaver Population			
	a) Male	61632	6447	68079
	b) Female	60056	6203	66259
	Total	121688	12650	134338
3	Weaving workforce			
	a) No. of adult weavers	35894	4038	39932
	b) No. of adult allied workers	33762	3125	36917
	Total	69686	7163	76849
4	Looms			
	a) Working	30394	4212	34606
	b) Idle	5268	614	5882
	Total	35662	4826	40486
5	Per capita income of weaver households (Rs.)	24840	25405	24897

Source: Handloom census conducted by Govt. of India, 2009-10

**Table 9.15: Powerloom Weavers and Looms in Karnataka**

Sl. No.	Particulars	
1	No. of weaver households	30988
2	No. of weavers	127535
3	No. of looms	88566

Source: Powerloom census conducted by Govt. of India, 1995-96

**Table 9.16 (A): Production and Employment in Handloom and Power-loom Industries (In Co-operative sector only)**

Sl No	Item	Unit	Annual Plan 2013-14		Annual Plan 2014-15		Annual Plan 2015-16	
			Target	Acht.	Target	Acht.	Target	Acht. (upto December 2015)
1	Handlooms a) Production	Million mtrs	50.00	47.63	55.00	43.58	55.00	38.68
	b)Employment	Lakh	0.95	1.12	0.95	0.85	0.95	1.06
2	Powerlooms a) Production	Million. mtrs	330.00	353.59	335.00	304.02	350.00	290.35
	b)Employment	Lakh	2.60	2.60	2.90	2.96	2.90	4.42

Source: Textile Department

**Table 9.16 (B): Production and Employment in Handloom and Powerloom Industries (In Co-operative sector only)**

Sl No	Item	Unit	Annual Plan 2013-14		Annual Plan 2014-15		Annual Plan 2015-16	
			Target	Acht. (Upto December 2013)	Target	Acht. (Upto December 2014)	Target	Acht. (Upto December 2015)
1	Handlooms a) Production	Million mtrs	50.00	37.36	55.00	41.29	60.00	38.68
	b)Employment	Lakh	0.95	0.82	0.95	0.84	0.95	1.06
2	Powerlooms a) Production	Million. mtrs	330.00	267.57	335.00	268.00	350.00	290.35
	b)Employment	Lakh	2.60	2.51	2.90	2.94	2.90	4.42

Source: Textile Department

During the 11<sup>th</sup> five year plan, 3000 handloom weavers have been provided with housing facilities. 12500 Handloom weavers have been provided with loan at subsidized rate of 4% / 3% to the tune of Rs. 350.42 lakh. Rs. 4290 lakh has been utilized during the plan period for waiver of loan and interest of weavers. 120 handloom weavers' co-operative societies are being provided with 20% rebate on sale of handloom goods as marketing incentive. Power is subsidized and provided at the rate of Rs. 1.25 per unit for 25000 powerloom units having power connection up to 20 HP benefiting above 90000 weavers. 1500 powerloom weavers are being provided with 2 powerlooms each at subsidized rate of 50% subject to ceiling of Rs.

1.00 lakh per beneficiary. Employment for 85000 persons is being generated by imparting skill development training in various segments of textile sector through training and setting up of training centres with an expenditure of Rs. 7000 lakh.

During the 12<sup>th</sup> five year plan, it is planned that 10000 weavers would be provided with housing facilities. 30000 weavers will be provided with 3% interest loans and 10000 employment opportunities will be created for SC/ST beneficiaries by providing training, looms and accessories, working capital and housing facilities. 5000 silk weavers will be covered under catalytic development program of Government of India for the development of



the silk sector in the State. 50 clusters and groups of weavers will be identified and developed under integrated handloom development scheme with coverage of about 10000 weavers. All handloom weavers will be provided with yarn subsidy at the rate of Rs. 15 per kg of yarn purchased through National handloom development corporation which is subject to change according to market fluctuations. The benefit of power subsidy will be extended to powerloom units having power connection upto 50 HP. 20000 weavers will be provided with 2 power looms each at subsidized rate of 50% subject to ceiling of Rs. 2.00 lakh per beneficiary with 5000 SC/ST beneficiaries being provided looms with 90% subsidy. The benefit of power subsidy of Re. 1 per unit will be extended to the old spinning mills also to prevent further closure of mills. Financial assistance will be provided for taking up modernization of ginning, pressing and spinning mills. Special emphasis will be given to technical textiles sector. There would be a special focus on employment generation to the tune of 5 lakh persons and investment mobilization of Rs. 10000 crore.

During the year 2014-15, Rs.24154.94 lakhs budget has been released. Rs.738.10 lakhs has been spent for providing living cum workshed for 768 handloom weavers. Rs.32.78 lakhs has been paid as interest subsidy for 3% interest loan to 1218 Handloom weavers. Rs.37.50 lakhs has been released to 28 weavers co-ops. towards interest on Thrift fund scheme. Rs.450.00 lakhs has been released to 111 handloom weavers' co-operative societies towards 20% rebate on sale of handloom products. Power subsidy of Rs.3696.00 lakhs has been released to Electricity supply companies towards power subsidy of 23601 units. Rs.375.00 lakhs has been released for providing Powerlooms to 375 weavers at 50% subsidized rate. Under SCP & TSP Rs.1445.10 lakhs has been released. Under Nuthana Javali Neethi scheme, Rs.1730.605 lakhs for 25603 General, SCP and TSP beneficiaries for SMO training. Rs.22.07

crores has been released as incentive and concession for 2 Megha projects. Rs.759.00 lakhs for general programmes, Rs.166.50 lakhs for SCP programmes and Rs.69.50 lakhs for TSP has been released to KHDC for implementation of various schemes.

During the year 2015-16, Rs.225.76 lakhs budget has been allotted. Upto December 2015 an amount of Rs.13036.71 lakhs has been released for implementation of various schemes. Rs.300.00 lakhs has been released to 107 handloom weavers' co-operative societies and Cauvery Handlooms towards 20% rebate on sale of handloom products. Under Nuthana Javali Neethi scheme, Rs.590.325 lakhs has been released for providing Garment training to 8840 beneficiaries, Rs.4199.00 lakhs has been released as incentives and concession for 2 Megha projects. Power subsidy of Rs.4651.87 lakhs has been released to Electricity supply companies towards 24,349 powerloom units. Under SCP & TSP Rs.1607.35 lakhs has been released.

### 9.8.3 Sericulture

Sericulture is one of the major employment generating sectors in the State and its growth has immense employment generation potential, particularly in rural Karnataka. The area under mulberry cultivation in the State was about 87927.05 hectares at the end of December 2015 given in Table 9.17. The production of cocoons, quantity of cocoons marketed, raw silk production was high in 2015-16 compared to 2014-15 and total employment in industry was high in 2015-16 compared to 2014-15. Details of the State's production and imports of silk yarn are presented in Table 9.18. Table 9.19 provides details of expenditure incurred under various beneficiary oriented programs while Table 9.20 presents details of financial assistance availed by Sericulturists and reelers. During 2014-15, the estimated mulberry silk production in Karnataka was 9645 MTs.

**Table 9.17- Sericulture industry in Karnataka 2011-12 to 2015-16 (Up to December 2015)**

Sl. No.	Category	Unit	2011-12	2012-13	2013-14	2014-15	April to December		variation 2015 over 2014
							2014	2015	
1	Area under mulberry	'000 hectares	70.96	74.13	80.87	88.489	88.88	87.93	-0.95
2	Production of cocoons	'000 MTs.	55.96	49.44	61.41	68.759	44.16	53.00	8.84
3	Quantum of Cocoons marketed	'000 MTs.	55.03	48.95	45.99	48.492	39.71	41.43	1.72
4	Raw silk production	'000 MTs.	7.79	7.06	8.57	9.645	7.114	7.381	0.267
5	Employment in sericulture	Lakhs	9.22	9.63	10.51	11.50	11.55	11.43	-0.12

Note: MTs -Metric Tonnes, Source: Department of Sericulture.

**Table 9.18: Production of raw silk in Karnataka and import of raw silk in India (Qty: MT)**

Year	Production of raw silk in Karnataka	Import of raw silk by India
2011-12	7796	5673
2012-13	7063	4951
2013-14	8574	3260
2014-15	9645	3489
2015-16 (April – December)	7382	2274*

\* April to November period Source: Central Silk Board

**Table 9.19- Beneficiary oriented Programs for Sericulture (2015-16)**

Sl. No.	Programmes	Head of Account	2015-16 Budget allocation	Expenditure (Upto end of December 2015)
<b>1</b>	<b>Catalytic Development Programme</b>			
a	General	2851-00-107-1-35(106)	3645.00	905.525
b	Special Component Sub Plan (SCSP)	2851-00-107-1-35(422)	223.00	52.375
c	Tribal Sub-Plan (TSP)	2851-00-107-1-35(423)	134.00	33.390
2	PMKSY	2851-00-107-1-49(106)	2500.00	0
<b>3</b>	<b>New Initiatives for Sericulture Development &amp; Assistance to Stake holders</b>			
a	General	2851-00-107-1-48(106)	5346.00	3216.632
b	Special Component Sub Plan (SCSP)	2851-00-107-1-48(422)	1484.00	619.761
c	Tribal Sub-Plan (TSP)	2851-00-107-1-48(423)	671.00	253.792
	Total		14003.00	3396.385

Source: Department of Sericulture.

**Table 9.20 - Financial Assistance provided to Sericulturists and Reelers (2015-16)**

Particulars	2012-13		2013-14		2014-15		April - Dec 2015-16	
	Bene- ficiaries	Amount (Rs. Lakhs)	Bene- ficiaries	Amount (Rs. Lakhs)	Bene- ficiaries	Amount (Rs. Lakhs)	Bene- ficiaries	Amount (Rs. Lakh)
<b>1. Financial Assistance provided to Sericulturists</b>								
Mulberry Plantation	7974	368.20	9439	660.573	5486	628.12	5757	2564.431
Purchase of equipment	7169	2199.77	8282	1578.22	4648	867.306	155	17.035
Construction of Rearing House	2709	1603.80	2285	1463.45	2345	1644.506	883	395.635
Irrigation system	2188	835.19	1421	1212.22	3833	3366.426	0	0
Total	20040	5006.96	21427	4914.463	16312	6506.358	6795	2977.101
<b>2. Financial Assistance provided to Reelers</b>								
Cottage Basin	221	113.294	187	134.347	123	172.33	23	37.002
Multi-end Reeling Machine	13	95.57	13	99.05	21	218.01	6	28.679
Automatic Reeling Machine	5	300.00	1	75.00	4	288.13	0	0
Reeling Shed/ Machinaries	344	108.96	516	145.434	1270	471.595	112	135.589
Total	583	617.824	717	453.831	1418	1150.065	141	201.27

Source: Department of Sericulture.

The reduction of custom duty on raw silk from 30% to 5% during March 2011 has had a serious impact on the sericulture industry in Karnataka. It is to be noted that the raw silk price in the country is directly related to imported Chinese raw silk price. Reduction of customs duty has resulted in the drastic fall in the silk and cocoon prices in the State resulting in distress sale and large scale agitation by the farmers and other stakeholders.

Considering the above-mentioned issues, the State Government had introduced a scheme of providing incentive to cocoons to farmers in 2011-12. The State Government had implemented a package upto Rs.30/- per kg cocoons as distress relief when the cocoon rates go below Rs.160/-. To encourage and motivate the farmers to continue in sericulture, the Govt. of Karnataka has introduced a scheme of providing incentive of Rs.30/- per kg to cross-breed cocoons and Rs.50/- per kg to bivoltine cocoons. In addition to this Seed cocoon incentive, Bivoltine chawki cost, Raw silk incentive programmes are also implemented,

sericulturists are provided with infrastructure development programmes like construction of rearing houses, establishment of chawki rearing centers, drip irrigation etc., and for reelers automatic reeling machines, multi-end reeling machines, cottage/filature basin reeling machinaries etc., The State Government is also actively pursuing the issue of minimum support price for silk with the Government of India. In the Union Budget of 2015-16 the duty on raw silk imports has been reduced from 15% to 10% as against the request for 30% by State Government in the interest of stake holders with this average cocoon prices of cocoons/kg has gone down.

In 2014-15 many innovative programmes are implemented for the development of Sericulture, like (1) Rs.5 crore was provided for waiver of loans taken by 1027 sericulturists and reelers during 1982-1995 under Indo-Dutch scheme. (2) Establishment of 100 Customer Service Centres. (3) Comprehensive and transparent e-auction system in major cocoon markets. During 2015-16 following new Programmes are

announced (1) Popularization of Vishala, G2, Suvarna variety mulberry in 1000 acres (2) Establishment of Farmers Producers Organisations – 2 in North Karnataka, 3 in South Karnataka (3) To encourage 10 Private RSPs with the assistance of 4.86 crores to produce 50 lakhs Bivoltine dfls & installation Incubation Chambers in CRCs (4) Establishment of Reeling Parks in traditional areas like Ramanagara, Shidlaghatta & Kollegala with the assistance of Rs.10.00 crores to provide common reeling facilities (5) Encouraging to establish of 3 ARMs with 90% subsidy in North Karnataka (6) Encouraging Enterprueners to establish Pupae Processing Machine developed by Central Silk Board with 75% subsidy.

### **KARNATAKA SILK MARKETING BOARD LTD**

The Karnataka Silk Marketing Board Ltd. promoted by the Government of Karnataka was established in 1979. This was done with the intention of stabilising the prices of Silk

yarn. During 2014-15 the Company has made a turnover of Rs.2310.00 Lakhs as against the turnover Rs.3860.00 Lakhs in the previous year. During this year upto Dec-2015 the turnover was Rs.803.98 Lakhs. Table 9.21 presents details of Financial performance of Silk Marketing Board.

During 2015-16 upto December, the transactions in the Silk Exchanges have increased (56%) by 742 M. tons when compared to the corresponding period of pervious year. The prices of silk yarn for filature silk has decreased by 21% and charaka silk prices were decreased by 26%, when compared to the prices of 2014-15.

During 2014-15 the Company has purchased 66 tons of silk amounting Rs.18.01 Crores and sold 80 tons valued Rs.23.10 Crores and the loss incurred was Rs.439.00 Lakhs. Table 9.22 presents details of Transactions of Silk Yarn at Silk Exchange and average prices for 2010-11 to 2015-16.

**Table 9.21: Financial performance of Silk Marketing Board (Rs in Lakhs)**

Particulars	2012-13	2013-14	2014-15	2015-16 (Upto Dec-2015)
1. Turnover	4647.40	3860.00	2310.00	804.00
2. Profit after tax	(-154.47)	(-) 541.82	(-) 439.00	(-) 265.00

Source: Karnataka Silk Marketing Board Ltd

**Table 9.22: Transactions of Silk Yarn at Silk Exchange and average prices during 2010-11 to 2015-16, (Upto December-2015)**

YEAR	Quantity (Tonnes)	Average Price Rs. Per Kg.	
		Filature	Charka
2010-11	1037	2163	1962
2011-12	1310	1913	1655
2012-13	1238	2236	2182
2013-14	1358	2860	2624
2014-15.	2057	2539	2249
2015-16 (Upto Dec-2015)	2060	2131	1714

Source: Karnataka Silk Marketing Board Ltd

**Table 9.23: Particulars of Purchase & Sales and Profit/Loss of Silk Marketing Board from 2006-07 to 2015-16 (Upto December-2015), (Quantity in tons and value in Rs. Lakhs.)**

Year	Purchase		Sales		(+ Profit (-) Loss	Accumulated (-) Loss
	Quantity	Value	Quantity	Value		
2006-07	105	1215	95	1165	(-) 316.65	1413.87
2007-08	87	959	113	1324	(-) 405.86	1819.73
2008-09	127	1569	147	1898	(-) 361.88	2181.61
2009-10	171	2661	163	2653	(-) 258.79	2440.40
2010-11	201	4179	161	3444	(-) 399.63	2840.04
2011-12	270	5008	215	4320	(-)368.70	3208.74
2012-13	118	2696	209	4647	(-)154.47	3363.21
2013-14	132	3909	129	3860	(-)541.82	3905.00
2014-15	66	1801	80	2313	(-)439.44	4344.44
2015-16 (Upto Dec-15)	42	878	35	804	(-)255.34	4609.48

Source: Karnataka Silk Marketing Board Ltd

During the year 2014-15 the prices of imported silk in the domestic market was higher than the domestic silk price and the prices of domestic silk were on lower side throughout the year, when Compared to previous year. The average price of filature silk during April-2014, was Rs.2996 per K.g and the same has decreased to Rs.2459 per K.g by December-2014. The prices during March-2015 was Rs.2371/- per K.g and the prices have come down since April-2015 and the average prices during December-2015 was Rs.2082/- per K.g , the prices are showing steady trend with a difference of Rs.50 to 100 per K.g upto November-2015, during December-2015 the prices are increased by Rs.200/- to Rs.300/- per K.g. Table 9.23 presents details of Particulars of

Purchase & Sales and Profit/Loss of Silk Marketing Board from 2006-07 to 2015-16 up to December 2015. The production of silk yarn and import of silk yarn in Karnataka from 2000-01 to 2014-15 is given in Table 9.24.

The Company had purchased the silk by offering the day to day market price and purchased 66 tons and sold 80 tons during 2014-15 & at the end of the year 31-03-2015, the stock holding was 10.4 tons. During 2015-16 upto December -2015, 41.88 tons of silk was purchased and sold 35.16 tons and the closing stock at the end of December – 2015 was 17 M. tons.

**Table 9.24: Production of silk yarn and import of silk yarn in Karnataka 2000-01 to 2014-15**

Year	Karnataka Silk Production (in tons)	Import of Silk Yarn (in tons)
2000 – 2001	8121	4713
2001 – 2002	8200	6808
2002 – 2003	8728	9054
2003 – 2004	6760	9258
2004 – 2005	7302	7185
2005 – 2006	7471	8334
2006 – 2007	7883	5567
2007- 2008	8240	7921
2008 - 2009	7238	8392
2009 - 2010	7360	7341
2010 - 2011	7338	5870
2011 - 2012	7796	5673
2012 - 2013	7063	4951
2013 - 2014	8574	3259
2014 - 2015	9645	3489

Source: i) Department of Sericulture, ii) Central Silk Board

Company is primarily discharging the function of Price Stabilisation of silk yarn which is generally a non-profitable proposition. Company is expected to protect the interest of reelers and farmers by continuously purchasing silk in all Silk Exchanges in Karnataka. The Company being the biggest Government licensed buyer of silk at Silk Exchanges of Karnataka State has to strive to maintain price stability and to prevent formation of groups and cartels among traders and merchants, thereby to protect the interest of reelers. Company has to maintain sufficient buffer stock to meet the daily requirement of consumers spread over the states of Karnataka, Tamilnadu, Andhra Pradesh & Telangan State. It sells silk to artisans(i.e. weavers). When the prices are continuously stable, the intervention of KSMB in the market may not be necessary.

This will result in very low purchase and sales. This is in fact the role of any Price Stabilisation Agency and KSMB is one among them. Maintenance of procurement and distribution points involves considerable overhead expenses such as rent for office and godown, insurance etc.

#### **Strength and strategy of the Board:**

1. Board is buying Silk yarn in the open auction in all the Silk Exchanges, and maintaining the stability in the prices of cocoon and silk yarn there by protecting the interest of reelers and rearers .
  2. Board is planning to discharge its activities more effectively in the coming years.
- The vision of the Board is to achieve the highest position in the sale of silk yarn.
  - To protect the interest of small and very small weavers and twisters.
  - To give direct and indirect employment to nearly 02 Lakhs families who are depending on this occupation.

- To give fair price to the reelers and weavers.
- To intervene the market effectively for the stabilization of prices.
- To create a linkage between the reelers and consumers.
- Effective usage of financial assistance extended by the Government of Karnataka.
- During 2014-15 the Department of Sericulture has released Rs.50 Lakhs for purchase activities and during 2015-16 (May-2015) the Government of Karnataka has released Rs.10 Crores in the form of loan and agreed to give Guarantee upto Rs.20 Crores to avail loan from the Bank.
- Board is having its marketing network in the states of Karnataka, Tamilnadu, Telangana & Andhra Pradesh.

The Board has the Action plan of 320 tonnes turnover during the year.

#### **9.8.4 Karnataka Information Technology and Biotechnology Services**

The Information Technology Revolution in Karnataka is initially began in Bangalore. The details of the following are given in Chapter 4:

- The details of IT revolution in Bangalore
- The Penetration of ITBT into regions other than Bangalore along with Karnataka i<sup>4</sup> Policy and its highlights
- GoK-NASSCOM Second Startup Warehouse
- Karnataka Semiconductor Venture Capital Fund (KARSEMVEN Fund)
- KARNATAKA ANIMATION VISUAL GAMING & COMICS (KAVGC) POLICY
- Karnataka's Electronics Systems Design and Manufacturing Policy 2013
- ICT Skills Development Society
- Investment in ITBT sector

Table 9.25 presents details of Achievements in IT & BT Sector from 2011-12 to 2015-16.

**Table 9.25: Achievements in IT & BT Sector for the year**

Sl. No	Particulars	Units	2011-12	2012-13	2013-14	2014-15	2015-16 (April-December)
1	Software Exports	Rs.in crores	82110	95048	102273	107125.77	81565
2	No STP Units Approved	No.s.	26	16	24	15	15
3	Investment from STP Units Approved	Rs.in crores	62.71	17.09	78.14	24.06	138.99
4	Nos. of Foreign Equity Companies	Nos.	19	14	14	10	9
5	Investment from Foreign Equity	Rs.in crores	21.35	1.3	29.39	23.63	15.14
6	Hardware Exports	Rs.in crores	3021	3250	4291.10	4617.61	2446
7	No of Electronic Hardware	Nos.	1	2	4	1	0
8	Investment from Hardware Units	Rs.in crores	0.1	0.11	182.02	15.41	0
9	No of Major India Companies	Nos.	0	1	5	0	2
10	Investment from Major Indian Companies	Rs.in crores	0	15.2	223.05	0	113.65
11	No of SME's Companies	Nos	8	3	9	5	4
12	Investment from SME's Companies	Rs.in crores	41.46	0.79	7.72	0.43	10.20
13	No of BPO Companies	Nos	3	0	0	0	0
14	BPO Exports	Rs.in crores	17775	20392	16692.73	18984.37	NA
15	Investment from BPO Units Approved	Rs.in crores	1.02	0.6	0	0	0

Source: Software Technology Parks of India, Bengaluru

### 9.8.5 Initiatives of e-Governance

Karnataka has an exclusive e-Governance Division in the Department of Personnel & Administrative Reforms, headed by Secretary to Government. This was set up in the year 2003 with a view to accelerate the process of IT enabling eg. Government processes for the benefit of citizens and to improve transparency and efficiency in administration. The Department of Personnel & Administration Reforms (e-Governance) has created the necessary infrastructure for implementing e-Governance initiatives in the state. The Schemes of e-Governance Department are as follows

#### 1. Mobile Governance

Mobile One has the unique distinction of being certified as India's first and the world's

largest multi-mode mobile governance platform with over 4,000 services. It is a unified mobile platform for delivery of citizens' services both from the Government and Private sector. These anytime, anywhere, anyhow services will be available 24x7 days at any location in India on any mobile device.

The project was successfully launched on 08th December 2014, where the Hon'ble President of India Shri. Pranab Mukherjee in the presence of Hon'ble Governor of Karnataka Shri. Vajubhai Vala & Hon'ble Chief Minister of Karnataka Shri.Siddaramaiah dedicated the platform. With 650+ services of 30+ State departments along with important Central level services and many more private application services to the general public of the country.

**Categories of Services:**

The following categories of services are available on Mobile One and Table 9.26 presents current status of Mobile One.

Service Type	Channels
Payment services	SMS, IVR, Mobile Web, Smart Client Apps
Pull Services	SMS, IVR, Mobile Web, Smart Client Apps
Push Services	SMS, IVR
Data Capture Services	SMS, IVR, Mobile Web, Smart Client Apps

**Table 9.26: Current Status of Mobile One**

Mobile App & web visitors	over one crore
Number of IVR calls	over 50 lakhs
Payments services	over 9.5 crores
Departmental Services	over 650
VAS services	over 3500

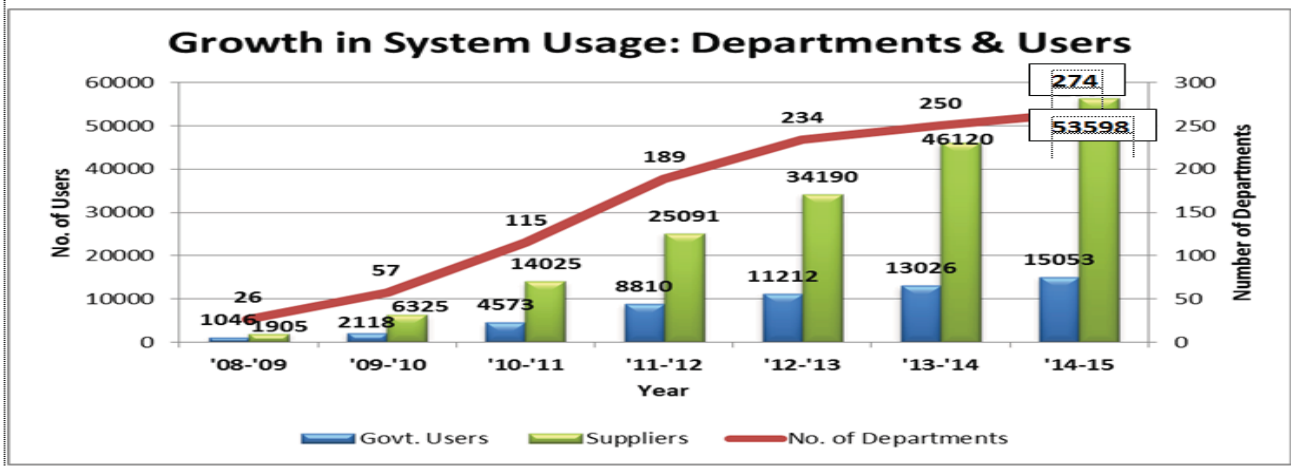
Source: e-Governance

**1. e-Procurement:** E-Procurement is aimed to enhance transparency, accountability and reliability and responsiveness in all Government procurement activities. The e-Procurement is implemented on an “end to end” solution. It is to the credit of the project that it is a less-paper office.

**Project Status:**

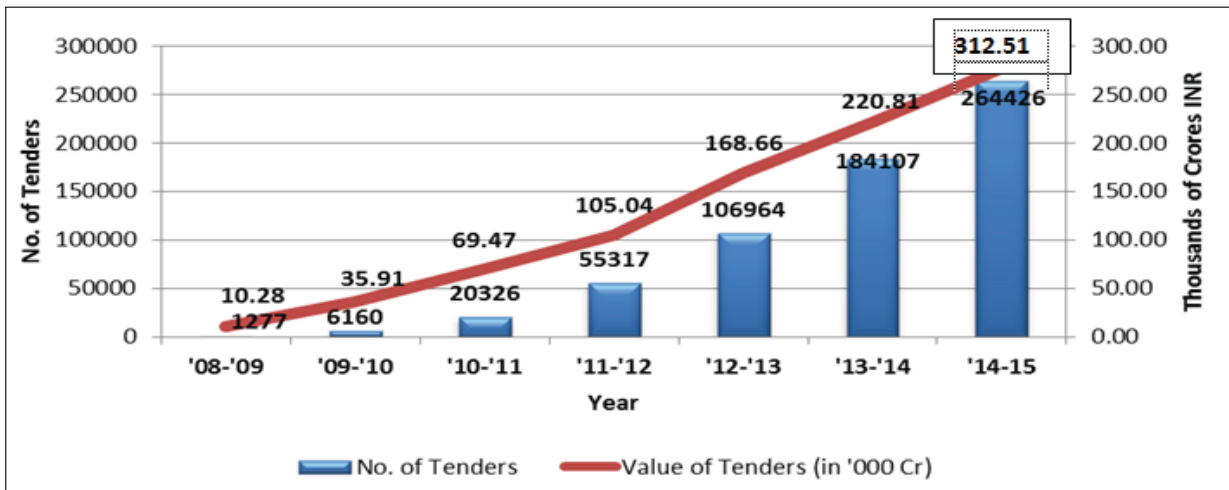
This project has been extended to 274 Departments/Organizations as of September 2015, procurement valued at more than 3,12,513/- crores have been made through this platform. This platform has enabled competition among the bidders. 53,598 suppliers /bidders are registered on the platform.

**Figure 9.4: Growth in System Usage: Department & Users**





**Figure 9.5: Growth in System Usage: No. and value of finalized tenders**

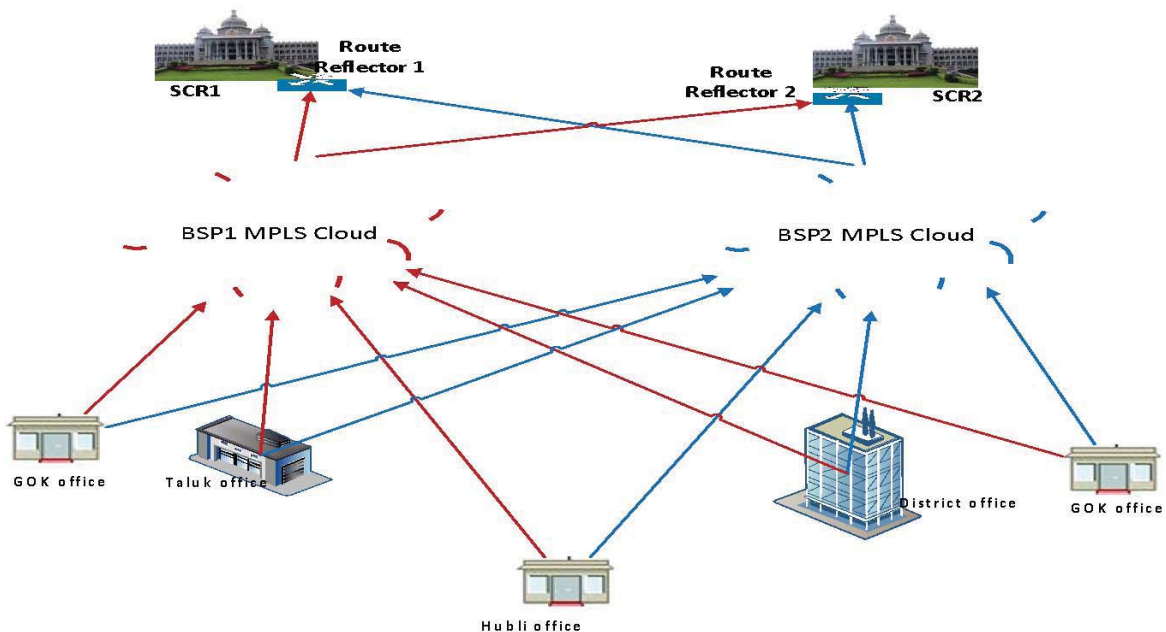


**2. Karnataka State Wide Area Network (KSWAN)**

Karnataka State wide Area Network (KSWAN) is providing a reliable/ resilient and a secure backbone to meet the information requirements and associated services. KSWAN is connected in three levels of connectivity from the state up to the District and Taluka levels.

The primary purpose of KSWAN is to act as a backbone for all “Data”, “Voice” and “Video”

**KSWAN 2.0 Architecture**



services across the State. The services have increased tremendously in the last 2 years. The present status:-

- a. **4400** Offices of **68 Departments** connected
- b. **2,400** Offices provided IP Phones.
- c. **3 times** increase of Bandwidth.
- d. Internet facility to all the KSWAN Users.
- e. Taluka Level Video Conferences in 176 Taluka implemented.
- f. KSWAN 2.0 is being implemented.

### 3. Human Resources Management System (HRMS):-

The Human resource Management System covers automating all the Human resource functions like leave, transfer, payroll, administration and service procedures of the government and also provides a unified view of deployment of human resources across the state. Human resource Management System helps to create an exhaustive and accurate database of Government employees for effective administration, improving productivity and efficiency. HRMS is completely adopted in the State, The present status:-

- a) Pay, D.A., Advance, arrears, etc., paid through electronic platform
- b) Immediate availability of salary component of Budget to the Finance Department.
- c) Government has given sanction to upgrade the present HRMS system into HRMS -2.0 and the SRS is prepared and scheme is expected to be rolled out by March 2017:
- d) An interface is provided to Accountant General Office for updating the Leave balance of Gazetted officers, which will facilitate in getting their leave title online.
- e) Another interface is provided to “Jyothi Sanjeevini Trust” to incorporate the details of employees and their family dependents which will facilitate them to avail the Cashless health service.

HRMS has bagged several national Awards. Other states are trying to emulate this system in their respective States.

### 4. State Data Centre (SDC):-

The Karnataka State Data Centre is a key supporting element of e-Governance initiatives and businesses for delivering

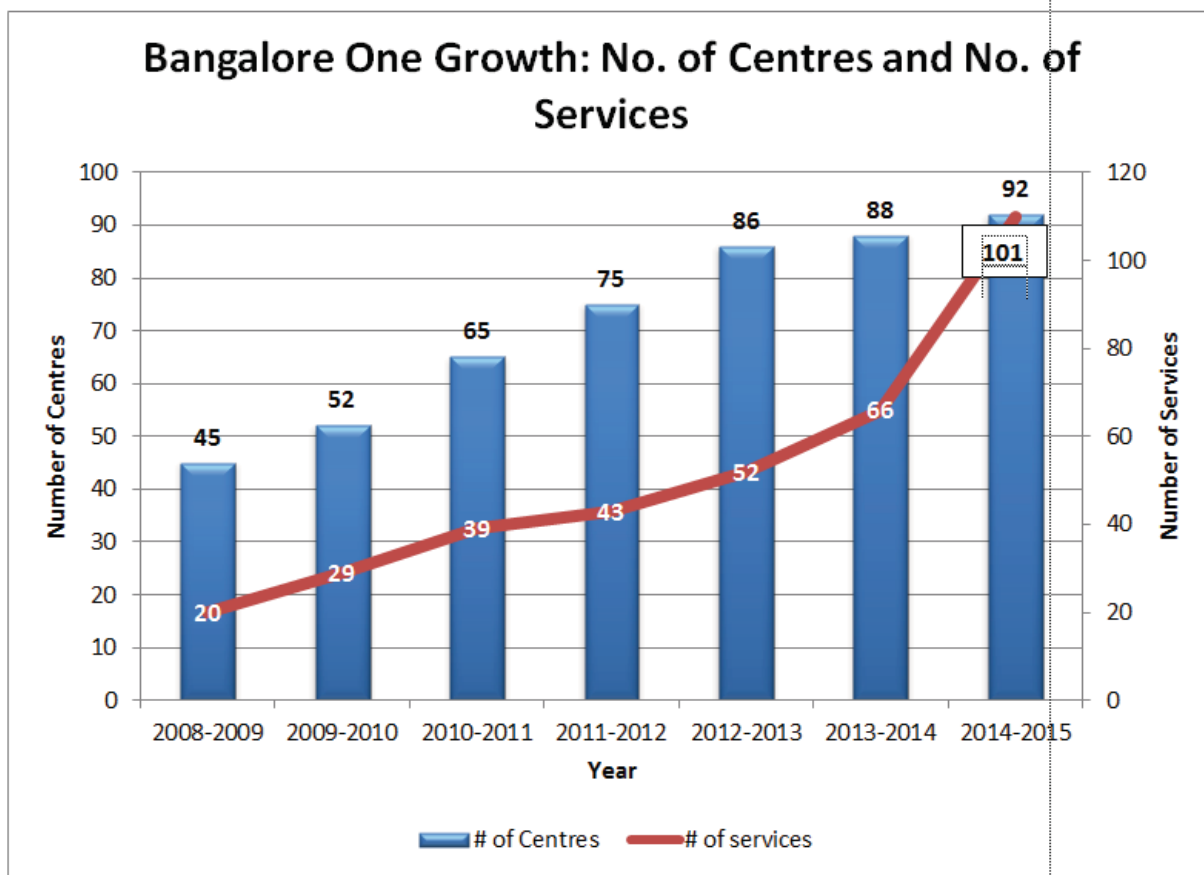
services to the citizens with greater reliability, availability and service ability. It enables various state departments to host their services/applications on a common infrastructure. The state has two data centres, the first of which was started in 2005 and the second went live in 2010. The current status (December 2015):-

- a) **178 softwares of 65 departments hosted.**
- b) Selection of a site for setting up of a Disaster Recovery site is completed.
- c) The State Data Centre has been cloud enabled with the implementation of cloud software for management & spinning of servers.
- d) The State Data Centres has been certified with ISO 27001-2013 and ISO 20000

**5. Bangalore one Centre:-** Bangalore One aims at integrated citizen service centres “One stop shop” concept. The project which was launched on the 2nd April 2005 runs on public Private Partnership model (PPP). It is one of our flagship projects which have been widely appreciated by citizens. More number of services of departments are being added. The current Status (FY 2013-15):-

- a) The number of centres which was at **14** to start with has risen to **92**.
- b) The number of services delivered were **11** to start with and has now risen to **101**.
- c) The total transactions have crossed **12.18 Cr.**
- d) The project has bagged several National Awards including “**Namma Bengaluru Foundation award**” given by Citizens forum of Bangalore.

The growth of Bangalore One over the years is highlighted in the below graphs.

**Figure 9.6: Bangalore One Growth: No. of Centres and No. of Services**

**6. Karnataka One:** - On successful completion of Bangalore One project the Government of Karnataka decided to replicate it to tier two cities of Karnataka. 09 centres are functioning at Hubli – Dharwad, Shivamoga, Belgavi, Bellary, Mysore, Mangalore, Davangere, Gulbarga and Tumkur. The current status (FY 2013-15):-

- 39 centres are functional.
- 83 Services are delivered through these centres.
- The total number transactions till date have crossed 2.34 Cr.

**7. SECLAN:** - LAN Connectivity has been provided to the Offices in Vikasa Soudha, Vidhana Soudha, Raj Bhavan & Multi Storied Building. There are 5982 nodes.

**8. Aadhaar:-** The objective of the scheme was to issue Identity numbers to around 6 crores resident of the State. Currently 5.20 crore (85% of population) Aadhaars have been generated. A lot of publicity measures using

print media, news Channels, Cinema Theatres, endorsement through Brand Ambassador etc., and other special activities are under taken to enroll remaining residents. Some of the special activities are:-

- A special enrolment drive for schools & Colleges to enroll the Students from 6 – 18 years of age in association with education Department.
- Establishment of 400 permanent enrolment centres at Atal Jana Snehi Kendras.

**9. Karnataka Resident Data Hub:** - Karnataka Resident Data Hub (KRDH) would essentially be a repository of all the Government services availed by each citizen of the State. This data hub will be populated with the beneficiary identifying key from the seeded Department's Data base against the UID of an authenticated citizen. As a result eligible people will avail the services and the volume of pilferage is going to be significantly reduced. At present seeding in 9 Departments

viz., Social Security Pension, Minorities, RDPR, Food & Civil Supplies, Election Commission, HRMS, NAREGA, Education, Backward Classes, Social Welfare is in progress. KRDH has processed-7 crores of data till date.

**10. Capacity Building:** - Government of Karnataka is in the forefront in initiating and implementing successfully several e-Governance projects of national importance in order to improve delivery of public services. Imparting of specialized training and enhancing the knowledge, skills of the employees in various facets of e-governance and ICT is envisaged.

The Department is providing consultants to other Departments for the implementation of e-Governance initiatives. For this purpose State e-Mission Team (SEMT) is established in the Department and it is interacting with other Departments. The current status (FY 2013-15):-

- a) 150 Officers trained in e-Governance Project Life Cycle under STeP (Specialized Training for e-Governance Projects)
- b) 2200 officials of 30 Zilla Panchayaths, 30 Departments & Legislature were imparted Basic Computer Training.
- c) 1550 Government Officials were exposed to e-Procurement Training.

**11. E-District:** - e-District is one of the Mission Mode Projects (MMP) under National e-Governance Programme. This MMP aims at electronic delivery of identified high volume citizen centering services, at District and subdivision level. Government Order has been issued to set up e-District in the State. District e-Governance societies under the Chairmanship of Deputy Commissioners formed in 26 Districts. The State Project Monitoring Unit (M/s. Wipro) has completed the Functional and Technical requirements of various citizen centric services from more than 28 Departments of 340 services.

**12. Common Service Center:** - The State Government in association with GOI is going to establish 5,000 Common Service Centers. Government order has been issued to set up

CSC's in the state. Tender process is in progress.

**13. State Service Delivery Gateway (SSDG):-** This scheme will be enabling the State Portal with other components such as State Service Delivery Gateway (SSDG) and electronic form (e-form) application. e-form application will enable citizen to download forms and submit their applications electronically. It is proposed to implement SSDG 2.0.

**14. Sachivalayavahini:** - File Monitoring System (FMS) and Letter Monitoring System (LMS) are in operation in Karnataka Government Secretariat. Another package called document management system and court monitoring system is also operationalised. The upgraded Sachivalaya-2 package is implemented.

During the year 2014-15 the scheme is extended to Commissionrates, Directorates, Deputy Commissioner's Office & Zilla Panchayaths,

### 9.8.6 Mining and Minerals Industries

During 2015-16, upto December 2015 the Department of Mines and Geology has granted one mining lease for limestone over an extent of 519 hectares where as in the previous year the department has executed total 6 mining lease over an extent of 1000.73 hectares (03 mining leases for limestone over an extent of 983.03 hectares, 01 mining lease for limestone & dolomite over an extent of 4.85 hectares 01 mining lease for limeshell over an extent of 8.31 hectares & 01 mining lease is sanctioned for laterite over an extent of 4.54 hectares) and renewed 03 mining lease for Iron ore over an extent of 2159.89 hectares.

During 2015-16 upto December 2015, 16 quarry leases for ornamental stones and 166 leases for building stone have been sanctioned where as in 2014-15, 30 leases for ornamental stone were sanctioned and in 2013-14 a total of 13 Quarry leases for ornamental stone have been granted.

The Department of Mines and Geology has realized revenues of Rs.1318.93 crores as against the target of Rs.1474.74 crores upto December 2015 and as against the annual target of 2048.26 crores for the year 2015-16.

Details of royalty collections from 2013-14 to 2015-16 are provided in Table 9.27. Scheme wise details of Plan and Expenditure presented in Appendix 9.6

## 9.9 Status of Public Enterprises in Karnataka

### 9.9.1 Karnataka State Small Industries Development Corporation (KSSIDC)

Karnataka State Small Industries Development Corporation Limited (KSSIDC)

promotes the development of small scale industry (SSI) sector by providing industrial sheds, channels for procurement and distribution of raw materials and management guidance to SSI entrepreneurs. The Corporation has a network of 16 Raw Material Depots for the distribution of required raw materials to SSI units through out the State. It has also acquired the lands in and around Bangalore and also in other Districts for the construction of sheds and for the development of plots as per the demand from SSI units. The details of raw materials sold, sheds constructed and the plots developed by the Corporation are given in Table-9.28. The financial performance of KSSIDC is shown in Table-9.29 and 9.30, Sales Performance of KSSIDC given in Table – 9.31.

**Table 9.27: Details of Royalty Collections (Rs. in crore)**

Year	Target	Achievement	Major Mineral (Ore and other industrial minerals)	Minor Mineral (Building Stone +Ornamental Stone + Sand)
2013-14	1411.91	1366.99	743.04	623.95
2014-15	1750.00	1794.61	925.94	868.67
2015-16 (upto Dec/2015)	2048.26	1318.93	625.12	693.81 (as per MPR)

Source: DCB Section, Mining and Geology Department

**Table-9.28: Performance Of Karnataka State Small Industries Development Corporation**

Particulars	Unit	2011-12	2012-13	2013-14	2014-15	2015-16 (April to December -2015)
Depots for distribution of raw material	Number	23	23	17	17	16
Raw material sold (Iron & Steel)	Rs. Crore	86.71	64.51	53.96	49.38	17.66
Industrial sheds constructed (Incl. Sheds / Godowns/ Flats/ Shops)	Number	6163	6163	6177	6180	6210
Industrial Plots developed (cumulative)	Number	7010	7164	7617	8258	8425

**Table: 9.29: Financial Performance of Karnataka State Small Industries Development Corporation Limited, (Rs. Lakh)**

Year	Total income	Total Expenditure	Net Profit after tax
2011-12	15660.91	13370.06	1699.50
2012-13	13058.41	11290.88	1254.10
2013-14	11147.00	9579.00	1126.00
2014-15	11276.00	9270.00	1482.00
2015-16 (Up to Dec-15 as per Budget )	36408.00	35746.00	384.00

Source: KSSDIC

**Table 9.30: Financial Projections for the period 01.04.2014 to 31.03.2019 (Rs. Lakh)**

Sl. No	Year	Total income	Total Expenditure	Net Profit
1	2014-15	34100.22	32934.08	1166.13
2	2015-16	35805.23	34580.79	1224.44
3	2016-17	37595.49	36309.83	1285.66
4	2017-18	39475.26	38125.32	1349.95
5	2018-19	41489.63	40031.58	1417.44

Source: KSSDIC

❖ In the Karnataka Industrial Policy 2014-19 announced by Government of Karnataka, provision has been made that, KIADB to earmark minimum 20% of allotable land in their Industrial Areas for MSMEs and KSSIDC will be allotted land in KIADB Industrial Area, depending upon the request for making industrial plots and sheds of smaller sizes for MSME sectors. Accordingly, KSSIDC will get the allotment of suitable lands from KIADB for the establishment of New Industrial Estates for MSME sectors in the State.

❖ Further, as per Karnataka Industrial Policy 2014-19, provision has been made for KSSIDC that, the KSSIDC will also procure land for its own for developing the estates exclusively for micro and small enterprises. The area to be procured will not be lesser than 50 acres. Accordingly, KSSIDC will identify suitable lands for the development of New Industrial Estates in the State, with due consent from the land owners and the same land will be purchased under section 109 of Karnataka Land Reforms Act 1966, by getting approval from the Revenue Department.

❖ Further, KSSIDC will identify the suitable Government lands in Rural areas and get the sanction of the said lands from Revenue Department for the establishment of Small Industrial Estates.

The details of 11<sup>th</sup> Five Year Plan target & achievement of the corresponding department are given in Appendix 9.7. The Corporation's principal objective is promotion and development of Small Scale Industries in the State. Construction and utilization of infrastructure especially in the backward areas, procurement and marketing industrial raw-materials and extending technical support and assistance are the means to achieve the above goals. In the last few years, the Corporation is playing a **key role** in the development of MSME Sector in terms of establishment of new Industrial Estates, Up-gradation of basic infrastructure in the existing Industrial Estates by introducing various entrepreneur friendly measures both in Industrial Estate and Commercial activities. KSSIDC's policy initiatives and strategies includes.

- Monitoring of the lands allotted by way of introducing strict time limit on utilisation of plots.
- Initiating participative policy in which land owners are made partners in the benefits of the Industrial Estates to be developed.
- To establish 22 Nos. of New Industrial Clusters in about 18 places based on the availability of local skill & demand from the industry side in various districts of the State.

- Policy to develop Functional Industrial Estates / Parks on PPP Model on privately owned to avoid land acquisition and thereby, avoid blockage of funds.
- Proposals to develop new Industrial Estates keeping in mind the modern infrastructure, utility and service requirements.
- To upgrade the existing Infrastructure and to take up Critical infrastructure works in the Indl. Estates, by seeking separate funds in the State Budgets and also by bringing them under the ambit of Industrial Township Act so that the concerned Industries Associations of the Estates could collect the taxes and other levies and maintain the Estates themselves efficiently.
- With a view to assist the SSI Sector in marketing their products, Marketing Assistance Scheme was proposed to be taken up for catering to the requirements of Public Sector Undertakings / Boards and Corporations and other Agencies. In this connection KSSIDC had requested the Government to extend exemption under section 4(g) of the KTPP Act and only if Govt. extends this exemption Marketing Assistance Scheme can be perused by KSSIDC Ltd.,

KSSIDC has been continuing to serve the SSI units in the State by procuring and distributing various Industrial Raw materials required by them like Iron & Steel, Coal, Cement, Paraffin Wax etc. through its 16 raw material depots throughout the State.

Since KSSIDC is procuring & distributing various industrial raw materials, this has helped the SSI units in getting good quality of raw materials at reasonable prices. This has acted as a deterrent to the Private Traders from exploiting the SSI units. KSSIDC has been extending 30 days interest **free credit facility** to the SSI units for purchase of raw materials through KSSIDC raw material depots against Bank Guarantee. Also under the provisions of MOU executed between KSFC and KSSIDC, M/s. KSFC is extending Rs. 100.00 lakhs financial Assistance per unit / per year to the SSI Sector for the purchase of Industrial Raw Materials under line of credit. This has helped the SSI units to meet their raw material requirements without immediately arranging the funds.

Due to severe competition, declining prices due to cheaper imports from China, Korea etc., the prospects of improving the sales of raw materials through KSSIDC are not encouraging. KSSIDC may find it difficult to achieve the sales target for the year 2015-16. However, efforts will be made to achieve maximum possible sales target of raw materials through KSSIDC raw material depots.

The Corporation has also proposed to take up establishment of New Industrial Estates / construction of sheds / Complexes at the following places are given in Table 9.32.

**Table 9.31: Sales Performance of KSSIDC (2014-15 & 2015-16)**

Sl No	Items	Target for 2014-15		Target for 2015-16		Sales performance 2014-15		Sales performance 2015-16 (Up to December-15)	
		Qty In Mts	Value In Rs. lakhs	Qty in Mts	Value in Rs. lakhs	Qty in Mts	Value in Rs. lakhs	Qty in Mts	Value in Rs. lakhs
1	Iron & Steel	13,800	6624	12,000	5650	10,196	4938.48	6,272	2605.00
2	Coal **	27,340	714	27,300	737	26,294	745.64	00	0.0
3	Wax	200	211	70	80	58	66.68	7	775.00
4	Cement *	3,000	226	460	30	3862	161.32	2285	0

\*\* Due to change in policy regarding mode of transportation by M/s.WCL, Nagpur, coal transaction has not taken place during 2015-16. \* Cement is sold on commission basis. Therefore value is not taken.

**Table 9.32: New Industrial Estates / construction of sheds / Complexes of KSSIDC**

Sl. No.	Name of Industrial Estates	Extent of Land in acres	No. of Sheds Constructed	No. of plots proposed to be Developed	Project Cost in lakhs
1	Kudumalakunte, Gowribidanur Tq.	..	40		536.00
2	Pavagada 2 <sup>nd</sup> Stg.	34.00			600.00
3	Mangur, Chikkodi	14.10		212	720.00
4	Chikkahosahalli, Anekal.	19.00		146	710.00
5	Muttugadahalli, Bangalore North	12.15		62	460.00
6	Hireshakuna, Soraba	20.00		102	750.00
7	Ullarthikaval, Challakere	125.00		350	5150.00
8	Khudapura, Challakere	50.00		125	1875.00
	Total	274.25	40	997	10801.00
Proposed Complexes					
1	Golden Jubilee Complex at Rajajinagar (Existing AO Bldg)				5150.00
2	M.S. Complex at Rajajinagar, (Canteen Bldg)				600.00
				Total	5750.00

Source: KSSIDC.

### 9.9.2 Karnataka State Industrial Area Development Board (KIADB)

Karnataka Industrial Areas Development Board (KIADB) is a statutory body, playing an important role in development of industries in the state. Since inception, the KIADB has developed 153 Industrial Areas in 29 districts of the state covering an area of about 51048.69 acres. In all the industrial areas developed by KIADB, basic infrastructural facilities like internal roads, water supply, power supply, street lights, common facilities centers, buildings, housing and offsite

infrastructure like widening & improvement of approach roads etc., are provided.

Govt. of Karnataka vide its order dtd.13-08-2007 and 13-05-2010 in order to facilitate land acquisition activities for industrial development, has introduced a land-sharing scheme to KIADB acquired lands, wherein about 9583.00 Sq.ft. of developed land will be provided to the land owner in lieu of land compensation fixed for one acre of land acquired. The statistics on the performance of KIADB for the last five years are given in Table 9.33. Achievement made by KIADB in 11<sup>th</sup> five year details are presented in Appendix 9.8.



**Table 9.33: Performance of Karnataka State Industrial Areas Development Board 2011-12 to 2015-16 (April to December 2015)**

Sl.No.	Particulars	Unit	2011-12	2012-13	2013-14	2014-15	2015-16 (April – December 2015)
1.	Area acquired	Acres	7723.25	10012.20	5497.47	5922.50	894.90
2.	Area allotted (a) SSI, L &M	Acres	1004.86	1006.37	458.56	335.54	497.69
	(b) Single Unit Complex	Acres	5145.44	7604.72	574.88	2825.46	858.21
	Total	Acres	6150.30	8611.09	1033.44	3161.00	1355.90
3.	Expenditure incurred for acquisition	Rs. in lakhs	98,210.00	173,100.00	118,021.00	140,919.92	127,361.00
4.	Expenditure incurred for development	Rs. in Lakhs	15,575.00	31,260.00	52,894.00	36,758.08	39,178.00
5.	Total Expenditure incurred	Rs. in Lakhs	113,785.00	204,360.00	170,915.00	177,678.00	166,539.00
6.	No. of Entrepreneurs	No.	438	452	359	225	224
	(a) SSI units, L & M	No.	20	29	10	16	7
	(b) Single Unit Complex						
	Total		458	481	369	241	231

Source: Karnataka State Industrial Areas Development Board, Bangalore

### 9.9.3 Karnataka State Electronics Development Corporation Limited (KEONICS)

Karnataka, specifically, Bangalore is a preferred destination for companies looking to offshore their information technology (IT) and back-office functions, due to the metropolis' natural and strategic advantages coupled with the support extended by the Government of Karnataka to the IT industry in the form of allotment of land at concessional rates, IT infrastructure and other tax incentives to the IT Entrepreneurs. Further, the industry has its low-cost advantage and is a financially attractive location when viewed in combination with the business environment which the State offers, and the availability of skilled people. Further, a number of India's top technology firms have their strong base in the Silicon valley of India, i.e. in Electronic City, Bangalore. These IT majors have a decisive role in IT Exports and instrumental in regularly achieving and sustaining growth.

In order to ensure that the fruits of the IT revolution are obtained in all regions of the State and to encourage the local entrepreneurs to set up their business units, the Government of Karnataka has taken a series of measures to establish IT Infrastructure/IT Parks in the Tier-II cities. To supplement the measures taken in this direction, the Government entrusted the Karnataka State Electronics Development Corporation Limited (KEONICS) with the responsibility of setting up IT Parks in Tier-II Cities in the State and done the role of a nodal agency to provide necessary IT Infrastructure and support to the IT Industry & the entrepreneurs in the State.

The activities that are presently being undertaken by KEONICS can be broadly categorized as i. IT Infrastructure Facility Services ii. Commercial & Marketing Services iii. Training Services iv. Information Technology Enabled Services (ITES) and Allied Services v. Consultancy Services and vi. Human Resources & Manpower Consultancy Services.

KEONICS is actively involved in establishing IT Parks in Tier - 2 Cities in the State such as Hubli, Gulbarga & Shimoga. The progress made in this direction is as under-

**IT Park, Hubli:** The Government of Karnataka has established IT park in Hubli with state-of-the art infrastructure. The first step in this direction was taken way back in the year 1999-2000 by setting up an IT park with 2,75,000 sq. ft. built up area in a sprawling IT complex at Hubli with a total investment of Rs 42.36 crore. The Government has offered additional incentives including providing work space at concessional lease rentals to prospective entrepreneurs to utilize the space available for establishing IT and IT enabled businesses in the complex. KEONICS has been entrusted with the responsibility of maintaining the IT Park Complex at Hubli.

**IT Park, SEZ, Shimoga:** The Government of Karnataka has announced the establishment of IT SEZ and IT PARK in Non-SEZ areas in Shimoga. KEONICS has been mandated to establish and develop IT -SEZ and IT park in KIADB Industrial Estate, off Shimoga Bhadravathi Highway. Developmental works have been undertaken to create 1 million sq.ft built up area in 25 acres of land allotted for developing the IT SEZ with an estimated investment of Rs. 250 crore on PPP model. Co-developers have been identified and the work is in progress in the first phase in an area of 6 acres. All necessary approvals have been obtained from the Government of India and

other Agencies

**IT Park Non- SEZ Shimoga:** The first phase of construction for setting up of IT Park in the non-SEZ at Shimoga for a built-up area of 67599 sq.ft out of a total area of 100000 sq.ft. has been completed.

IT Park, Gulbarga: KEONICS has taken up IT Park project in Gulbarga in an area of 2 acres of land with a built-up area of 150000 sq.ft. in 3 phases with an estimated cost of Rs. 23.90 crore. The construction of the IT Park complex 1st Phase has been completed. Several incentives are offered to the local entrepreneurs including allotting workspace at very nominal rates.

Along with the implementation of activities related to establishment of IT Parks, KEONICS is also involved in other activities as indicated above. The financial performance of KEONICS is given in Table 9.34.

Keonics is poised to play a vital role in the upcoming Information Technology Investment Region (ITIR) project conceived and being developed by the Government of India and Government of Karnataka near the international airport, Bangalore with an initial investment of Rs. 1600 crore in and area spreading over 2100 acres in the first phase. The Project is aimed at housing IT SEZ, Electronic Hardware park among other ancillary industries with an integrated township.

**Table 9.34: Financial Performance from 2011-12 to 2015-16 (Upto December 2015)**  
**Rs. in crores**

	2011-12	2012-13	2013-14	2014-15	2015-16 upto 31.12.2015
Sales and Service Turnover	137.90	208.97	191.19	181.02	159.14
Other Income	5.81	6.62	7.10	6.82	4.80
Total Turnover	143.71	215.59	198.29	187.84	163.94
Profit before Tax	7.59	38.08	11.23	4.90	3.30
Profit after Tax	4.51	24.66	7.49	3.31	2.31

The mission of the KEONICS cyber lab is to provide training and investigation support to agencies and entities involved in prevention, investigation and prosecution of economic and high tech crime. The vision of the KEONICS cyber lab is i. Training of law enforcement, prosecution, judiciary in Cyber Crime Investigation (Tools and Techniques), Cyber Forensics Process & procedures and Cyber Laws for their respective roles in dealing with cyber crimes/cyber threat incidents ii. Training Banking & Financial Institutions and Education Segment on Cyber Security to prevent security breaches iii. Conducting cyber safety sensitization programs for all Government Department iv. To act as a resource center for guiding law enforcement authorities of cyber crime cases and v. Knowledge enhancement for the core departments handling cyber crime issues.

#### 9.9.4 Department of Factories, Boilers, Industrial Safety and Health

Department of Factories, Boilers, Industrial Safety and Health is associated with the responsibility of ensuring Occupational Safety and Health of the persons employed in registered factories. The State of Karnataka is having 15618 registered factories having employment potential of around 16.74 lakh persons). 4450 registered boilers are functioning in the State. 73 Factories located in 16 districts have been identified as Major Accident Hazard Units considering the threshold of quantity of hazardous

chemicals stored and handled at the worksite. 1181 factories have been identified as factories having hazardous processes. Special provisions are in place for Major accident hazard and hazardous are in respect of these categories of factories. The details of newly registered units under various production categories are given in Table 9.35. Registered Factories by Industries in 2015-16 are presented in Appendix 9.9.

#### 9.9.5 Karnataka State Financial Corporation (KSFC)

Karnataka State Financial Corporation (KSFC) is a State Level Financial Institution established by the State Government in 1959 under the provisions of State Finance Corporation Act, 1951 which is a Central Act. The basic objective of the Corporation is the development of Micro, Small & Medium Enterprises (MSMEs), backward areas & first generation entrepreneurs in the State of Karnataka. The Corporation has worked in this direction since the beginning and has been successful in achieving the same. Since its inception up to the end of 31<sup>st</sup> March 2015, the Corporation has extended assistance to the extent of 67% for Small Scale Industries, 54% for Development of Backward Areas and 51% for the promotion of First Generation Entrepreneurs.

**Table 9.35: Registration of New Industrial Units in Karnataka**

Sl. No	Industrial Units	2011	2012	2013	2014	2015-16 (April – December 2015)
1	Food Products	30	90	107	75	79
2	Paper & paper products	12	30	54	23	15
3	Metals & Alloys	43	82	118	44	47
4	Chemical manufacturing & Chemical using industries	11	30	44	26	29
5	Transports & Equipment	10	54	79	22	33
6	Textiles	28	69	104	39	78
7	Wood & wood Products	13	20	36	16	29
8	Other	647	496	307	381	448
	Total	794	871	849	626	758

Source: Department of Factories, Boilers, Industrial Safety and Health

**MAJOR INITIATIVES:**

During the FY 2014-15, the Corporation has been successful in formulating a Financial Restructuring Plan and concluding One Time Settlement with SIDBI. Through this settlement, the Corporation got interest benefit of 2201.00 lakhs and principal relief of 24293.00 lakhs. The settlement improved the financials and changed the landscape of the Corporation.

**MAJOR ACHIEVEMENTS DURING FY: 2014-15:**

- During the FY: 2014-15, the Corporation Sanctioned 67514.60 lakhs, Disbursed 55362.41 lakhs & Recovered 81399.70 lakhs.
- The Cumulative Gross Sanctions of the Corporation reached 1381068.01 lakhs covering 1,69,244 cases as on 31<sup>st</sup> March 2015.
- The Cumulative Disbursements reached 1082112.00 lakhs as on 31<sup>st</sup> March 2015.
- The Cumulative Recovery touched 1390842.00 lakhs as on 31<sup>st</sup> March 2015.
- The State Government infused an additional share capital of 7500.00 lakhs for making the part payment of settlement amount with SIDBI.
- The State Government extended Guarantee support of 48500.00 lakhs for

raising the resources for issue of private placement bonds towards meeting settlement amount with SIDBI and business requirements.

- The State Government extended the Interest Subsidy Scheme for the SC/ST Entrepreneurs and provided 1100.00 lakhs during the FY: 2014-15.
- The State Government approved the Interest Subsidy Scheme for First Generation Entrepreneurs for establishing new Micro & Small Industries.
- The State Government approved the Interest Subsidy Scheme for the Construction of Warehouses and Cold Storages for Agriculture and Horticulture Produce around Villages and Towns.
- The Corporation earned a net profit of 4446.98 lakhs during the FY:2014-15.
- 

**Performance of the Corporation during the fy: 2015-16 (April to December 2015):**

During the FY:2015-16 (April to December 2015) the Corporation has assisted 763 cases to an extent of 44331.44 lakhs, disbursed 38863.15 lakhs and recovered 61339.34 lakhs.

The performance of the Corporation in the key areas of operations is summarized in Table 9.36. Assistance sanctioned and disbursed by KSFC are presented in Appendix 9.10.

**Table 9.36: Performance of KSFC, Rs. in lakhs)**

Period	Sanctions		Disbursements	Recovery
	No.	Amount	Amount	Amount
April'11 to Dec.'11	1037	58909.18	41402.68	45707.37
FY 2011-12	1485	81731.68	59707.84	66089.70
April'12 to Dec.'12	1129	65642.52	50093.20	53401.41
FY 2012-13	1598	94405.52	73470.44	79288.81
April'13 to Dec.'13	991	62117.59	46448.44	60695.85
FY 2013-14	1426	90926.05	70746.78	83651.82
April'14 to Dec.'14	730	40228.95	38922.32	58309.04
FY 2014-15	1092	67514.60	55362.41	81399.70
April'15 to Dec.'15	763	44331.44	38863.15	61339.34

Source: Karnataka State Financial Corporation

### 9.9.6 Karnataka State Industrial Investment & Development Corporation (KSIIDC)

KSIIDC, established in 1964, has been greatly instrumental in the industrialization of the State, especially in the large and medium sector. KSIIDC has stopped financial lending activity since October 2002 onwards. At present, recovery of the past lending/advances and loans and disinvestment of Equity are the main activity. However, certain Investments as per the directions of Government of Karnataka are being made from time to time.

KSIIDC continued its proactive role in the promotion of infrastructure projects on Public Private Partnership model and its role as nodal agency for Bangalore International Airport Project. Duly noting the initiatives taken up by KSIIDC in the infrastructure sector, the name was changed to "Karnataka State Industrial and Infrastructure Development Corporation Limited" with effect from November 22, 2010.

As the nodal agency of the State Government, KSIIDC has initiated activities for the development of the following projects which will be pursued for completion during 12<sup>th</sup> five year plan.

- a) Expansion of the Bengaluru International Airport.
- b) Development of Bengaluru International Convention Centre Complex adjacent to the Bengaluru International Airport on PPP mode
- c) Development of Devanahalli Business Park

- d) Development of a Sea Port at Tadadi on PPP mode
- e) Dabhol-Bangalore (Bidadi) Gas Pipeline
- f) City Gas Distribution Project
- g) National Investment and Manufacturing Zone (NIMZ), Tumkur
- h) Special Investment Region (SIR) Dharwad
- i) Peninsular Region Industrial Development (PRIDE):
  - Chennai-Bangalore-Chithradurga Industrial Corridor (CBCIC)
  - Bengaluru-Mumbai Economic Corridor (BMEC)

Also, KSIIDC will continue to act as Nodal Agency of the State Government in respect of the specified projects assigned from time to time by the State Government.

In addition to the above activities in the infrastructure sector, the following existing activities will be pursued.

- a. Thrust on recovery from advances
- b. Settlement of remaining loan accounts under OTS
- c. Sale of primary assets taken over under section 29.
- d. Recovery of advances through legal recourse under SFC & other Acts.

Besides, KSIIDC through its Joint Venture Company with IL & FS, Viz KSIIDC would extend advisory services for project development to the Government Agencies for development of their projects on PPP model. Performance of KSIIDC from 2013-14 to 2015-16 are given in Table 9.37.

**Table 9.37: Performance of Karnataka State Industrial and Infrastructure development Corporation limited from 2013-14 to 2015-16, (Upto December 2015)**

Assistance	Unit	Achievement			Target	Achievement 2015-16 (Up to December 2015) (Provisional)
		2013-14	2014-15	2015-16		
Sanctioned (Gross)						
1. Sanctions:						
a) Loan	Rs. Crores	0.00	0.00	0.00	0.00	0.00
b) Equity	Rs. Crores	0.00	0.00	0.00	0.00	0.00
2. Disbursements:						
a) Loan	Rs. Crores	0.00	0.00	0.00	0.00	0.00
b) Equity	Rs. Crores	0.00	0.00	0.00	0.00	0.00
3. Recovery:	Rs. Crores	47.27	14.87	26.13		11.80

Source: KSIIDC

Note: KSIIDC has stopped financial lending activity since October 2002 onwards. At present, recovery of the past lending/advances and loans and disinvestment of Equity are the main activities.

### 9.9.7 Department of Public Enterprises

Government of Karnataka had established the Karnataka State Bureau of Public Enterprises in the year 1981. Later on, in the year 2002 this Bureau was converted as The Department of Disinvestment and Public Enterprises Reforms. The main aim/object of this department is to take decisions in matters relating to disinvestment, restructuring, amalgamation etc. In the year 2005 Government had accorded independent status to this department and re-named it as The Department of Public Enterprises. This department is vested with the responsibility of monitoring, regulatory, evaluatory and advisory functions for the betterment of the Enterprises.

Out of the 60 operating units, details of the profit- making top 8 State-level Public

Enterprises in Karnataka are given in Table 9.38.

The 60 State Level Public Enterprises in Karnataka are grouped into various sectors like Agriculture, Horticulture, Animal Husbandry, Energy, Housing, Transport, Co-operation etc. While more than 40 Enterprises are profit making ones, rest are experiencing loss. In order to identify the deep root cause for the sickness and non-viability of the enterprises, the Department of Public Enterprises, through Professionalized External Institutions, has taken up evaluation studies to identify and to focus on such detrimental areas and to work out on the remedial measures which will make the Enterprises to come out of the clutches of loss making status and achieve profitability.

**Table 9.38: Performance of top 8 State Level Public Enterprises in Karnataka**

Name of the Enterprise	Enterprise status as on 31-03-2015			Enterprise status as on 31-12-2015			
	Investment (Rs. in lakh)	Employment (in number)	Profit (Rs. in Lakh)	Investment (Rs. in Lakh)	Employment (in number)	Profit (Rs. in Lakh)	
Mysore Paints and Varnish Ltd	103.65	58	665.50 (PBT) 444.21 (PAT)	103.65	54	979.06(PBT) (Provisional)	
Karnataka Vidyuth Karkane Ltd	NIL	186	486.66	NIL	172	350.00 (Provisional)	
Karnataka Soaps & Detergent Ltd	3182.21	667	4518.76	3182.21	607	3668.85	
Karnataka Silk Industries Corporation Ltd	5800	656	1625.94	5800	620	1500	
Karnataka State Road Transport Corporation	GOI 4909.76 GOK 24278.94 Total 29188.70	37326	-4349.01	GOI 4909.76 GOK 24278.94 Total 29188.70	36516	-7464.36	
Mysore Minerals Ltd	600.00	945	Profit After tax 28087.43	600.00	896	Profit after tax (Prov) 31,388.00	
Hutti Gold Mines Ltd.	24816.93	4256	Before Tax 8244.20	26554.11	4085	Before Tax 2951.61	After Tax 949.95
Bangalore metropolitan transport ltd	10459.48	36474	-6490.37 (unaudited)	10459.48	35242	5794.88 (Budget Estimate)	

Source: Department of Public Enterprises

In order to update knowledge and skill, the Department also conducts Management Development and Training programmes to the officers and officials working in the PSEs which aim at improving the performance in the areas of productivity, marketing, finance, Human resources, administration, industrial regulations, environment and ecology, industrial safety etc., through various recognized institutions.

In order to recognize, motivate and appreciate the best performing Public Sector Enterprise, the Government gives Annual 'Chief Minister's Ratna Award' for the three best performing Public Sector Enterprises, every year. Karnataka Power Transmission Corporation Limited, Mangaluru Electricity Supply Company Limited and Dr.B.R. Ambedkar Development Corporation Limited are the winners during 2014-15.

### 9.10 Industrial Policy Initiatives and Industrial Investment

Karnataka has been pursuing a pro-active industrial policy to facilitate and promote a favorable investment climate both for existing and prospective investors. The State's current industrial policy (2009-2014) has been introduced for a period of five years with effect from 1<sup>st</sup> April 2009. The policy has the major objectives of (i) building a prosperous Karnataka by developing human and natural

resources in a systematic, scientific and sustainable manner (ii) creating an additional employment of 1 million with an investment of Rs.30000 crore in the industrial sector by the end of 2014 (iii) creating enabling investment for robust industrial growth and achieving inclusive industrial development in the State and (iv) enhancing the contribution of manufacturing sector to the State GDP from the present 25% by the end of March 2014.

Industrial investments proposed through filing of industrial entrepreneurs' memorandum (IEM) and issuing of industrial licenses (IL) are presented in Table 9.39. There is increase in the number of Industrial Entrepreneurs Memorandum filed and amount of proposed investment upto December 2015 when compared to same period in 2014. Industrial approvals in Karnataka are presented in Appendix 9.12.

#### 9.10.1 Foreign Direct Investment (FDI)

Details of State-wise FDI inflows from 2012-13 up to 2015-16 (upto September 2015) as well as cumulative FDI inflows from April 2000 till September 2015 are given in Table 9.40. The total FDI inflows to the State in the last decade accounted for 7% of the total FDI inflows to India and Karnataka stands fifth among Indian States, in terms of quantum of FDI inflows.

**Table 9.39: Details of Industrial Approvals in Karnataka**

Particulars	Calendar Year (January – December)			
	2012	2013	2014	2015
Industrial Entrepreneurs Memorandum filed (Nos.)	169	101	83	93
Proposed investment (Rs. crores)	47,967	10,019	21,858	31,544
Letter of Intent & Direct Industrial Licenses issued	-	9	6	13
Proposed Investment (Rs. crores)	-	31	8	124

Source: Department of Industrial Policy & Promotion, GoI.

**Table 9.40 : State-wise FDI Inflows<sup>1</sup>State-wise FDI Inflows, (Amount in Rs. Crore)**

Sl. No.	Reserve Bank of India - Regional Office <sup>2</sup>	States Covered	2012-13 (Apr. to Mar.)	2013-14 (Apr. to Mar.)	2014-15 (Apr. to Mar.)	2015-16 (Apr. to Sept.)	Cumulative Inflows (April, 2000 - September- 2015)	% to Total Inflows
1	2	3	4	5	6	7	8	9
1	Mumbai	Maharashtra, Dadra & Nagar Haveli, Daman & Diu	47,359	20,595	38,933	21,449	3,74,471	29
2	New Delhi	Delhi, Part of UP & Haryana	17,490	38,190	42,252	38,968	2,87,991	21
3	Bangalore	Karnataka	5,553	11,422	21,255	14,029	96,151	7
4	Chennai	Tamil Nadu, Pondicherry	15,252	12,595	23,361	6,780	95,546	7
5	Ahmedabad	Gujarat	2,676	5,282	9,416	6,903	60,700	5
6	Hyderabad	Andhra Pradesh	6,290	4,024	8,326	3,487	52,727	4
7	Kolkata	West Bengal, Sikkim, Andaman & Nicobar Islands	2,319	2,659	1,464	4,645	19,272	2
8	Chandigarh	Chandigarh, Punjab, Haryana, Himachal Pradesh	255	562	234	148	6,509	0.5
9	Jaipur	Rajasthan	714	233	3,237	117	6,911	0.5
10	Bhopal	Madhya Pradesh, Chattisgarh	1,208	708	601	334	6,430	0.5
11	Kochi	Kerala, Lakshadweep	390	411	1,418	165	6,315	0.5
12	Panaji	Goa	47	103	211	111	3,979	0.3
13	Kanpur	Uttar Pradesh, Uttaranchal	167	150	679	395	2,839	0.2
14	Bhubaneswar	Orissa	285	288	56	26	1,987	0.2
15	Patna	Bihar, Jharkhand	41	9	68	272	538	0.03
16	Guwahati	Assam, Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Tripura	27	4	29	40	421	0.03
17	Jammu	Jammu & Kashmir	-	1	25	-	26	-
18	Region Not Indicated		21,833	50,283	37,544	8,825	3,16,885	24
	Sub-Total		1,21,907	1,47,518	1,89,107	1,06,693	13,39,698	-
	RBI's- NRI Schemes (from 2000 to 2002)		-	-	-	-	533	-
	Grand Total		1,21,907	1,47,518	1,89,107	1,06,693	13,40,231	100

<sup>1</sup>Includes 'Equity Capital Component' only<sup>2</sup>The Region-wise FDI inflows are as per RBIs - Regional Office received FDI inflows furnished by RBI, Mumbai  
Source: Department of Industrial Policy & Promotion, GoI



### 9.10.2 Karnataka Udyog Mitra (KUM)

Karnataka Udyog Mitra (KUM) is a single contact point for all investors who are looking at setting up enterprises / business in Karnataka. As a nodal agency, its role is to facilitate investments & execute initiatives to enable a smooth transition, from receiving an investment proposal to the eventual implementation of the project.

It acts as a secretariat for State High Level Clearance Committee (SHLCC) chaired by Hon'ble Chief Minister for projects above Rs. 500.00 crores & State Level Single Window Clearance Committee (SLSWCC) chaired by Hon'ble Minister for Large & Medium Industries and Tourism to Government for projects between Rs.15 to 500 Crores.

The details of projects cleared indicating the investment & employment to be generated by the projects cleared by the State Level Single Window Clearance Committee (SLSWCC) & State High Level Clearance Committee (SHLCC) are given in Chapter 4.

### INVEST KARNATAKA 2016

A successful investors' meet "Invest Karnataka" was held between 3 and 5 February 2016. The Government has attracted over Rs. 3 lakh crore investment, of which 1080 projects with investments of Rs. 1.77 lakh crore have been approved. This has the potential to create employment for 4.82 lakh persons. Further, 122 Memoranda of Understanding/Expressions of Interest were signed across sectors with a potential of Rs. 1.27 lakh crore of investment and employment creation for 1.7 lakh persons.

#### B2G Meetings

The total number of meetings with Chief Minister, LMI minister and Agricultural Minister that were planned and held during both the days of the event were 60 in number. Apart from the planned meetings, there were 4-5 meetings which were impromptu.

Delegates from Sweden, Japan, France, Saudi Arabia, UK, Italy, USA, Germany, South Korea, etc were part of the meetings. Prospective investors from the companies like Solar Capital, Fox petroleum, Uber, etc and Indian entrepreneurs Mr. Ratan Tata, Mr. Anil Ambani, Mr. Sajjan Jindal, etc were also part of the meetings.

Many of these meetings ended up fruitful with the signing of Memorandum of Understandings signed between the parties.

#### B2B Meetings

434 participants have actively taken part in B2B meetings on both the days. These participants are from various sectors-Agribusiness & food processing, automotive and auto components, biotechnology, aerospace, finance, business development, law, HR, trading, education and others.

#### Sector Sessions

**On 3<sup>rd</sup> Feb 2016**-Number of sessions 8, Number of speakers 96 including Sri. Krishna Byregowda, Hon'ble Minister of State for Agriculture & Food Processing, Shri S.R. Patil, Hon'ble Minister for Planning and Statistics, IT, BT, Science & Technology, H.E. Mr. François Richier, Ambassador of France.

**On 4<sup>th</sup> Feb 2016**- Number of sessions 17, Number of speakers 154 including H.E. Lorenzo Angeloni, Ambassador of Italy to India, Shri S.R. Patil, Hon'ble Minister for Planning and Statistics, IT, BT, Science & Technology, Mr. Dominic McAllister, British Deputy High Commissioner.

### 9.10.3 Major Industrial Policy Initiatives

The State Government now intends to consolidate the strategies and achievements made so far by providing adequate infrastructure support with attractive enhanced incentives and improved facilitation mechanism coupled with governance reforms.

Government of India has come out with the National Manufacturing Policy in 2011 with

the objective of accelerated development, inclusive growth and provision of gainful employment. The policy aims to enhance share of manufacturing in GDP to 25% within a decade and create 100 million jobs with appropriate skill sets, increase the depth in manufacturing and enhance global competitiveness.

The Karnataka Manufacturing Taskforce (MTF) constituted by the State Government to study the manufacturing sector in Karnataka and suggest interventions to drive growth in the sector in a sustainable and holistic manner, taking into account global trends and existing challenges in the manufacturing sector has given its valuable recommendations and suggestions.

It is in this context that the State Government is desirous of formulating a new Industrial Policy to be in alignment with the objectives and goals of the National Manufacturing Policy 2011 and the recommendations of Karnataka Manufacturing Taskforce (MTF) which would enable smooth transition of policy measures for the benefit of investors in the State.

### **KARNATAKA INDUSTRIAL POLICY 2014-19**

We have brought out New Industrial Policy 2014-19 and it gives emphasis on providing good infrastructure support for promotion of industries. In order to provide world class industrial infrastructure support, the policy proposes to encourage private investment in establishing industrial area/ estate either individually or through PPP mode.

The Policy aims at holistic development of the State and looks beyond Bangalore with equitable distribution of industries all over Karnataka.

Incentives and Concessions offered in the policy are as follows:

- i. Interest Free Loan to Large, Mega, Ultra Mega and Super Mega enterprises on Net VAT and CST Incentive is interest free loan of 40 % to 100% of NET VAT+CST with max limit of 100 % of value of fixed assets for a period of 7 yrs to 14 yrs depending on investments and zone.
- ii. Anchor Industries: Anchor Units (Manufacturing enterprises in a taluk providing a minimum direct employment of 150 persons with a minimum investment of Rs.250 crore) are given special importance by providing special investment promotion subsidies and enhanced tax related incentives for taking the industries to taluks where industrial activity needs to be encouraged.
- iii. Investment Promotion Subsidy ranging from minimum of Rs.9 Lakhs to a maximum of Rs.65 Lakhs based on investment and location of project (Details of Zones).
- iv. Stamp Duty Exemption & Concessional Registration Charges.
- v. Reimbursement of Land Conversion Fee from 75% to 100% based on investment and location of project (Details of Zones).
- vi. Exemption from Entry Tax: 100 % on Plant and Machinery for period of 3 to 5 years and 100% on Raw Material for period of 5 to 8 Years based on the investment and location of project (Details of Zones).
- vii. Subsidy for Setting up Effluent Treatment Plant (ETP) from 50% of cost of ETP subject to a maximum of Rs.50 Lakhs to 75% of cost of ETP subject to a maximum of Rs.100 Lakhs based on the investment and location of project (Details of Zones).
- viii. Interest subsidy (Micro enterprises only) of 5% for period from 4 years to 7 years based on the investment and location of project (Details of Zones).
- ix. 100% Exemption from Tax on Electricity Tariff (for MSMEs) for period from 4 years to 8 years.
- x. Incentives for Technology Upgradation, Quality Certification for MSMEs (Interest subsidy – 5%, ISO series Certification – 75% or maximum of Rs.1 lakh, BIS Certification – 75% to 100% subject to maximum of Rs.1 lakh, Technology Adoption – 25% to 50% subject to maximum of Rs.1 lakh, Technology Business Incubation Centre - 25% to 50%

subject to maximum of Rs.75 lakh, Recycling of electronic waste and plastic waste - 5% or subject to maximum of Rs.15 lakh) based on the investment and location of project. (Details of Zones)

- xi. Incentives for Water Harvesting / Conservation Measures (Manufacturing SMEs Only) (Rainwater harvesting - 50% to 75% subject to maximum of Rs.1.5 lakh, Waste water recycling - 50% to 75% subject to maximum of Rs.7.5 lakh, Zero discharge process - 50% to 75% subject to maximum of Rs.7.5 lakh) based on the investment and location of project. (Details of Zones)
- xii. Energy Conservation: Manufacturing MSMEs (Energy conservation measures - 10% to 15% subject to maximum of Rs.7.5 lakh, Non conventional energy sources - 10% to 15% subject to maximum of Rs.7.5 lakh, Captive power generation subsidy – Rs.0.5 to Rs.0.75 per unit through Solar and Wind energy) based on the investment and location of project. (Details of Zones)
- xiii. Focus on MSME: Special attention has been given to this sector by reserving 20% of the allotable land in each industrial area. Further, an attractive package of incentives and concessions provided in the policy coupled with suitable measures for marketing and financial support for MSMEs are proposed.
- xiv. Inclusive Growth: The Policy not only aims at spreading industries all over Karnataka, it also aims at inclusive growth covering all sections of the society like Women, SC/ST, Backward Classes & Minorities, special package of incentives and concessions have been given to them.
  - i. For SC/ST Entrepreneurs:
    - 1. KIADB/KSSIDC to reserve 22.50% of allotable area
    - 2. KIADB/KSSIDC to allot land at subsidised rates at 30% to 40 % subject to maximum of Rs.35 lakhs based on the investment and location of project. (Details of Zones)
  - ii. For Women entrepreneurs.
    - 1. KIADB/KSSIDC to reserve 5% of allotable area
    - 2. Special package of incentives
  - iii. For Minorities, Backward Classes, Physically challenged persons, Ex-Servicemen entrepreneurs

- 1. KIADB/KSSIDC to reserve 5% of allotable area
- 2. Special package of incentives
- xv. Encouragement to Non Resident Kannadigas (NRKs)
- xvi. Additional Package of incentives and Concessions to focused Manufacturing sector i.e., Automotive & Machine Tools (Excluding Steel and Cement) Ultra and Super Mega projects
- xvii. Special Incentives – special package of incentives and concessions and relaxation in the conditions mentioned in the policy will be considered for deserving cases.

Besides, we have sector specific policy like Aerospace Policy, Textile Policy, IT & BT Policy, Electronics and Semiconductors, Tourism Policy, Integrated Agri Business Policy, Solar Policy and infrastructure Policy.

#### **i. Agribusiness sector**

**A. Integrated Agribusiness Development Policy 2011:** The policy provides exemption from Stamp Duty & Concessional Registration for MSME, Large and Mega agro based industries and agri-infrastructure. Export oriented units in the agribusiness sector benefit from exemption from Entry Tax, Exemption of APMC cess/fees and Incentives. The policy facilitates the provision of Interest Free Loan on VAT for Large and Mega agro based industries and exempts agro units & agri-infrastructure from electricity duty. The policy also enables the provision of special incentives in selected zones.

**B. Karnataka Grape Processing and Wine Policy, 2007:** The policy has declared Wineries as “Horticultural & Food Processing Industries” and enabled the simplification of rules for getting lands for production of grape wine varieties. The policy envisages the production of wine and for issuing License and Permit to the Wineries. Capital Investment Subsidy and Subsidy for Grape Processing, Incentives for marketing and distribution of wines and establishment of wine Parks have been proposed as part of the policy.

**C. Karnataka State Policy on Organic Farming, 2004:** This policy promotes the integrated and sustainable management of natural resources for achieving food, nutritional, environmental and livelihood security. The policy envisages improvement in soil fertility & productivity through safe farming and the use of efficient, economic, eco-friendly and sustainable crop production and protection technologies. Other related policies in the State's agribusiness sector include Karnataka Agriculture policy, Karnataka Horticulture Policy and Karnataka Industrial Policy 2009-14.

Foreign Direct Investment in the agribusiness sector: 100% FDI under automatic route is permissible for the following agricultural subsectors under Agriculture: Floriculture, Horticulture, Apiculture and Cultivation of Vegetables & Mushrooms under controlled conditions. Development and production of Seeds and Planting material. Animal Husbandry (including breeding of Dogs), Aquaculture, under controlled conditions and services related to agro and allied sectors.

Other than the above-mentioned subsectors, FDI is not allowed in any other agricultural sector/activity. Any import of genetically modified materials, if required, shall be subject to the conditions laid down vide Notifications issued under Foreign Trade (Development and Regulation) Act, 1992.

## ii. Aviation/Aerospace industry

Karnataka produces more than a quarter of India's aircraft and spacecraft and, the State is the base for most global players in India. The State is home to some of India's first and top R&D centres in Aerospace & Defence such as Indian Space Research Organization (ISRO), Defence Research and Development Organization (DRDO), etc. Boeing Research & Technology centre, Airbus Engineering Centre, and DRDO's Gas Turbine Research Establishment (GTRE) are located in Bangalore. The State has extensive experience and inherent competencies in aerospace with India's first private aircraft factory, Hindustan Aircraft Ltd, having been established here in 1940. The State has

strong backward linkages in the sector with the Society of Indian Aerospace Industries and Technologies (SIATI) recording membership of approximately 300 small and medium-scale industries. 984 acres have been allocated for an exclusive industrial area and sector specific SEZ for Aerospace industries near Bangalore International Airport.

An FDI of 100% is allowed under the automatic route in this industry. In the defence sector, 100% private sector participation and 26% FDI permitted in the Defence production Sector with prior Government approval and industrial licensing (if applicable). Defence Procurement Procedure (DPP) provides for a uniform offset of at least 30% in case of foreign contracts valued over US\$ 62.5 million (INR 300 crores).

In the civil aviation sector, 100% FDI is allowed under automatic route for green field airport projects and for existing projects 74% can be under automatic and remaining under Government route. 74% FDI is permissible (Automatic up to 49%; Government route beyond 49% and up to 74%) for Ground Handling Services subject to sectoral regulations and security clearance. 100% FDI is permissible under automatic route for Maintenance and Repair organizations; flying training institutes and technical training institutions.

## ii. Industrial Infrastructure

The State is currently home to 58 Special Economic Zones that provide a Duty-free Enclave for driving FDI and Exports.

Karnataka State Policy for Special Economic Zones Act, 2009 allows for the single point clearance by unit approval committee headed by the Development Commissioner, SEZ. All industrial units and other establishments in the SEZs are declared as Public Utility Service under the provisions of the Industrial Dispute Act, 1947. Units in SEZs are eligible for 50% exemption of Stamp Duty and Registration fees, exemption of Electricity Duty or Taxes, exemption of 1% Labour Welfare Cess on construction cost and, Exemption from any

other State taxes, cess, duties or levies as may be notified by the State Government. The units are also eligible for Duty-free import/domestic procurement of goods and, 100% Income Tax exemption on Export Income for SEZ units for first 5 years, 50% for next 5 years thereafter and 50% of the ploughed back export profit for next 5 years. The SEZ units benefit from exemptions from taxes such as minimum alternate tax, Central sales tax, State sales tax and other State Government levies. External Commercial borrowing by SEZ units up to US\$ 500 million (Rs.2,400Crore) in a year is permitted without any maturity restriction through recognized channels.

### iii. Energy Sector

#### A. Karnataka Renewable Energy Policy 2009-14

The policy lays emphasis on Energy Conservation and Energy Efficiency by a saving of 1,500 MU per year (900 MW by 2014). The policy proposes the sublease of the developed lands to the Renewable Energy developers for a period of 30 years and renewed for a period of 5 years at a time after the lease period subject to fulfilment of conditions stipulated by the Government. The State Government will assign the Power Purchase Agreements to the ESCOMs at the time of allotment. The policy proposes the establishment of an Akshaya Shakthi Nidhi (Green Energy Fund) to facilitate Renewable Energy project financing and Energy Conservation and Efficiency measures. "Green Energy Cess" of INR 0.05 (five paise) per unit would be levied on the electricity supplied to commercial and industrial consumers.

#### Land Policy for Renewable Energy Projects:

The availability of suitable land and making the land available expeditiously is a major issue for RE development. Renewable Energy Special Economic Zone (SEZ) (under Industrial Policy 2009) proposes that 10% portion of the lands to be at the disposal of KREDL to develop Renewable Energy projects

and allied Renewable Energy industries (in proposed and future SEZs).

The State's renewable energy policy promotes the development of (i) Sugar and co-gen power in Bidar, Belgaum, Bagalkot, Shimoga and Mandya Districts. (ii) Power Generation sector specific industrial zones in Raichur, Bellary, and Bijapur & Chitradurga Districts and (iii) Renewable energy SEZs at Shimoga, Hassan, Bangalore, Udupi, Mysore and Bellary.

#### Clearance of Renewable Energy projects:

The concerned department will give necessary approval and clearance within 90 days of the application submitted. KREDL will monitor with the concerned departments. Wheeling charges at 5% will be applicable subject to the KERC norms and, grant of incentives available to industries would be guided by the Industrial Policy 2009.

#### B. Karnataka Solar Policy 2011-16:

A major feature of the policy is that it envisages a purchase obligation that the Quantum of power that is to be procured by ESCOMs from solar resources will be 0.25% of the total consumption.

#### Highlights of Strengths and Incentives Offered for Various Sectors

##### Biotechnology

- ❖ Bangalore is the number 1 biotech hub in India with revenues of 1.18 bn in 2013-14
- ❖ Biopharma is the biggest segment of biotech industry (~60%)
- ❖ Karnataka contributes to around 1/3rd of the BT exports of the country.
- ❖ It is home to over 50% of the country's Biotech companies.
- ❖ Bio-Ventures Fund and Bio Innovation Centre being established with state-of-the-art laboratory facilities
- Fund of INR 50 crore in partnership with a VC firm
- Bangalore Bio Innovation Centre – 25 fully furnished labs to promote innovation driven R&D startups

- ❖ Biotech startups growing at 30% annually in the state.
- ❖ First state in the country to bring out biotech policy.
- ❖ 8 Biotech Finishing Schools offering post graduate diploma, Centre for Human genetics conducting courses and workshops for scientists and clinicians, Institute of Bioinformatics and Applied Biotechnology offering courses for PG, M.Sc, and PhD.
- ❖ Karnataka has the highest R&D expenditure in south India (3rd in the country)
  - Biotech parks being developed.
  - Research labs under green category
  - Anchor unit subsidy for first two manufacturing enterprises

#### **Electronic System Design and Manufacturing**

- ❖ 4th largest producer (contributing 10% to national output) growing at 18% CAGR in 2008 – 13.
- ❖ Karnataka is 2nd largest chip design hub in the country.
- ❖ Karnataka ESDM policy
  - Capital subsidy for anchor units in Greenfield clusters
  - Fiscal incentives in the form Capital subsidy and R&D subsidy
  - Monetary support for filing patents
- ❖ Two ESDM clusters coming up with total investment of USD 25 mn (Bangalore and Mysore) with facilities like
  - Rapid prototyping
  - Proto PCB Manufacturing
  - SMT assembly line with Testing facility
  - Calibration center
  - EM Discharge Simulation Lab, Tool room and moldings
- ❖ First state to roll out ESDM skill development program, aiming to train 15,000 youth in 5 years
- ❖ Two World class innovation centres for designing, prototyping, testing, characterization and certification (IIIT-Bangalore and STPI-Bangalore).
- ❖ An upcoming ICT Academy of Karnataka in association with GoI & NASSCOM for industry oriented ICT Skill Development Programs.
- ❖ GoK in partnership with STPI set up SMART Lab (Semiconductor Measurement, Analysis and Reliability Test Lab), a state of the art lab to test, measure parameters and conduct failure analysis of chips.

#### **Animation, Visual Effects, Gaming & Comics**

- ❖ Karnataka is the first state roll out a dedicated AVGC policy.
- ❖ Karnataka has presence of prominent players in the AVGC industry.
- ❖ Bangalore based companies have contributed to Oscar winning and many nominated movies.
- ❖ Presence of bodies like Association of Bangalore Animation Industries (ABAI) serving as a 'nodal connector' between the industry, academia and government greatly help the sector in the state by incubating, skill development, networking and creating new initiatives. Various initiatives are being undertaken to develop talent pool in the state:
  - Train the Trainer – Six weeks training program including practical work, activities, individual and group projects to enhance the skills of the trainers.
  - Digitalisation of Art Colleges– Digital Arts Training centers being set up in willing colleges in association with ABAI to teach latest skills with a curriculum designed by ABAI experts.
- ❖ AVGC Finishing Schools to be set up in the state aimed to raise skill quotient at entry & get students industry-ready and providing skill enhancement of fresh graduates by industry internship & apprenticeship.

- ❖ GoK has declared development of Digital Media City providing core media services catering to entire value chain of media and entertainment industry.
- ❖ Investment Opportunities in upcoming
  - KAVGC Park
  - Digital Media City
  - AVGC Lab

### IT and ITes

- ❖ Karnataka is the largest software exporter in India, contributing to 1/3rd of total export.
- ❖ Karnataka is expected to be the largest IT cluster globally by 2020, employing around 2 million people.
- ❖ Karnataka is the 4th largest technological cluster in the world
- ❖ Karnataka's IT – BPM revenue is envisaged to grow to USD 90 bn in 2020 from 50 bn in 2015.
- ❖ 80% (400) Fortune 500 companies have their outsourcing operations in Karnataka.
- ❖ Bangalore has been ranked 2nd in Global startup ecosystem growth index by "Compass".
- ❖ ICT Skill Development Society provides an opportunity for industry stakeholders to train personnel for their specific requirements.
- ❖ GoK/KBITS in partnership with NASSCOM set up the first start up warehouse to provide startups in the country.
- ❖ The Karnataka's i4 policy aims to increase penetration of sector to other parts of the state. The policy also provides number of incentives to startups, SMEs as well as Mega Projects.
- ❖ The Karnataka Startup Policy 2015 – 20 shall also help improve the ecosystem by creating incubation infrastructure, fostering partnership between R&D institutions and industry and channelizing innovation for social impact.
- ❖ More than 900 acres of land available in various parks and investment zones.

### Infrastructure

- ❖ Karnataka has been an Investor friendly state with many flagship projects undertaken in partnership with private sector under the PPP model:
  - Bengaluru International Airport which is now the third largest and one of the most preferred airport in India was done in partnership with GVK
  - Karnataka is flag bearer in terms of pioneering PPP models such as Hybrid annuity models
  - Number of other success stories in urban water supply, bus station developments transport and industrial parks
- ❖ Our infrastructure Policy recently approved by State Cabinet gives clarity on the procurement models for various strategic infrastructure projects which include new capacity creation as well as operations and maintenance of existing infrastructure
- ❖ We have many flagship infrastructure investment projects where we look forward to partnering again with reputed investors
  - Roads – In roads sector we have identified 23 projects with more than 1900 km opportunity under KSHIP and KRDCCL with total investment opportunity of Rs. 4600 crore.
  - Water – To ensure sustainable water supply for urban centers, we are binging Integrated water supply and water recycling projects with a INR 125 crore investment opportunity
  - Ports- We have more than 330 km long coastline which we want to continue developing for maritime trade. We have identified potential Port Development opportunities at Tadri, Belekari, Karwar and other ports our western coastline.
  - Airports – We want to improve regional connectivity within our state with development of airstrips, helipads and regional air-travel and air-taxi services. There are multiple urban centres such as

Mysore and Hubli Dharwad, attractive tourist destinations such as Coorg Valley and Chimangaluru which can be connected with Bangalore through NON-SCHEDULED Air Taxi services. We are inviting investors to take advantage of GoI Regional Air Travel policy initiative and our own air strip development programme to invest in this lucrative sector.

- Industrial Infrastructure – Karnataka is focusing on development of manufacturing sector within the state by creating holistic ecosystems for nurturing investments in industrial projects. Karnataka is home to two major industrial corridor initiatives, the Chennai Bengaluru Chitradurga Industrial Corridor and Bengaluru Mumbai Economic Corridor under which 9 world class industrial townships will be created with help of investments from GoI and multi-lateral agencies such as JICA. Other industrial parks focused on Agri-Business and Food processing such as Sea Food Park in Mangalore and IT-BT parks across the states are being planned which present investment opportunities to develop these industrial parks on a PPP basis.

- Urban Infrastructure – The Dabhol-Bangalore gas pipeline presents a unique opportunity for the state to build City Gas Distribution network in multiple urban centres. The first investment opportunity in this sector is presented in the Bangalore with a 1583 inch-km plan over 5 years to further cover Bangalore Urban and Rural districts completely in next 25 years. The first phase investment requirement is Rs. 750 Crore which can benefit over 1.5 lakh domestic customers.

### **Agri Business and Food Processing**

- ❖ Karnataka is the leader in horticulture and floriculture business. The state is the largest exporter of Gherkins and Flowers in the country.
- ❖ Karnataka is R&D hub of the country with 5 national level R&D institutes in Agriculture and Horticulture
- ❖ Karnataka is leading the country in sector reform, being the first state with unified platform for commodity trade (ReMS) and to have unveiled dedicated Agriculture and Wine Policy.
- ❖ Karnataka is the Coffee Capital of India producing 70% of India's output.
- ❖ The state has revealed Karnataka Agribusiness and Food Processing Policy 2015, focussed towards sustainable development for the entire value chain of Agri Business and Food Processing Sector. The policy declares the state as a single zone, providing incentives uniformly.
- ❖ There is opportunity in Karnataka to invest in new farm technology like solar powered pumps, drip and sprinkler irrigation and also in organic farming and cold chains.

### **Tourism**

- ❖ Karnataka is recipient of Best State in Integrated Development and Innovation Award by Travel Awards in 2015
- ❖ Karnataka is home to variety of tourist attractions ranging from wildlife to cities, heritage structures to adventure sports, spiritual destinations and beaches.
- ❖ Tourist visits to Karnataka have increased sevenfold in 2008 – 2013.
- ❖ Pride of South, Southern Splendour - Luxury tourist trains sojourning through well-known and off beat destinations of Karnataka and other parts of south India, providing world class travel experience.
- ❖ Jungle Lodges & Resorts Ltd - 18 resorts and 2 heritage hotels promoting eco and adventure tourism in the state.
- ❖ GoK has undertaken various initiatives to ensure quality of service, safety and security of tourists like Karnataka Tourism Trade Facilitation Bill, Empanelment of Rating Agencies.
- ❖ The new Tourism Policy 2015 – 19 aims to encourage Mega Tourism Projects and position Karnataka as preferred tourist destination. The policy has envisaged private investment of INR 27,000 crore in 2015 – 20, generating employment for 30 lakh people.
- ❖ A range of projects have been identified with investment potential of more than INR 1100 crore in the following categories
  - Cruise Tourism



- Adventure Tourism – Water based and cable cars
- Hotels & Resorts
- Theme Parks
- Wayside Amenities

### **Automobile & Auto Component**

- ❖ Karnataka is home to 7 major OEMs and more than 50 auto component manufacturers.
- ❖ Karnataka is the 4th largest automobile producing state in the country, contributing 8.5% to the national output in the sector.
- ❖ Automotive is one of the focus sector identified in the Industrial Policy 2014 – 19. The state has proposed initiatives like 'Karnataka Automobile Research & Innovation Centre' and creation of FTWZ for engineering sector in the policy to further strengthen Karnataka's position in the sector. The policy provides additional package of incentives Ultra Mega (INR 500 – 1000 crore) and Super Mega (> 1000 crore) projects in automotive sector.
- ❖ Karnataka has a huge local market with more than 14 million registered vehicles in the state and connectivity to four of the top five automobile markets in the country, creating potential for automobile and component manufacturers to grow.
- ❖ Land bank of more than 19000 acres across the state. The Industrial Policy 2014 – 19 provides higher quantum of incentives for units in backward parts of the state, promoting inclusive growth of the state.

### **Machine Tools & Heavy Engineering**

- ❖ Karnataka is the second highest producer of Special Purpose Machinery and Heavy Electrical Machinery in the country.
- ❖ Karnataka is the only state among the top five capital goods producing states to produce more special purpose machinery than general purpose machinery (in terms of value), clearly showcasing state's capability in manufacturing high value products.
- ❖ Karnataka is the leading state in Machine Tools industry with Bangalore is alone

producing 60% (in terms of value) of the machine tools in the country.

- ❖ India's first Integrated Machine Tool Industry Park was set up near Bangalore in an area of 300 acres by India Machine Tools Manufacturing Association.
- ❖ Advanced Machine Tool Testing Facility (AMTTF), a state-of-art equipment facility at the Central Manufacturing Technology Institute(CMTI), was jointly established in Bangalore by machine tool industry and DIPP, GoI.
- ❖ Land bank of more than 19000 acres across the state. Machine Tools is identified as a focus manufacturing sector in Industrial Policy 2014 – 15. The policy provides additional package of incentives Ultra Mega (INR 500 – 1000 crore) and Super Mega (> 1000 crore) projects in Machine Tools sector.
- ❖ The upcoming Chennai Bangalore Industrial Corridor and Bangalore Mumbai Industrial corridor shall create a conducive environment for the manufacturing industries in the state by improving connectivity & logistics.

### **Aerospace and Defense**

- ❖ Karnataka is the undisputed leader of the country in the Aerospace and Defense sector producing quarter of India's aircraft and spacecraft.
- ❖ The state has a strong base of lower tier suppliers with more than 2000 SMEs which execute niche subcontracting work for the defense PSU creating a strong ecosystem in the state.
- ❖ Karnataka contributes 65% to aerospace related exports from the country.
- ❖ With increase in national defense budget and increasing demand of civil aviation globally, Karnataka is in unique position in the country to leverage this potential growth in the sector.
- ❖ India's first aerospace SEZ is operational at Belgaum.
- ❖ More than 950 acres has been earmarked for aerospace SEZ near Bangalore International Airport.
- ❖ Karnataka has the advantage of presence of number of top companies in IT/ITeS and electronics hardware, many of them being

integrated in supply chain of integrated sector.

- ❖ Karnataka is the first state in the country to roll out a dedicated Aerospace Policy to boost the sector in the state by providing sector specific incentives and propose tailor made initiatives for the sector.
- ❖ Incentives and concessions like anchor unit subsidy, exemption from stamp duty, concessional registration charges, exemption from electricity duty (duration depending on the size of the project), entry tax exemption, etc.
- ❖ Special package of incentives & concessions shall be provide to large, mega, ultra-mega and super-mega projects on case to case basis.
- ❖ Establishment of Bangalore Aerospace Park and Bangalore Aerospace SEZ containing facilities like manufacturing are and SEZ, MRO with direct access to BIAL runway, Testing Center, Hardware/embedded technology center, technology innovation center including a certification/calibration center, a common finishing facility and housing.
- ❖ Develop Greenfield airports at Shimoga, Bijapur, Hassan and Gulbarga through the PPP model.

### **Textiles & Apparel**

- ❖ Karnataka is the garment capital of India accounting for 20% of national garment production valued at USD 1.56 bn.
- ❖ The state has abundant availability of raw material. Karnataka contributes 65% to silk, 12% to wool and 6% to cotton production of the country.
- ❖ Karnataka has 144 skill development centers and 168 private training centers which have trained more than 1,60,000 personnel to date.
- ❖ The state exports readymade garments to countries like USA, UK, Italy, Germany, Western Europe, Hong Kong, Turkey, Canada and Australia.
- ❖ The state is keen to emerge as a leader of Technical textiles (Builtech, Clothtech, Hometech, Meditech, etc.) with Mysore, Hassan and Bangalore being growth beds of Technical Textiles. The state has already

attracted investments worth INR 1480 crore in the segment.

- ❖ The new Textile Policy-Nuthana Javali Neethi 2013-18 aims to strengthen the value chain, attract more investment across the state, develop skills of the manpower and infrastructure for the sector.
  - Zone dependent reimbursement based fiscal incentives.
  - Support for development of common infrastructure in Greenfield textile parks and common facilities in Brownfield clusters
  - Support for setting up Specific Textiles Zones in backward areas
  - Reimbursement based incentives for mega projects

### **Pharmaceutical Industry**

- ❖ Karnataka contributes 8% to the country's revenue in the pharmaceutical sector.
- ❖ The state has exclusive pharma SEZs in Hassan and Yadgir.
- ❖ Karnataka ranks 5th in pharmaceutical exports, contributing 12% to country's exports.
- ❖ Karnataka Pharmaceutical Policy 2012 aims to develop infrastructure, foster R&D and attract mega projects in the sector.
- ❖ Initiatives like Venture Capital fund of INR 50 crore with 26% contribution from government, formation of Karnataka Pharmaceutical Development Council and the Vision Group and promotional activities have been introduced in the policy.

### **Energy**

- ❖ Bangalore (Karnataka) is the best test site for the Smart Grid in the Country because of Distribution Automation System being implemented here and the transmission SCADA is already in place. Presence of local IT and professional skills adds advantage for bringing in Smart Grid.
- ❖ Karnataka has the highest potential of 7.9 GW of pumped storage hydro power in South India.

- ❖ Government of Karnataka is committed to provide 24x7 power to all by 2020. Energy sector successfully bridged the difference between energy requirement and availability by 10% in last 3 FYs.
- ❖ Installed capacity for private sector has grown at a CAGR of 12% in the last 5 FYs; private sector contributes to 43% (6,582 MW) of the total installed capacity.
- ❖ Karnataka has a wind potential and solar PV potential in excess of ~14 GW and 24.7 GW respectively. The state has made amendments to Renewable Energy policy, keen to attract renewable energy projects:

- Industry status to RE projects, simple land conversion and forest clearance, attractive Feed-in-Tariffs promote wind, SHP and Biomass power projects.
- Amendments to building bye laws for Floor Area Ratio (FAR) exemptions driving the growth of roof top solar PV project investments.
- Open bid process & competitive tariff for solar PV projects; Industry friendly regulations support open access projects with waiver of open access charges, loss & 100% banking for solar projects.
- Central excise duty exemptions, Tax holiday, Customs Duty exemption, and up to 50% VAT reimbursement.

- ❖ Attractive incentives provided specifically to solar power generation projects via dedicated Karnataka Solar Policy 2014 – 21.

#### 9.10.4 Special Economic Zones (SEZs)

In order to support the efforts of the Govt. of India in development and promotion of SEZs in the State, the Government of Karnataka has formulated a State policy for SEZs as per the Central SEZ Act 2005 & Rules 2006. The Policy aims to provide a hassle-free environment for the manufacturing & service sectors and to attract FDI. The salient features of the State Policy for SEZs are as below:

- Single point clearance to SEZ developers & units.
- Acquisition of land on consent basis.

- To set up SEZs on waste, dry and single crop land.
- Delegation of Labour Commissioner's powers to Development Commissioner – SEZ.
- Monitoring and Review committee is constituted to monitor and review the implementation of SEZs under the Chairmanship of Chief Secretary, Govt. of Karnataka.

The fiscal package of incentives & concessions extended to SEZ developers and SEZ units includes:

- Exemption from State taxes for all purchases from domestic tariff area excluding petroleum products.
- Exemption from stamp duty and electricity duty.
- Capital subsidy for common effluent treatment plant.

The Board of approval of SEZ constituted under SEZ Act 2005 has granted formal approvals for 60 SEZs in the State. SEZs numbering 26 are operational in the State with an investment of Rs. 37,225 crores and generating employment for 11,43,145 persons. Currently there are 277 SEZ units functioning in these SEZs. The value of exports from these SEZs during the year 2014-15 accounted to Rs.55,221/-crores.

#### **Incentives for Exports from Govt. of Karnataka as per Industrial Policy 2014-19:**

1. Exemption from payment of Entry Tax
2. Refund of Certification Charges
3. Refund of cost incurred for Export Consultancy/Market Intelligence Studies:
4. Brand Promotion and Quality Assurance
5. Refund of Fee for an individual entrepreneur incurred for certification courses on Export Import Management
6. Support for Establishment of CFSs and other Export infrastructure
7. Support for creation of Export facilitation facilities, R&D and Testing services
8. Market Development Assistance:

- a) For South American countries

assistance up to 1.75 lakhs is provided as below:

- b) For Other countries assistance up to 1.50 lakhs is provided as below:

9. Reimbursement of Premium paid for ECGC
10. Financial assistance for MSME, SC/ST, Artisans and Women Entrepreneurs
11. Support for Development of exports in Gherkins, Rose Onions and Floriculture.

### 10.11 Karnataka Tourism

Karnataka with its great Heritage and Cultural Background has vast potential for the sustainable development of tourism industry. State Government has declared Tourism as an industry' since 1988. The Department has brought out series of Tourism Policies with the package of incentives, concessions and subsidies for development of Tourist Infrastructure in the State through the private investment. Tourism has been given priority and it is instrumental for Socio-Economic growth of the State as well as providing lot of employment opportunities for both skilled and unskilled man power. Human Resource Development has also given importance and initiatives have been taken to impart short term courses in hospitality sector to the younger generation. With the development of Tourism, other related sectors such as, Transport, Hospitality, Horticulture, Handicrafts and other micro enterprises have developed.

The Economic benefits of Tourism are far-reaching. In addition to enhancing revenues within the segment, tourism has the potential to create employment and generate wealth in a short of "ripple effect" across industries throughout an entire geographical region. By boosting local spending and generating direct job opportunities, tourism provides socioeconomic benefits that far outweigh the costs. Rural areas, in particular, stand to gain the most from the improved regional infrastructure and enhanced revenue circulation engendered by tourism-related development projects.

The growth of Tourism is directly proportional to the arrivals of tourists to a particular destination. More number of arrivals will create more economic activities and generate employment and other social facilities.

The impact is measurable at a particular destination comparing with its previous position. Road connectivity, Electrical Connection, Water Supply, Poultry, Handicrafts and various other related sectors also improve in particular destination, Growth of Community Development in particular area can also be attributed to growth of Tourism. Karnataka is a veritable Treasure Trove of Tourism hills, bewitching white sand beaches, magnificent monuments, temples and palaces, exciting wild life, exquisite handicrafts, salubrious and eco-friendly climate, endless varieties of mouth-watering cuisines, hospitality of the people, rich heritage and glorious culture make the whole state a tourist's paradise.

The exclusive perfume of sandalwood and agarbathis, the aroma of fresh blooming coffee flowers, the heady fragrance of the Mysore jasmine and the thousand varieties of roses make Karnataka a land of fragrance. The State has all the ingredients for great holiday-the relaxed length of the Arabian sea coast line, the majestic rocks of the Deccan, thick lush green tropical forests, an unimaginable variety of trees, Plants, flowers, animals and birds and an all-pervasive sense of history and culture. Karnataka is probably the only state in India where you can take an elephant ride hike across an excitingly rugged terrains swim and surf in a green blue sea: wander through the forts and ruins pay a devotional visit to magnificent Temples, churches, Mosques, Gurudwaras and Jain Basadis relax in an unpolluted and peaceful natural environment or simply watch the monsoon rains batter the earth, transforming the land into a variegated form of productivity.

Karnataka is a State of charming contrasts with the modern blending harmoniously with the ancient. Even in the thick of the bustling life of the modern cities, one can discern an easy-going, relaxed way of life. All these and

many more make the state an enigmatic, unforgettable and ecstatic experience for all tourists. Hence, Karnataka is aptly called "ONE STATE, MANY WORLDS".

The Directorate of Tourism at Bangalore is looking after the administration of Tourism Department along with promotional and developmental activities. It is supported by two other Government undertaking agencies namely, Karnataka State Tourism Development Corporation Ltd (KSTDC) and Jungle Lodges and Resorts Ltd. Every district has a District Tourism Promotional Council headed by the Deputy Commissioners of the concerned districts. This committee will look after the tourism activities and also monitor the progress of tourism works.

The KSTDC undertakes commercial activities like operation and maintenance of infrastructure facilities created by the Department and running of Hotels, restaurants and organizing package tours in and outside the State. It is also looking after the operation of Golden Chariot (Luxury Tourist Train). Jungle Lodges and Resorts manage the Eco-Tourism units in the State; currently it is managing 18 such Eco-Tourism units across the State, which are the best of its kind in the country.

For development of Golf Tourism in the State, the Department is supporting by creating tourist infrastructure facilities at various golf clubs in the State. A golf Course is proposed to develop at Thannirbhavi near Mangalore on PPP model.

Karnataka Tourism is actively participating every year in the Tourism Marts and Events. Last year Department has actively participated in the Domestic events like IITM Bengaluru, IITM Chennai, IITM Mumbai, IITM Pune and IITM Gurgaon, TTF Hyderabad, TTF Kolkata, TTF Ahmedabad, TTF Surath, TTF Mumbai, TTF Pune. Department participated in International Tourist

Events like WTM-London, ILTM-Cannes, China International

Expo, Namaste Stockholm at Sweden and PATA International Travel Mart held at Bangalore.

Karnataka Tourism has got Condensate Traveler 5th edition award under reader choice category for Coorg as emerging tourist destination.

Karnataka Department of Tourism has taken up infrastructure development on top priority and has taken several concrete steps to enhance facilities at tourist destinations. Department has also made all possible efforts and took all possible steps for aggressive marketing and publicity campaigns both at National and International levels. As a result of this, Karnataka has a considerable growth in tourist arrivals, the flow of tourists registered a considerable increase compared to the past few years. The details of tourist arrivals are provided in Table No 9.41.

**Table No.9.41 Tourist's Arrival from 2006 to end of 2015**

Sl. No	Year	Indians	Foreigners	Total
1	2006	36195907	505524	36701431
2	2007	37825953	534563	38360516
3	2008	37010928	520041	37530969
4	2009	32729679	529847	33259526
5	2010	38202077	524573	38726650
6	2011	84107390	574005	84681395
7	2012	94052729	595359	94648088
8	2013	98010140	636378	98646518
9	2014	118283220	561870	118845090
10	2015(Up to December 2015)	119863942	636498	120500440
	Total	69,62,81,965	56,18,658	70,19,00,623

Source: Department of Tourism

The tourist flow in to the State has continuously increased from 3.67Cr in 2006 to 11.88Cr in 2014, which indicates comprehensive increase in arrivals. In 2015 the tourist inflow to the State as on December 2015 is Rs. 12.05 Crore. This is the result of Department of Tourism initiatives.

#### **Accommodation Facilities:**

As a result of sustained promotional activity of the Department, the tourist inflow is expected to increase substantially in the coming years, the demand for hotel rooms is expected to go up sharply and supply would fall short. In order to meet the demand Department has taken initiatives to encourage private stake holders by introducing new Tourism Policy “2015-20”.

Besides, “Athithi”-Home Stay scheme has been introduced in the State. Many families are coming forward to offer their homes to tourists as Home stays with excellent facilities to the tourists in the State. Separate guidelines have been issued to encourage Home Stays in the state. So far around 370 home Stay projects have been given approval by the department and around 523 new applications have been received for Department approval. Under New Tourism Policy “2015-20” encouragement provided to Home Stays.

Eco-Tourism accommodation facilities are provided by Jungle Lodges and Resorts across the State. KSTDC is operating providing services to Tourists through Mayura brand hotels which consists High end tourist facilities. Department increasing the Budget

Class accommodation facilities at various tourist places by constructing Yatrinivas and Dormitories.

#### **Tourism as an Economic Activity:**

For integrated development of Tourism in the State Department of Tourism has introduced new tourism policy

“2015-20” (5 Years). It is envisaged that during policy period 54000 Cr investments will be made which will generate around 30 lakhs employment. More investment expected from the private sector or under PPP.

Tourism value chain provides employment not only skilled man power but also for unskilled man power. As per estimation, approximately 8 to 11 percent of the world population gets direct or indirect livelihood through Tourism sector. Tourism attractions, monuments etc fall in the rural area therefore a good opportunity for the rural people to get employment.

#### **Income from Revenue Earnings:**

Tourism earns foreign exchange. The revenue generated by the Tourism is from both by direct and indirect. World Travel and Tourism Council reports that the contribution of tourism sector to India's GDP was 6.6% during the year 2012. The revenue generated under the public sector during the last 5 years are summarized as under in Table 9.42 & Budget allocation & Expenditure given in Table 9.43. Target & Achievements of 12th Five year plan given in Table 9.44.

**Table No. 9.42: Revenue Realized by the Tourism, (Rs. in lakhs)**

Name of the Organization	2011-12	2012-13	2013-14	2014-15	2015-16 (Up to December 2015)
Directorate of Tourism	35.61	89.21	101.63	104.50	23.24
Jungle Lodges and Resorts	4268.21	4093.72	4524.16	5040.11	2884.80
Karnataka Tourism Development Corporation	6256.00	6684.20	6583.74	6811.00	4900.00
Total	10559.82	10867.13	11209.53	11955.61	7808.04

Source: Department of Tourism

**Table No.9.43: Details of Budget allocations and Expenditure made from 2013- 14 to 2015-16, (Rs. in lakhs)**

Sl.No		Financial Year					
		2013-14		2014-15		2015-16	
		Budget	Exp	Budget	Exp	Budget	Exp
1	3452 - Plan	11339.00	10454.00	12823.00	11756.30	126.91	88.09
2	3452 - Non plan	372.14	371.39	410.66	336.61	4.56	2.75
3	5452 - Capital outlay	20340.00	19522.30	25677.00	21071.77	275.00	110.95
	Total	32051.00	30377.69	38910.66	33164.68	406.47	201.79

Source: Department of Tourism

**Table No 9.44: Department of Tourism Targets and Achievements of 12th Five Year Plan**

Sl. No	Details	Quantity	12th Five year Plan Target	Achievement
1	Foreign Tourists arrivals	Lakhs	25	22
2	Domestic Tourists arrivals	Lakhs	4000	4040
3	Tourist Accommodation facilities			
	A) Hotels	Number	1000	1002
	B) Food Facilities (Restaurant)	Number	75	45
	C) Road side Facilities	Number	15	5
	D) Public Convenience	Number	300	50

Source: Department of Tourism

**Other Initiatives taken by the Department:**

In order to maximize impact, Karnataka Tourism has devised and implemented a four-pronged strategy for the development of tourism in Karnataka. The Department has focused its efforts on four separate area,- policy and implementation, infrastructure development, marketing and preservation and sustenance. It is hoped that progress made on these four fronts will help to achieve the ambitious self imposed targets.

- District Tourism Promotion Councils have been created for all the 30 districts which are headed by Deputy Commissioners of the concerned district. This committee will focus on development of identified areas in their region and will monitor the progress. In order to strengthen the council, local tourism stakeholders are also included as a part of the council. Budgetary of Rs.20.00 lakhs has been released to each

district Tourism council of Karnataka to take up tourism activities at district level.

- Under the Chairmanship of Additional chief Secretary, Tourism Department, State Level Monitoring Committee has been created for monitoring the overall developments and progress of centrally sponsored projects.
- Master Plans for all the districts have been prepared and district Tourism Consultants are appointed for each districts.
- Detailed Project Reports for state funded and centrally Assisted Schemes are being prepared by State Level Project Monitoring Agency M/s Darashaw Company Pvt Ltd.
- Tourist facilities are being developed near two World Heritage Sites under mega project, namely, Hampi and Pattadakal. The integrated development of the Hampi site is in progress Action has been taken to establish tourist plazas at World Heritage Sites Hampi and Pattadakal to

provide all Tourist services under single roof.

- Installation of tourist Signage's and hoardings along the state and national highways is under implementation.
- A systematic approach has been followed to increase the tourism man power specifically in Hospitality sector by imparting tourism training through Institute of Hotel Management & Food Craft Institute. Food Craft Institute at Belur has started training to the local young educated youths in various hospitality courses, DPRs have been prepared to establish Hotel management Institutes at Karwar and Hampi.
- Works are under progress for providing tourist facilities at Hill Stations namely Kemmannugundi and Nandi Hills.
- A separate Budget Head has been provided for development of scheduled Caste and Tribes under Special Component Plan and Tribal Sub Plan, under which tourists taxis have been provided to the eligible SC and ST candidates with subsidy. Apart from this supply of musical instruments, short term courses in hospitality sector are provided to the Youth's of these community. Karnataka Darshan Program is being arranged for the students studying in 8th, 9th & 10th STD in Government schools.
- On the lines of SCP/TSP program Karnataka Darshan Tour Program are being organized to the students of all communities studying in 8th, 9th & 10th STD in Government schools.

#### **Establishment of Karnataka Tourism Infrastructure Limited:**

A Separate entity called Karnataka Tourism Infrastructure Limited is established in order to implement all the flagship infrastructure projects and Public Private Partnership projects of the Department.

#### **• Karnataka Tourism Trade Facilitation Act:**

Karnataka Tourism Trade Facilitation and Regulation Act 2015 are Enacted, In order to Control, Encourage, Facilitate all the Tourism related activities also to provide legal frame work for Tourism Industry.

#### **• Karnataka Tourism Policy "2015-20":**

New tourism policy 2015-20 has been brought in to encourage private investors to take up tourism projects. Host of incentives and concessions are offered to 18 projects.

#### **• Karnataka Tourism Vision Group:**

Karnataka Tourism Vision Group is established under the Chairmanship of Sri Mohandas Pai which comprises experts from various sectors like Art, Culture, Education, Tourism etc. to give the road map for Karnataka Tourism development. An amount of Rs.50.00 Cr was provided to implement the KTVG recommended projects. M/s I Deck has been appointed as consultants to select agencies for preparations of DPR and execution of works through transparent tender process.

#### **Adoption of Tourist Destinations under Corporate Social Responsibility:**

In India for the first time a Novel program Adoption of Tourist Destinations under Corporate Social Responsibility has launched in Karnataka. Under this program Tourist destinations like Ranganatittu bird sanctuary, Bangalore museum, Venkatappa art gallery, Belur and Halebedu, Lalbhag and Kavala caves have been adopted by various corporate companies.

- **Tourist Mitra:** In order to ensure the safety and security of tourists at the tourist destinations of Karnataka "Pravasi Mitra" program has been launched. Under this program, in first phase 174 Tourist friendly polices are deployed in tourist destinations in 13 various districts across the state.

- **Privatization of Department properties:** Properties built and not put to use for many years have been taken up for privatization through Renovate, Operate, and Maintain & Transfer basis. Seven Properties are privatized through transparent tender process and remaining 11 properties privatization for the second time is under progress.

#### ➤ **Mega Coastal Circuit Project:**

Development of Coastal Circuit was sanctioned under Mega project at an estimated cost of Rs.50.00 cr. by Government of India under CFA (2013-14) the project covers 23 beaches of costal districts of Karnataka. This project was launched in Karwar during Jan 2015.



Development works are completed in 6 beaches of North Canara district and 3 beaches of Udupi district at an expenditure of Rs.12.25 Cr.

- **Centrally Sponsored Schemes:** In the year 2014-15 12 project proposals of worth Rs.124.08 Cr have been submitted to Ministry of Tourism, Government of India. Under the new scheme of Government of India namely Swadesh Darshan 2 project proposals of state are under submission for central Financial Assistance to the tune of 200 Cr.
- **Luxury Bus Service packages:** In order to provide quality tourist packages to the tourists 6 luxury tourist coaches are started from Mysuru to various tourist destinations. Similarly 3 luxury coaches services from Hyderabad to Vijayapura, Bidar and Kalburgi has been started by KSTDC.

#### **7 point strategy for tourist destinations:**

1. Development of Last Mile Connectivity
2. Development of Accommodation.
3. Supply of publicity Material
4. Hygiene & Sanitation
5. Safety and Security of tourists
6. Drinking Water Facility
7. Signages and Hoardings.

#### **Investments Plans:**

The Investment for creation of infrastructure and promotional activities mainly come from State Budget, Central Financial grants by Ministry of Tourism Govt of India, JNNURM and 12th Finance commission funds. District wise details & Roads taken up with NABARD assistance are presented in Appendix 9.13 & 9.14.

##### **a. JN-NURM Scheme:**

Ministry of Urban Development, Government of India, under the JN-NURM scheme has sanctioned an amount of Rs. 39.45 Cr for development of Heritage path around Mysore Palace in Mysore. The work is implemented through Mysore City Corporation Mysore.

##### **b.Mega Tourism Projects:**

World Heritage Site Hampi is being developed under Mega project of Government of India at an estimate cost of Rs, 32.00 Cr and project is under progress.

#### **Other Initiatives:**

- **Rating of Tourism products:** In order to evaluate the quality of various services provided by the stakeholders of the tourism Industry 4 rating agencies have been appointed. 21 Various Tourism products are identified for this purpose. The rating will provide visibility of stakeholders across world.
- **Establishment of Tourism Plaza at Karwar and Mysuru:** To provide all the necessary facilities to tourists under the single roof it is proposed to establish Tourism Plaza at an estimated cost of Rs.169.00 lakh each at Karwar and Mysuru. For this suitable sites have been identified and foundation stone laid by Honorable Tourism Minister and Chief Minister respectively.
- **PATA travel mart-2015:** The Premier Tourism Travel Mart in Asia Pacific region PATA (Pacific Asia Travel Association) was successfully organized in Bangalore between 6th to 8th September 2015. During this prestigious occasion 1480 Tourist Delegates across the 57 countries participated. Investment Forum was held as part of event, 30 EoI's have been signed with investment worth 1860 Cr.
- **Comprehensive Guide training program:** To enhance the skills of tourist guides in History, Culture, Communication, Etiquette and Foreign languages Comprehensive Guide Training program has been started. This program is implemented through Rani Chennamma University, Mysuru University, Mangalore University, Visweswaraiiah Technological University Etc. First batch training is completed.
- **Establishment of Cauvery Art gallery at Mysuru:** Proposal has been received from Karnataka Knowledge Commission to establish Cauvery art gallery at Mysuru. Government order has been issued to implement this project at an estimated cost of rs.350.00 lakhs through National Academy of Science India, Allahabad and National Council of Science museums, Kolkata. Foundation Stone laying ceremony is completed on 23-10-2015; this will be established premises of State Archaeology Department building at Mysuru.

## EMPLOYMENT AND LABOUR WELFARE

# 10

### 10.1. Introduction

Achieving high rate of growth along with commensurate generation of productive and quality employment opportunities for the rising labour force continues to be a major challenge for both the central and the state governments. Low growth in employment, prevalence of low productive and low quality employment especially in the unorganized sector and high unemployment rate among the youth and educated indicate that the expansion of productive, quality and decent employment has been the principal concern of the state government's policy in recent years. It reduces not only poverty but also makes the growth process more inclusive. In Karnataka, agriculture is the predominant source of livelihood for the majority of the population and employment is largely unorganized, rural and non-industrial in nature.

### 10.2 Key Labour Market Indicators of 2013-14

In the policy context the most critical factor that impinges on labour supply is the Labour Force Participation Rate (LFPR). LFPR is a measure of the proportion of a country's/state's working-age population that engages actively in the labour market, either by actual working or seeking for work. It provides an indication about the availability of labour force for production of goods and services.

Other than Labour Force Participation Rate, Worker Population Ratio and Unemployment Rates are also very important indicators in social and economic arena. Worker Population Ratio (WPR) is defined as the number of persons employed per 1000 persons. Unemployment Rate (UR) is defined as the number of persons unemployed per 1000 in the labour force. However in this report it is expressed in percentage.

Low LFPR primarily implies high dependency ratio. The development experience suggests a strong negative correlation between dependency and growth.

### Employment and Unemployment

Annual Employment and Unemployment Survey, 2013-14 of Labour Bureau, Government of India is fourth in the series. As the Survey of Labour Bureau is annual, there is continuity in the data availability.

In this analysis two approaches for each parameter are considered. They are Usual Principal (UPS) and Usual Principal and Subsidiary Status (UPSS) or (PS+SS) approach. Here the age criteria is 15 years and above for all the estimates. Following analysis gives comparisons among Andhra Pradesh, Tamil Nadu, Karnataka, Kerala, Maharashtra, Gujarat, Telangana and along with all India average.

The parameters considered are Labour Force Participation Rate (LFPR), Worker Population Ratio (WPR), Proportion of Unemployed (PU) and Unemployment Rate (UR).

The activity in which a person spends relatively longer time during the reference period is termed as usual principal activity of the person. To decide the usual principal activity of a person, he/she is first categorized as belonging to the labour force or not, during the reference period on the basis of major time criterion. A person may have pursued some other activity for more than 30 days or more other than his usual principal activity. This status is termed as usual principal activity and subsidiary activity status (PS+SS) or (UPSS) approach.

The critical issues in the context of labour force enquiries pertain to defining the labour

**Table 10.1: Labour Force Participation Rate for Persons Aged 15 Years and above According to UPSS Status Approach (in Percentage)**

State	Rural			Urban			Urban & Rural		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Andhra Pradesh	84.2	57.8	70.8	78.7	35.1	56.7	82.6	51.3	66.8
Gujarat	82.4	34.0	59.2	75.9	11.0	44.7	79.8	24.7	53.3
Karnataka	81.7	39.6	61.1	75.2	28.0	52.0	79.3	35.3	57.8
Kerala	74.3	36.7	54.3	71.5	30.2	49.9	73.4	34.7	52.9
Maharashtra	79.4	47.6	64.2	70.9	19.9	46.5	75.6	35.4	56.4
Tamil Nadu	80.2	52.4	66.6	76.7	29.0	52.8	78.6	41.6	60.3
Telangana	83.4	70.0	76.7	72.9	28.2	51.3	79.4	54.6	67.2
All India	76.4	36.4	58.8	74.0	19.7	47.9	75.7	31.1	55.6

Source: Employment and unemployment survey 2013-14 by Labour Bureau GOI

**Table 10.2: Labour Force Participation Rate for Persons of Different Age Groups According to UPSS Status Approach (in percentages)**

State	15-17 Years	18-29 Years	30 Years and above
Andhra Pradesh	18	63.4	72.1
Gujarat	16.2	51.2	58.9
Karnataka	13.3	54.2	63.8
Kerala	2.8	50.1	57.8
Maharashtra	8.5	49	65
Tamil Nadu	9.5	54.7	67
Telangana	13.5	59.3	76
All India	14.1	52	62.8

Source: Employment and unemployment survey 2013-14 by Labour Bureau GOI

force and measuring participation of labour force in different economic activities. The activity participation of the people is not only dynamic but also multidimensional as it varies between regions, age, education, gender, industry and occupational categories.

### 10.2.1 Labour Force Participation Rate

The statistics presented in the following Tables show the scenario on employment - unemployment in Karnataka. There is also comparison among the comparable states and national average. This indicates that LFPR for persons aged 15 years and above according to PS+ SS status approach is 57.8% in Karnataka, whereas this is 55.6% for India. Among comparable states, lowest rate is in Kerala and the highest rate is in Telangana. This rate is 81.7% for males in rural Karnataka, which is fourth highest among the

comparable States of Karnataka. Lowest rate i.e., 28.0% is for urban female and this is much more than the all India rate of 19.7% (urban female). Comparable data for Andhra Pradesh, Gujarat, Kerala, Maharashtra, Tamil Nadu, Telangana and India are given in Table 10.1

LFPR for different age group persons aged 15 years and above under UPSS approach is given in the Table 10.2. It can be observed that among the three age groups, the work participation rate is highest for the third category i.e., 30 years and above and the same is lowest for the age group 15-17 years. It explains that, the children in these age groups are normally pursuing their education. Among all the comparable states Andhra Pradesh is having the highest LFPR among all the three age groups. Obviously Kerala has registered the lowest rates in all the three categories. Quite interestingly

Kerala has very low LFPR in the age group 15-17 years which explains the focus of the state on education. In this age group even Maharashtra and Tamil Nadu are having lesser LFPR when compared to Karnataka.

### 10.2.2 Worker Population Ratio (WPR)

The WPR indicates the proportion of workers / employed persons in the total population. WPR under ps+ss approach for Karnataka is 56.8% which is more than all India average of 53.7%. This rate is more in Telangana, Andhra Pradesh and Tamil Nadu. However, it is less in Kerala, Gujarat and Maharashtra. Highest WPR in Karnataka is 80.6% i.e., for rural male and for rural female it is 38.8%. Both are more than the all India average of 74.3% and 35.1% respectively. For urban male it is 74% and for urban female it is 27.1% and again higher than the all India

average of 71.4% and 17.5% respectively. The state average male and female worker population ratios (78.2% and 34.5%) are also higher than all India average. Among the southern states, Andhra Pradesh has the highest ratio of 64.8% and Kerala has the lowest ratio of 48%. Table 10.3

### 10.2.3 Unemployment Rate (UR)

Yet another important parameter of employment scenario is Unemployment Rate (UR). It is the ratio of number of unemployed persons/person-days to the number of persons/person-days in the labour force. The estimates of URs are obtained based on the estimates of unemployment obtained by the number of persons usually unemployed based on 'usual principal status' approach, used for the classification of the activity status of persons.

**Table 10.3: Worker Population Ratio Rate for Persons Aged 15 Years and above According to Usual Principal & Subsidiary Status Approach (in percentage)**

State	Rural			Urban			Urban & Rural		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Andhra Pradesh	82.3	56.7	69.3	75.9	31.8	53.7	80.5	49.6	64.8
Gujarat	81.9	33.8	58.8	75.0	10.7	44.1	79.1	24.5	52.9
Karnataka	80.6	38.8	60.2	74.0	27.1	51.0	78.2	34.5	56.8
Kerala	71.4	30.2	49.5	69.4	22.3	44.7	70.8	27.8	48.0
Maharashtra	77.9	47.1	63.2	69.1	18.7	45.0	4.0	34.6	55.2
Tamil Nadu	78.2	51.0	64.9	74.7	26.3	50.4	76.6	39.6	58.3
Telangana	82.2	68.9	75.6	70.4	23.4	47.7	77.7	52.7	65.1
All India	74.3	35.1	57.1	71.4	17.5	45.5	73.5	29.6	53.7

Source: Employment and unemployment survey 2013-14 by Labour Bureau GOI

**Table 10.4: Unemployment Rate Among Persons Aged 15 Years and above According to Usual Principal & Subsidiary Status Approach (in percentages)**

State	Rural			Urban			Urban & Rural		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Andhra Pradesh	2.2	1.9	2.1	3.5	9.4	5.4	2.6	3.4	2.9
Gujarat	0.6	0.4	0.5	1.1	2.6	1.3	0.8	0.8	0.8
Karnataka	1.3	2.0	1.5	1.5	3.1	2.0	1.4	2.3	1.7
Kerala	3.9	17.6	8.8	3.0	26.0	10.3	3.6	19.9	9.3
Maharashtra	1.8	1.1	1.6	2.6	5.9	3.2	2.1	2.3	2.2
Tamil Nadu	2.5	2.6	2.5	2.7	9.3	4.5	2.6	4.8	3.3
Telangana	1.4	1.6	1.5	3.4	16.9	7.0	2.1	4.5	3.1
All India	2.7	3.4	2.9	3.5	10.8	4.9	2.9	4.9	3.4

Source: Employment and unemployment survey 2013-14 by Labour Bureau GOI

Here UPSS is taken for comparison and Table 10.4 presents the UPSS UR for the selected states. Under UPSS approach, UR of Karnataka is 1.7% for all persons i.e., urban and rural put together which is very less compared to India's rate of 3.4%. Karnataka has lowest UR among all the southern states and this rate is lowest in Gujarat also and Kerala has the highest rate of 9.3%. In Karnataka, in rural areas unemployment rate is 1.3% for males and 2% for females. Whereas in urban areas, for males it is 1.5% and for females it is 3.1%. At all India level, for males in rural areas it is 2.7% and for females 3.4%. The corresponding figures for urban male and female are 3.5% and 10.8% respectively

**Table 10.5: Unemployment Rate for 18-29 Years Group According To Usual Principal & Subsidiary Status Approach (in percentage)**

State	Male	Female	Total
Andhra Pradesh	8.3	9.9	8.9
Gujarat	2.0	2.3	2.1
Karnataka	3.9	6.1	4.6
Kerala	13.6	51.9	27.9
Maharashtra	7.2	6.7	7.1
Tamil Nadu	8.2	13.3	9.9
Telangana	7.3	11.2	8.9
All India	8.4	12.4	9.4

Source: Employment and unemployment survey 2013-14 by Labour Bureau GOI

The Table 10.5 explains the unemployment rate in the age group of 18-29 years among the southern states with all India average. In Karnataka, the rates are 3.9% for males and 6.1% for females and average is 4.6%. Karnataka has almost 50% lesser rates when compared to all India average. Gujarat has the lowest rates in all the three categories and Kerala has the highest rates in the three categories. For females it is as high as 52%.

#### 10.2.4 Proportion Unemployed (PU)

Proportion Unemployment is the ratio of number of unemployed persons to the total population. This indicator uses total population in denominator instead of labour force which is smaller compared to total population and therefore the rates estimated are lower than that of UR for the same category. Lower PU is a good indicator in employment scenario of the state.

Proportion Unemployment under Usual Principal and Subsidiary Status approach indicates that, Karnataka has comparatively the lowest rates among the comparable states except Gujarat. For males and females in rural areas, it is 1.1% and 0.8% respectively and the corresponding figures for males and females in urban areas are 1.2% and 0.9% respectively. The proportion unemployed in Karnataka is lesser than the all India average. Among all the comparable states Gujarat has the lowest PU rates for all the categories and Kerala has the highest rates for all the categories Table 10.6.

**Table 10.6: Proportion Unemployed for Persons Aged 15 Years and above According To Usual Principal & Subsidiary Status Approach (in percentage)**

State	Rural			Urban			Urban & Rural		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Andhra Pradesh	1.9	1.1	1.5	2.8	3.3	3.0	2.1	1.7	1.9
Gujarat	0.5	0.1	0.3	0.8	0.3	0.6	0.6	0.2	0.4
Karnataka	1.1	0.8	0.9	1.2	0.9	1.0	1.1	0.8	1.0
Kerala	2.9	6.5	4.8	2.1	7.9	5.1	2.7	6.9	4.9
Maharashtra	1.5	0.5	1.0	1.8	1.2	1.5	1.6	0.8	1.2
Tamil Nadu	2.0	1.4	1.7	2.0	2.7	2.4	2.0	2.0	2.0
Telangana	1.2	1.2	1.2	2.5	4.8	3.6	1.7	2.5	2.1
All India	2.1	1.2	1.7	2.6	2.1	2.4	2.2	1.5	1.9

Source: Employment and unemployment survey 2013-14 by Labour Bureau GOI

### 10.2.5 Labour Force Parameters as per Social Group

Here Usual Principal and Subsidiary Status approaches are used to make comparison between Karnataka (rural + urban) and all India. Here four parameters, namely, LFPR, WPR, UR and PU are presented for four social groups. The groups considered are Scheduled Caste, Scheduled Tribe, other Backward

Classes and General. For each group disaggregated male, female rates are also given Table 10.7.

The employment situation gets better as WPR (PS+SS) increases. Overall LFPR in India is 55.6% and the same in Karnataka is 57.8% which is higher than the all India rate.

**Table 10.7: Labour Force Parameters Rate for Persons Aged 15 Years and above According to (PS+SS) (in percentages)**

Details		All India				Karnataka			
		WPR	LFPR	UR	Prop. Unem ployment	WPR	LFPR	UR	Prop. Unem ployment
Schedule Caste	Male	73.9	76.1	2.9	2.2	81.1	82.0	1.2	1.0
	Female	34.0	35.3	3.6	1.3	45.4	45.9	1.1	0.5
	All	56.5	58.3	3.1	1.8	63.6	64.4	1.2	0.8
Schedule Tribes	Male	80.7	82.5	2.2	1.8	81.2	81.8	0.7	0.6
	Female	47.6	48.7	2.1	1.0	38.3	40.3	5.1	2.0
	All	65.0	66.4	2.1	1.4	59.8	61.1	2.2	1.3
Other Backward Classes	Male	73.3	75.5	2.9	2.2	78.3	79.7	1.8	1.4
	Female	30.6	32.1	4.9	1.6	35.7	36.6	2.5	0.9
	All	54.3	56.2	3.4	1.9	57.5	58.7	2.0	1.2
General	Male	71.3	73.7	3.3	2.5	76.7	77.6	1.2	0.9
	Female	20.3	22.0	7.8	1.7	29.1	29.7	2.0	0.6
	All	47.7	49.8	4.2	2.1	53.4	54.1	1.1	0.8
Overall	Male	73.5	75.7	2.9	2.2	78.2	79.3	1.4	1.4
	Female	29.6	31.1	4.9	1.5	34.5	35.3	2.3	0.8
	All	53.7	55.6	3.4	1.9	56.8	57.8	1.7	1.0

Source: Employment and unemployment survey 2013-14 by Labour Bureau GOI

In Karnataka LFPR for Scheduled Caste, other Backward class, General groups are higher than the corresponding all India rates for the same groups. At all India level for ST the LFPR is 66.4%. For males it is 82.5% and for females 48.7%. Whereas in Karnataka, the average LFPR for ST is 61.1%. For males it is 81.8% and for females is 40.3%. It means that, for ST category, the LFPR are lower in Karnataka when compared to national averages.

For SC, the national average LFPR is 58.3% and for males, it is 76.1% and for females 35.3%. The corresponding rates in Karnataka are 64.4% (average) and for males and females it is 82% and 45.9% respectively. It means that, the LFPR rates among SC in Karnataka are higher than national averages.

For backward classes the national average LFPR is 56.2%. For males it is 75.5% and for females 32.1%. In Karnataka, the average LFPR for this group is 58.7% and for males and females it is 79.7% and 36.6% respectively. It implies that, for this group also the state average rates are higher than national averages.

For general category, the national average LFPR is 49.8% and the breakup is 73.7% for males and 22% for females. The comparable rates in Karnataka are, 54.1% (state average) and for males and females it is 77.6% and 29.7% respectively. From this, it is evident that, the LFPR for SC, OBC and General are higher in Karnataka.

### 10.2.6 Employment by Education Among Social Groups

Here, an attempt has been made to estimate the proportion of employed, unemployed and not participating in labour force in each social group in accordance with their educational qualification. For this estimation, in each social group, nine categories have been considered in accordance with their level of education. For employment estimation three categories have been done i.e., employed, unemployed and not in labour force based on the survey according to Usual Principal Status (UPS) approach. Rural and urban, male and female and average rates for Karnataka and India are taken for comparative analysis. Table 10.8

- In Karnataka, the overall rate of employment among Post-graduates is 74.1%. Only 3% is unemployed and the remaining 23% are not in labour force. It means that, they are not seeking for employment. The same rates for SC workers are 68.3%, 9.7% and 22% respectively.
- Among the nine groups according to educational qualification, rate of unemployment is high among graduates and above followed by diploma holders.
- Among all the social groups the rate of employment is high among ST post-graduates (88.7%) followed by OBC (76.4%) and others (73%). Among SC (71.3%) highest rate of employment is found among people with just primary education.
- In Karnataka in all the social groups with different education backgrounds, the rate of employment is much higher than all India average.

**Table 10.8: Percentage Distribution of Persons by Educational Classification According to Usual Principal Status (PS)**

Education Classification	Scheduled Caste			Scheduled Tribes			Other Backward Classes			Others			Overall		
	Emp.	Un emp	N in LF	Emp	Un emp	N in LF	Emp	Un emp	N in LF	Emp	Un emp	N in LF	Emp	Un emp	N in LF
Illiterates	66.1	-	33.9	64.4	-	35.6	54.3	0.2	45.6	50.3	0.1	49.5	56.6	0.1	43.3
Below Primary	71.0	-	29.0	71.2	-	28.8	58.5	-	41.5	61.4	-	38.6	62.4	-	37.6
Primary	71.3	0.1	28.6	62.9	2.4	34.7	63.0	0.2	36.8	57.9	0.2	41.9	62.4	0.3	37.2
Middle	64.2	0.6	35.1	56.7	1.2	42.1	57.6	1.2	41.2	48.4	0.2	51.3	55.0	0.8	44.2
Secondary	52.7	0.9	46.5	49.4	1.9	48.7	49.9	1.4	48.7	44.7	0.4	54.9	47.9	1.0	51.2
Higher Secondary	39.4	2.2	58.4	46.2	3.2	50.6	44.6	1.8	53.6	42.9	0.7	56.4	43.4	1.4	55.2
Dip/Cert	50.1	-	49.9	50.0	5.0	45.0	59.8	4.4	35.9	53.8	2.6	43.7	55.9	3.2	40.9
Graduate & above	69.3	5.5	25.7	59.4	9.1	31.5	64.6	3.5	32.0	62.7	2.7	34.6	63.7	3.4	32.9
Post Graduate & above	68.3	9.7	22.0	88.7	-	11.3	76.4	1.1	22.6	73.0	3.3	23.7	74.1	3.0	23.0
Total	61.9	0.8	37.3	58.3	1.7	40.0	55.4	1.2	43.4	51.3	0.8	48.0	54.8	1.0	44.2
	Emp=Employed			Unemp=Unemployed			N in LF=Not in labour Force								

Source: Employment and unemployment survey 2013-14 by Labour Bureau GOI



### 10.2.7 Occupational Composition of Workers (UPSS Approach)

In this section an attempt has been made to explain the occupational composition of workers and the comparison of the same among the comparable states like Karnataka, Tamil Nadu, Andhra Pradesh, Kerala, Telangana, Gujarat and India. For this analysis ten categories of occupations are considered. The details are presented in Table 10.9.

From the above Table the following observations can be made.

- In Karnataka largest number of workers are found in elementary occupations (35.8%), it is followed by skilled agricultural and fishery workers (23.7%), service workers and traders (12.9%) and technicians and other professionals constitute (4.8%). For all the categories except skilled agricultural workers and service workers, for all other categories the percentage of workers in Karnataka is higher than national average.

- Among all southern states Andhra Pradesh has the highest percentage of workers that is 49.1% in elementary occupations. It is followed by Tamil Nadu with 38.5% and Kerala 36.9%.
- Gujarat has the highest percentage of workers that is 30.5% in skilled agricultural and fishery category. It is followed by Maharashtra with 28.7% and Telangana with 28.5%.
- Among all southern states the highest percentage of technicians and other professionals are found in Kerala (6.1%). This is followed by Karnataka (4.8%) and Tamil Nadu (4.5%). In this category of workers there is no significant difference among these states.
- The percentage of professionals is low in all southern states, however excepting Andhra Pradesh and Gujarat in other states the rates are higher than the all India average of 2.7%. Kerala has the highest rate of 5.2% followed by Telangana with 4.8% and Tamil Nadu with 3.8% ; in Karnataka the percentage of professionals is 3.2%.

**Table 10.9: Occupational Composition of Workers Aged 15 Years and above (PS+SS)**

Percentage distribution of workers by type of occupation								
Details	Andhra Pradesh	Gujarat	Karnataka	Kerala	Maharashtra	Tamil Nadu	Telangana	All India
Legislators, senior officials and managers	0.7	1.5	0.7	1.2	1.0	1.4	1.2	0.7
Professionals	2.4	2.3	3.2	5.2	3.3	3.8	4.8	2.7
Technicians and associate professionals	3.4	3.5	4.8	6.1	4.4	4.5	4.3	4.2
Clerks	2.3	2.8	4.1	4.6	4.8	3.9	2.8	3.1
Service workers and shop & market sales workers	11.2	13.3	12.9	15.5	15.7	12.5	9.5	13.2
Skilled agricultural and fishery workers	18.4	30.5	23.7	8.5	28.7	12.1	28.5	30.5
Craft and related trade workers	8.7	10.2	9.6	13.8	7.3	16.3	10.3	8.8
Plant and machine operators and assemblers	3.8	6.8	5.1	8.3	5.0	7.0	4.5	4.6
Elementary occupations	49.1	29.3	35.8	36.9	29.8	38.5	33.6	32.2
Workers not classified by occupations	-	-	-	-	-	-	-	0.0

Source: Employment and unemployment survey 2013-14 by Labour Bureau GOI

- The percentage of legislators, senior officials and managers is 0.7% in Karnataka and it is equal to the national average. Among all the southern states Gujarat has the highest percentage of 1.5% followed by Tamil Nadu with 1.4%.

So From this discussion it can be observed that in Karnataka elementary occupations and skilled agricultural and fishery related occupations have accommodated 60% of the work force. This highlights the importance of agro based and rural livelihood opportunities to enrich their occupations and improve the standard of living.

### 10.2.8 Distribution of Workers According to Work Conditions (UPSS Approach)

In the following Table an attempt has been made to present the proportion of workers according to the nature of the work. For this four categories are considered i.e., that is self employed, wage/salaried, contract workers and casual labourers. For this analysis all southern states are considered and compared with all India average.

**Table 10.10: Distribution of Workers According to Nature of Work (PS+SS).**

States	Self Employed	Wage/ Salary	Contract Worker	Casual Labour
Andhra Pradesh	37.4	11.6	1.5	49.5
Gujarat	52.0	12.9	7.5	27.7
Karnataka	43.7	18.6	1.3	36.4
Kerala	27.6	24.0	2.6	45.9
Maharashtra	61.3	19.6	3.1	16.10
Tamil Nadu	27.9	26.3	9.0	44.8
Telangana	45.8	17.6	2.3	34.2
All India	50.5	15.4	2.9	31.1

Source: Employment and unemployment survey 2013-14 by Labour Bureau GOI

It is also necessary to understand the distribution of workers according to the nature of the work. For this, four categories like self employed, wage/salaried, contract workers and casual labourers are considered.

From the above Table the following observations can be made.

- In Karnataka the highest numbers of persons are self employed (43.7%). This is followed by casual labourers with 36.4% and wage earners with 18.6%. The proportion of contract workers is just 1.3%. the State has more number of casual workers than the national average of 31.1% and wage earners of 15.4%.
- Among all southern states the percentage of self employed is highest in Maharashtra with 61.3% followed by Gujarat with 52% and Telangana with 45.8%. The lowest percentage of self employed is found in Kerala and it is just 27.6%.
- Among casual labourers highest percentage is found in Andhra Pradesh with 49.5% followed by Kerala with 45.9% and Tamil Nadu with 44.8%.
- The proportion of wage earners / salaried is just 15% at all India level. However Tamil Nadu has the highest share of such workers that is 26.3% followed by Kerala with 24% and Maharashtra with 19.6%.
- Tamil Nadu has registered the highest proportion of contract workers that is 9% and Karnataka has the lowest proportion of such workers i.e., 1.3%.

This analysis indicates that among the total working force self employed and casual labourers account for more than 81%, at all India level. In Karnataka also their share is 80%. This once again reiterates the importance of sustainable livelihood opportunities for this category of workers.

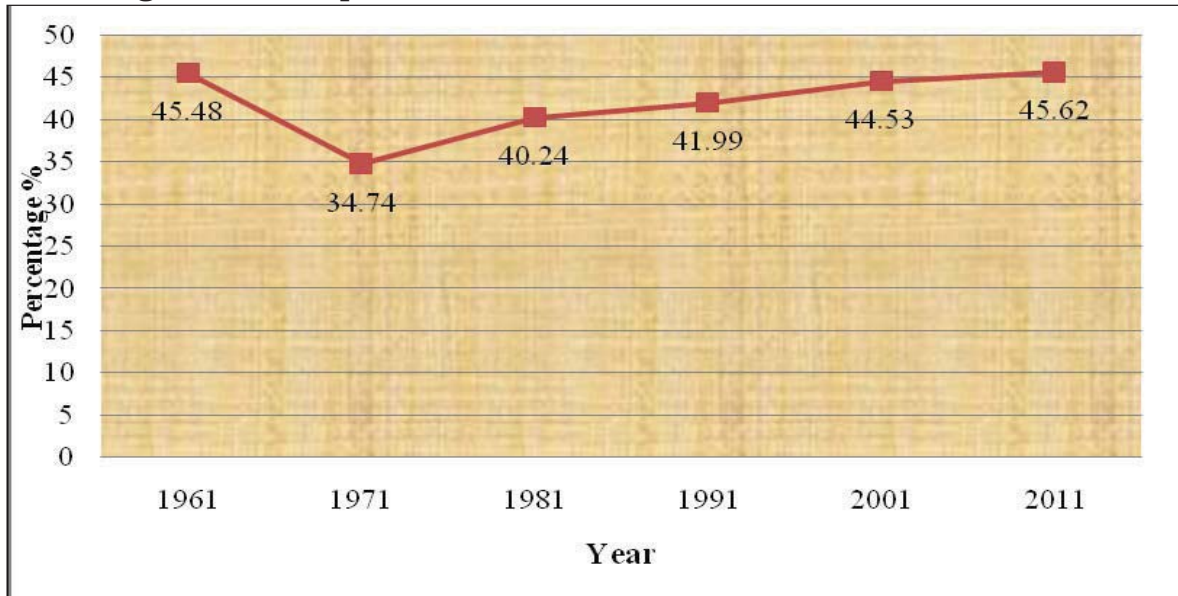
### 10.2.9 Labour Force and Work Force Participation Rate

According to Census 2011, the Work Participation Rate (WPR) is defined as the proportion of total workers (i.e. main and marginal workers) to total population. In the State, 2,78,72,597 persons constituting 45.62% of the total population have enumerated themselves as workers. Among them, 1,82,70,116 are males and 96,02,481 are females. In other words, 59% of the total male population and 31.87% of the total female population are workers. In 2001

**Table 10.11: Work force Participation Rate (in Percentage)**

Total			Rural			Urban		
2001	2011	change	2001	2011	change	2001	2011	change
44.53	45.62	1.09	49.04	49.38	0.34	35.67	39.66	3.99
56.64	59.00	2.36	58.10	59.76	1.66	53.85	57.81	3.96
31.98	31.87	-0.11	39.87	38.79	-1.08	16.37	20.81	4.44

Source: Census, 2011

**Figure 10.1 Proportion of Total Workers in Karnataka 1961-2011**

Source: Census, 2011

Census the WPR in the State was 44.53% comprising 56.64% male workers and 31.98% female workers. On the whole WPR in 2011 has increased in general irrespective of gender and more significantly in urban areas (4%) compared to 2001. It is noted that female WPR has marginally declined in rural Karnataka (Table 10.11). The proportion of total workers over the period of time from 1961- 2011 is given in Figure. 10.1

The above Table 10.11 and figure 10.1 explain the trends in WPR in Karnataka with rural – urban and male and female break up. In the state there is an overall increase in the WPR from 45.48% in 1961 to 45.62% in 2011. If we compare the WPR between the two censuses, 2001 and 2011 the following observations can be made.

- The overall, rural and urban WPR have increased during this period. The extent of increase is more in urban areas when compared to rural areas.

- The WPR among males has increased both in rural and urban areas and again in urban areas the extent of increase is more.
- The WPR among females has registered a negative growth rate in rural areas. However, in urban areas it has increased from 16.37% to 20.81%.
- The WPR for females is 32% whereas the same is 59% for males, in rural areas they are 39% and 60% respectively. In urban areas the WPR for males is 58% and for females it is 21%. This indicates that everywhere female WPR is less than male WPR. Further it is very low in urban areas implying the dependency syndrome among urban females.

#### **District-wise Work Participation Rates**

In this section an attempt has been made to compare and analyze district wise WPR. 2011 census data reveal that among all the districts, Chitradurga has the highest WPR of 52% and Bidar has the lowest WPR of 41.25%. The details are presented in Table 10.12, 10.13 and 10.14.

**Table 10.12: WPR by Districts- 2011(in percentages)**

Top 5 Districts				Bottom 5 Districts			
District	Total	Rural	Urban	District	Total	Rural	Urban
Chitradurga	51.62	55.13	37.43	Bijapur	42.61	45.40	33.30
Chikkaballapur	50.97	54.34	39.32	Dharwad	42.49	51.06	35.98
Hassan	50.87	54.55	37.17	Gulbarga	42.36	46.64	33.49
Tumkur	50.57	53.86	39.13	Uttara Kannada	42.34	45.50	34.66
Kodagu	50.30	51.96	40.62	Bidar	41.25	44.33	32.00

Source: Census, 2011

**Table 10.13: Male Work Participation Rate by Districts-2011**

Top 5 Districts				Bottom 5 Districts			
District	Total	Rural	Urban	District	Total	Rural	Urban
Mandya	63.55	64.47	59.09	Bagalkot	53.84	54.02	53.45
Hassan	63.42	64.94	57.82	Yadgir	53.72	54.52	50.30
Chamarajanagar	63.32	64.36	58.25	Bidar	52.72	54.32	47.98
Chikmagalur	63.16	64.28	58.95	Gulbarga	52.24	53.69	49.25
Ramanagarm	62.84	64.52	57.73	Bijapur	52.21	52.94	49.75

Source: Census, 2011

**Table 10.14: Female WPR by Districts, 2011**

Top 5 Districts				Bottom 5 Districts			
District	Total	Rural	Urban	District	Total	Rural	Urban
Chitradurga	41.93	47.78	18.65	Shimoga	28.12	35.35	15.07
Chikkaballapur	41.27	46.99	21.55	Dharwad	26.50	40.35	16.19
Yadgir	39.48	43.60	21.63	Mysore	26.35	32.22	18.14
Tumkur	38.93	44.14	20.85	Uttara Kannada	25.03	29.37	14.52
Raichur	38.69	45.24	19.32	Bangalore	24.61	28.02	24.27

From the above Tables 10.12, 10.13 and 10.14 the following trends can be observed.

- Among all the districts, Chitradurga with a WPR of 51.62% occupies the top position, followed closely by Chikkaballapur, Hassan, Tumkur and Kodagu with WPR of more than 50%.
- The lowest WPR of 41.25% is recorded in Bidar preceded closely by Uttara Kannada, Gulbarga, Dharwad and Bijapur with WPR between 42 and 43% (Table 10.12).
- The highest proportion of male workers is registered in Mandya (63.55%) and the lowest proportion of male workers is recorded in Bijapur (52.21%) (Table 10.13).
- In respect of female workers the highest proportion is recorded in Chitradurga (41.93%) and the lowest proportion is registered in Bangalore District (24.61%) (Table 10.14).
- When compared with the State average WPR, Bidar (41.25%), Gulbarga (42.36%) and Bellary (45.54%) districts have recorded less than the State average of 45.62%. The rest of the other districts in Hyderabad Karnataka region have recorded WPR above the State average (Table 10.15a).
- Though the WPR of the districts are above the State average, employment is mainly in dry land agriculture, which is both insecure and less remunerative. Among all the divisions, Mysore Division has the highest WPR (47%).

**Table 10.15.a: District Wise WPR-2011 (Gulbarga division)**

Districts	WPR (%)
Bidar	41.25
Bellary	45.54
Gulbarga	42.36
Koppal	47.11
Raichur	46.84
Yadgir	46.64

Source - Census, 2011

**Table 10.15.b: Division Wise Work Participation Rate WPR, 2011**

Divisions	WPR (%)
Gulbarga Division	44.69
Bangalore Division	46.45
Mysore Division	47.17
Belgaum Division	43.74
State	45.62

Source - Census, 2011

The above Table 10.15.b shows division wise WPR in 2011; among all the divisions, Mysore division has the highest WPR of 47% and Belgaum division has the lowest rate of 43.74%. Bangalore and Mysore divisions have the work participation rate more than the state average.

### 10.2.10 Main and Marginal Workers

Of the total 2,78,72,597 workers in the State, 2,33,97,181 persons, constituting 83.94% of the total workers, are main workers and 44,75,416 persons, constituting 16.06% are marginal workers. The proportion of main workers has marginally increased from 82.28% in 2001 to 83.94% in 2011 (Table 10.16). On the contrary, the proportion of marginal workers has slightly decreased from 17.72% in 2001 to 16.06% in 2011 (Table 10.17). The proportion of male main workers has decreased from 91.21% in 2001 to 89.49% in 2011, whereas, the proposition of female main workers has increased from 65.88% to 73.39%. With respect to marginal workers, the proportion of male marginal workers has recorded a marginal increase from 8.79% in 2001 to 10.51% in 2011. On the other hand, the proportion of female marginal workers has registered a sharp decrease from 34.12% in 2001 to 26.61% in 2011.

### 10.2.11 Composition of Workers

According to census definition, total workers (main+marginal) have been further classified into four broad categories viz., cultivators, agricultural labourers, workers in household industry and other workers. The category wise details of workers are given in Table 10.18 and Figure 10.2.

**Table 10.16: Main Workers, 2011 (in percentage)**

	Total			Rural			Urban		
	2001	2011	Change	2001	2011	Change	2001	2011	Change
Total	82.28	83.94	1.66	78.60	81.40	2.8	92.12	88.96	(-) 3.16
Male	91.21	89.49	(-) 1.72	89.67	84.43	(-) 5.24	94.40	91.21	(-) 3.19
Female	65.88	73.39	7.51	62.09	70.34	8.25	84.17	82.49	(-) 1.68

Source: Census, 2011

**Table 10.17: Marginal Workers (in percentage)**

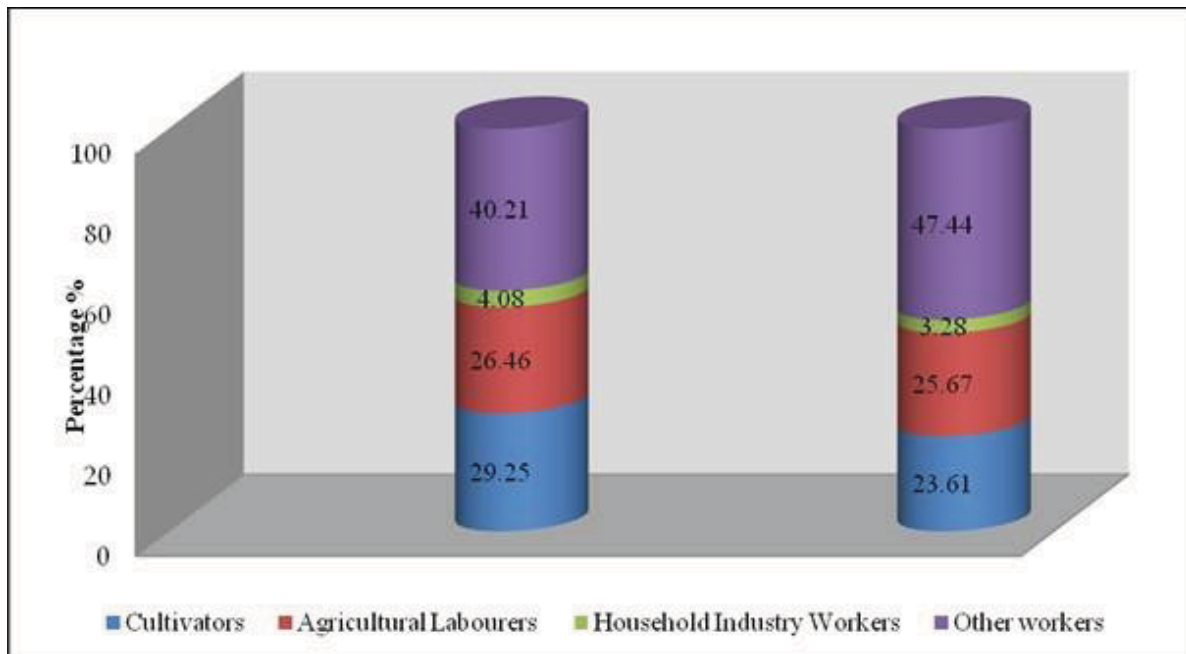
	Total			Rural			Urban		
	2001	2011	Change	2001	2011	Change	2001	2011	Change
Total	17.72	16.06	(-) 1.66	21.4	18.6	(-) 2.8	7.88	11.04	3.16
Male	8.79	10.51	1.72	10.33	11.57	1.24	5.6	8.79	3.19
Female	34.12	26.61	(-) 7.51	37.91	29.66	(-) 8.25	15.83	17.51	1.68

Source: Census, 2011

**Table 10.18: Category wise Distribution of Workers by Location- 2011**

Details		Agricultural Labourers	Cultivators	Household Industry	Other Workers	
Persons	2001	Total	26.46	29.25	4.08	40.21
		Rural	34.46	39.03	3.48	23.03
		Urban	5.07	3.11	5.67	86.14
	2011	Total	25.67	23.61	3.28	47.44
		Rural	36.41	34.27	2.82	26.49
		Urban	4.47	2.56	4.17	88.80
Males	2001	Total	17.20	31.72	2.66	48.42
		Rural	23.94	45.57	2.43	28.06
		Urban	3.33	3.22	3.13	90.32
	2011	Total	17.97	26.02	2.40	53.61
		Rural	26.94	40.36	2.04	30.66
		Urban	3.39	2.70	3.00	90.91
Females	2001	Total	43.45	24.71	6.68	25.16
		Rural	50.15	29.27	5.05	15.53
		Urban	11.16	2.75	14.55	71.55
	2011	Total	40.33	19.03	4.94	35.71
		Rural	51.32	24.69	4.06	19.93
		Urban	7.57	2.14	7.55	82.73

Source: Census, 2011

**Figure 10.2 : Category of Workers in Karnataka 2001-2011**

Source: Census, 2011

#### **Agricultural Labourers:**

Though the number of agricultural labourers has increased in the State by 14.92% in 2001-11, their proportion to total workers has marginally declined from 26.46% in 2001 to 25.67% in 2011 (Table 10.18). The proportion of male agricultural labourers has increased by a nominal 0.77%, their female counterparts have registered a decline of 3.12%. Among all the districts, the proportion of agricultural labourers has varied between 2.31% in Bangalore District and 44.49% in Chamarajanagar District.

In 19 out of 30 districts, the proportion of agricultural labourers is higher than the State average of 25.67% with 16 districts reporting more than 30%. In 3 out of the remaining 11 districts, where the proportion is below the State average, the proportion of agricultural labourers is less than 6%. When compared with State average of agricultural laborers, all the districts of Hyderabad Karnataka region have recorded higher than the State average of 25.7% (Table 10.19). However, employment is mainly in dry land agriculture, which is both insecure and less remunerative.

**Cultivators:** The number of cultivators has decreased from 68,83,856 in 2001 to

65,80,649 in 2011. Of the total decrease of 3,03,207, the decrease in the number of female cultivators (2,24,075) is more than the decrease in the number of male cultivators (79,132). The proportion of cultivators to total workers has decreased by 5.64% and the decrease in the proportion of male cultivators is by 5.7%, whereas the decrease in the proportion of female cultivators is by 5.68%.

Among the districts, the decrease in the proportion of cultivators is more than 5% in 11 districts with Bangalore Rural District registering the highest decrease of 9.55% followed closely by Mysore District, i.e. by 9.26%. In the remaining 19 districts, the decrease is less than 5% with the least decrease of 0.31% recorded in Kodagu preceded by Raichur with a decrease by 1.05%. Even though all the districts have registered decline in the proportion of cultivators in their work force, the proportion of cultivators is more than 45% in Hassan (48.37%) followed by Mandya (44.64%). The least proportion of cultivators is recorded in Bangalore District (2.25%) preceded by Dakshina Kannada (3.39%).

**Household Industry Workers:**

The proportion of workers engaged in Household Industry, which was 4.08% in 2001 has declined to 3.28% in 2011. Among the districts, Dakshina Kannada with a proportion of 18.86% of household industry workers tops the ranking, followed by Bagalkot with 5.48%. In the remaining districts the proportion of workers engaged in household industry is less than 5% and the least proportion of 0.56% is recorded in Kodagu. Among the total 9,13,227 persons enumerated as workers engaged in household industry in the State, nearly 3 lakh workers are accounted in Dakshina Kannada and Bangalore districts alone. Both these districts together account for more than 30% of the total workers engaged in household industry.

**Other Workers:** All workers engaged in any category of economic activity other than cultivation, agricultural labour or household industry are treated as 'Other Workers'. This category accounts for the highest number of workers i.e. 1,32,22,758 or 47.44% of total workers at the State level. In comparison to 2001 Census, the proportion of Other Workers has increased by 7.23% in 2011 Census. The proportion of male Other Workers has increased from 48.42% to 53.61% and the proportion of female Other Workers has increased from 25.16% to 35.71%. Among the districts, the proportion varies from a very high of 92.88% in Bangalore District to a low of 25.66% in Yadgir. The proportion of Other Workers to total workers is more than 50% in 6 districts, whereas it is below 30% in 6 districts. In the

remaining 18 districts, the proportion of Other Workers is between 30 to 50%

From the Table 10.19 the following trends can be observed.

- Among four divisions the proportion of agricultural labourers is highest in Gulbarga division that is 39.8% and the lowest is in Bangalore division that is 18%.
- Among cultivators the highest proportion is in Belgaum division that is 27.46% and again Bangalore division has the lowest of 19.63%.
- The proportion of other workers is as high as 59.34% in Bangalore division and in Gulbarga division it is 34.2%.

**10.2.12 Sectoral Distribution of Workers and Labour Productivity**

The sectoral distribution of workers across industry shows that agriculture and allied sector is the most important sector wherein about 49% of the workers in Karnataka and 53.8% of workers at all India level are engaged for their livelihood during 2011-12 (Table 10.20). The corresponding share in Karnataka and India was 61% and 58.17% respectively in 2004-05. This shows that the share of agricultural employment in Karnataka and all-India level has declined between 2004-05 and 2011-12, which is a positive trend towards structural transformation. There is an urgent need to devise appropriate policies to ensure rapid and sustainable structural transformation process in the coming years.

**Table 10.19: Category wise Distribution of Workers by Division- 2011 (in percentages)**

Division	Agricultural Labourers	Cultivators	Household Industry workers	Other Workers
Gulbarga Division	39.80	23.69	2.35	34.20
Bangalore Division	18.00	19.63	3.04	59.34
Mysore Division	19.30	26.36	4.81	49.56
Belgaum Division	33.10	27.46	2.97	36.50
State	25.70	23.61	3.28	47.44

Source: Census, 2011



**Table 10.20: Sectoral Distribution of Workers (in %) and Labour Productivity (Rs.) in Karnataka and India 2011-12**

Activities	Distribution of Workers (in %)						Labour Productivity (in Rs.)	
	Karnataka			India			Karnataka	India
	Rural	Urban	Total	Rural	Urban	Total		
Agriculture & Allied	70.2	7.8	49.0	64.1	6.7	53.8	54028	49875
Mining & Quarrying	0.3	0.3	0.3	0.5	0.7	0.5	400911	706804
Manufacturing	9.4	18.4	12.4	8.6	23.6	11.3	203593	193958
Construction	4.3	9.7	6.1	11.1	9.3	10.7	251739	116728
Electricity, Gas & Water supply	0.2	0.8	0.4	0.2	1.3	0.4	814274	626747
Transport, Storage & Communication	3.3	13.8	6.9	3.0	9.9	4.2	149567	256700
Industries	14.3	29.2	19.3	20.4	35.0	23.0	235843	177472
Trade, Hotels & Restaurants	6.2	24.5	12.4	6.5	23.4	9.5	182914	289444
Finance, Business Real estate, etc.	1.0	8.3	3.5	0.8	6.5	1.8	1109350	1387406
Public Admn., Health, Education etc.	5.1	16.4	8.9	5.3	18.4	7.6	222670	280027
Services	70.2	7.8	49.0	64.1	6.7	53.8	288176	366681
Total	100	100	100	100	100	100	163340	152812
	(18.6)	(9.6)	(28.2)	(448.0)	(98.0)	(546.0)		

Source: Employment from the results of 68<sup>th</sup> NSSO round data (UPSS) and First Revised Estimates GSDP & GDP for 2011-12 from DES Karnataka and CSO, New Delhi.

Note: Figures in parenthesis are employment in millions.

The overall labour productivity in Karnataka is Rs.1,63,340/- for 2011-12. However, given the sectoral composition of employment, there are wide variations in labour productivity across the sectors of the economy. Labour productivity in services is Rs.2,88,176/- per worker which is almost 5 times that in agriculture (Rs.54,028 per worker). At the same time, labour productivity in industry (Rs. 2, 35,843/- per worker) is more than 4 times that of agriculture. Across the sub-sectors of the economy, labour productivity is the lowest for agriculture and highest for financial intermediaries and business services. Electricity and water supply utilities are the most productive with a labour productivity of Rs.8,14,274.

### 10.2.13. Wages

Apart from employment status and level of education, wages and earnings are yet another indicator to judge the quality of employment in the state. Wage and earnings

are an important determinant that has profound implications for bettering employment and productivity of the workers. It is well known that regular employment is considered better, secure and durable and returns associated are usually higher than casual and intermittent nature of employment. At the overall level, the average wages and earnings per day received by the regular workers are noticeably higher in the state compared to that of other southern states. The average wage of regular workers (Rs.247/-) in rural Karnataka are lower than that of rural India (Rs. 298.96/-), while in urban Karnataka average wage of regular workers (Rs.486/-) is higher compared to urban India (Rs.449.65/-). Similarly, average wages of male regular workers in Karnataka are almost same like that of all-India (Rs.417.08/-), whereas in case of female regular workers average wage (Rs.312/-) is higher as compared to their counterparts at all-India level (Rs.307.72/-)-Table 10.21.

### 10.3 Employment in Public and Private Sectors

Organised sector employment in the State has increased by 0.06% from 23.842 lakh at the end of the March-2015 to 23.857 lakh at the end of September-2015. Public Sector employment account for 10.43 lakh (43.7%) and Private Sector for 13.42 lakh (56.3%), while the former has decreased by 0.15% where as latter has increased by 0.23% between September and March-2015.

A comparative analysis shows that employment in Central Government, State Government, Central Quasi Government and Local Bodies has decreased during this period i.e. March-2015 to September-2015. Table 10.22 gives the details of the organized sector employment till the end of September -2015.

#### (a) Activity wise Employment in Public and Private Sectors

An analysis of the organised sector employment by Industry group reveals an increase in the employment in Information & Communication sector from 4.458 lakhs in March-2015 to 4.469 lakh in September-2015, an addition of about 1100 workers employed. In Transportation & Storage sector employment was increased from 1.561 lakhs in March-2015 to 1.568 lakhs in September-2015, an addition about 700 workers employed. In Agriculture, Forestry & Fishing, Wholesale & Retail Trade, Repair of Motor vehicles & Motor Cycles, Accommodation & Food Service activities, Professional, Scientific & Technical activities and Public Administration, Defence, Compulsory Social Security sector, employment was increased from 0.385 lakhs in March-2015 to 0.386 lakhs in September-2015, 0.364 lakh in March-2015 to 0.365 lakhs in September - 2015

**Table 10.21: Average Daily Wages in Karnataka (in Rs) - 2011-12**

Category of Persons		Karnataka	
		Regular wages/ of workers	Casual labour in works other than public works
Rural	Male	237.53	162.94
	Female	151.85	99.86
	Person	247.07	142.40
Urban	Male	518.58	192.24
	Female	391.97	101.77
	Person	486.92	174.05
Rural+Urban	Male	416.69	170.00
	Female	312.17	99.00
	Person	391.45	148.00

Source: Employment and Unemployment, 68<sup>th</sup> Round, 2011-12, NSSO

**Table 10. 22: Employment in Public and Private Sector (in Thousands)**

Branch	March, 2014	March, 2015	September, 2015	Percentage variation September -2015/ March,2015
1. Central Government	95.4	94.5	94.0	-0.53
2. State Government	569.9	564.9	564.2	-0.12
3. Central Government (Quasi)	165.0	165.2	164.9	-0.18
4. State Government (Quasi).	155.7	156.7	156.6	-0.06
5. Local Bodies	63.6	63.9	63.9	0.00
6. Private Sector- Act.	1253.4	1277.8	1281.0	0.25
7. Private Sector - Non-Act.	61.0	61.2	61.1	-0.16
Public Sector	1049.6	1045.2	1043.6	-0.15
Private Sector.	1314.4	1339.0	1342.1	0.23
Total	2364.0	2384.2	2385.7	0.06

Source: Department of Employment & Training, Government of Karnataka

**Table 10.23: Activity wise Employment in Public and Private Sectors, (In Lakhs)**

Industry	Employment as on 31-3-2014.			Employment as on 31-03-2015			Employment as on 30-9-2015.		
	Pub	Pvt.	Total	Pub	Pvt.	Total	Pub	Pvt.	Total
Agriculture, forestry & fishing	0.271	0.121	0.392	0.265	0.120	0.385	0.266	0.120	0.386
Mining & quarrying.	0.074	0.072	0.146	0.074	0.072	0.146	0.074	0.072	0.146
Manufacturing.	0.597	5.701	6.298	0.587	5.790	6.377	0.587	5.782	6.369
Electricity, gas, steam and air conditioning supply.	0.338	0.010	0.348	0.344	0.010	0.354	0.344	0.010	0.354
Water supply; sewerage, waste management & remediation activities	0.056	0.001	0.057	0.055	0.001	0.056	0.055	0.001	0.056
Construction.	0.303	0.014	0.317	0.299	0.015	0.314	0.298	0.016	0.314
Wholesale, retail trade, repair of motor vehicles & motor cycles.	0.083	0.261	0.344	0.081	0.283	0.364	0.081	0.284	0.365
Transportation and storage	1.364	0.199	1.563	1.361	0.200	1.561	1.355	0.213	1.568
Accommodation and food service activities	0.006	0.249	0.255	0.006	0.249	0.255	0.006	0.250	0.256
Information and communication	0.231	4.139	4.370	0.228	4.230	4.458	0.227	4.242	4.469
Financial and insurance activities	0.881	0.224	1.105	0.883	0.232	1.115	0.881	0.232	1.113
Real estate activities	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Professional, scientific, and technical activities	0.324	0.081	0.405	0.320	0.080	0.400	0.320	0.081	0.401
Administrative and support service activities	0.009	0.540	0.549	0.009	0.572	0.581	0.009	0.569	0.578
Public administration & defence; compulsory social security	3.170	0.000	3.170	3.166	0.000	3.166	3.167	0.000	3.167
Education	1.850	1.139	2.989	1.852	1.143	2.995	1.847	1.146	2.993
Human health & social work activities.	0.906	0.364	1.270	0.887	0.369	1.256	0.884	0.368	1.252
Arts, entertainment and recreation	0.022	0.023	0.045	0.022	0.023	0.045	0.022	0.023	0.045
Other service activities	0.011	0.006	0.017	0.013	0.012	0.025	0.013	0.012	0.025
TOTAL:	10.496	13.144	23.640	10.452	13.401	23.853	10.436	13.421	23.857

Source: Department of Employment &amp; Training, Government of Karnataka

0.255 lakhs in March-2015 to 0.256 lakhs in September-2015, 0.400 lakh in March-2015 to 0.401 lakh in September-2015 and 3.166 lakhs in March-2015 to 3.167 lakhs in September-2015 respectively. In Manufacturing, Financial & Insurance activities, Administrative and support service activities, Education and Human Health & Social work activities sector, employment has decreased from March-2015 to September-2015. Organised sector employment has remained constant in Mining and Quarrying, Electricity, Gas, Steam and Air-conditioning system, Water Supply, Sewerage, Waste management and Remediation Activities, Construction, Arts, entertainment and recreation, and Other service Activities Sectors (Table 10.23).

#### 10.4 Employment Exchange Statistics

The number of job seekers as per the live register of employment exchanges was 3.45 lakh in December-2015 compared to 3.53 lakh at the end of March-2015, a decrease of 2.4 percent. As compared to previous year, there is a slight increase of 0.8% in Post Graduates & 0.4% in Graduate registrants. There has been -7.8 percent decline in the

registrants of Below Matriculates followed by I.T.I., Apprenticeship & Other Certificate Holders (-6.9%) Diploma Holders (-3.4%), Matriculates and Stenographers (-0.7%). Registrants on the Live Registers of Employment Exchanges in Karnataka are given in Table 10.24.

#### 10.5 Placements and Vacancies

Between April-2015 and December-2015, 2,988 placements were made (332 on an average every month). During the corresponding period of the previous year this number was about 7,870 (874 on an average per month). The number of placements was 0.86% of the total registrations at the end of December-2015. During the year 2014-15, 8,868 placements were made (739 on an average every month). 1,484 vacancies have been notified during the current year up to December-2015 (165 on an average every month) compared to 1,233 during the corresponding period the previous year (137 on an average every month). The number of vacancies notified was 0.43% of registrations at the end of December-2015. During the year 2014-15, 1,827 vacancies have been notified (152 on an average every month) (Table 10.25)

**Table 10.24: Registrants on the Live Registers of Employment Exchanges in Karnataka**

Registrants.	At the end of			Variation (Dec-15 / March-15) %
	March 2014	March 2015	Dec- 2015	
Post-Graduates.	5,062	4,649	4,685	0.8
Graduates.	49,844	48,983	49,201	0.4
Diploma Holders.	18,524	12,771	12,342	-3.4
I.T.I. Apprenticeship, Other Certificate Holders.	51,786	51,296	47,766	-6.9
Matriculates and Stenographers.	2,11,479	1,92,724	1,91,433	-0.7
Below Matriculation.	59,100	43,520	40,127	-7.8
Total:	3,95,795	3,53,943	3,45,554	-2.4

Source: Department of Employment & Training, Gok

**Table 10.25: Number of vacancies notified & placements made in 2010-11 to 2015-16**

Year	Vacancies Notified	Placements Made
2010-11	7,421	5,936
2011-12	3,202	8,694
2012-13	3,271	15,069
2013-14	2,629	18,573
2014-15	1,827	8,868
2015-16*	1,484	2,988

Source: Department of Employment & Training, Government of Karnataka, \*(Upto December-2015)

## 10.6 Wage Employment Programmes

### a. Mahatma Gandhi National Rural Employment Guarantee Scheme

The National Rural Employment Guarantee Act came into operation in five districts viz., Bidar, Gulbarga, Raichur, Davanagere & Chitradurga w.e.f. 02-02-2006 for implementation under Phase-1. Subsequently, the scheme has been extended to 6 more districts namely Belgaum, Bellary, Chikmagalur, Hassan, Shimoga and Kodagu under II phase with effect from 1st April 2007. The Scheme was further extended to cover the remaining districts of the State from 1st April 2008. The primary object of the Act is to enhance livelihood security in rural areas by providing at least 100 days of guaranteed wage employment in every financial year to every household whose adult members volunteer to do unskilled manual work. If work is not provided within 15 days of the demand for work by the applicant, then unemployment allowance has to be paid. Under the scheme, related objectives such as generation of productive assets, environmental protection, empowerment of rural women, reduction of rural-urban migration etc. are also sought to be achieved. The scheme is being implemented as Centrally Sponsored Scheme on cost sharing basis between Centre and State as wage component is fully borne by the Government

of India and labour material component is borne by Central and State Governments in the ratio of 60:40. The fund allocated for the scheme in 2015-16 is Rs.2587.35 crore of which, Rs.916.51 crore has been spent upto December 2015 and 238.67 lakh persons days of employment has been generated benefitting 6.65 lakh households. The cumulative picture is given Table 10.26 and 10.27.

### b. Wage Employment Generation Under Major Programmes

Wage employment generated under various state government programmes was 14.00 crore Mandays between April and Dec. 2015. During the corresponding period of the preceding year 23.45 crore Mandays were generated. The breakup is – Roads and Bridges 7.79 crore mandays (55.58 percent), Major medium irrigation and Flood control 1.96 crore Mandays (14.00 percent), Minor Irrigation generated 0.94 crore mandays (6.69 percent), followed by Buildings 0.61 crore mandays (4.34 percent), Watershed development 0.29 crore mandays (2.07 percent), CADA 0.04 crore mandays (0.30 percent) and MGNREGS 2.38 crore mandays. The wage employment generated as a proportion of the annual target was the highest in respect of Roads and **Bridges 7.79**

**Table 10.26: Progress Achieved Under MGNREGA**

Year	Available funds (in crores)	Expenditure (Rs. In crores)	Person days (Lakh)	Employment provided (Households lakhs.)	Works		
					Under taken (Nos)	Completed (Nos)	Under progress (Nos)
2014-15	1906.46	1680.17	434.75	10.97	1253312	132594	1120718
2015-16	1143.27	916.57	238.67	6.65	908229	183936	724293

\*includes state available fund & state level expenditure, (upto Dec. 2015)

Source: RDPR, Government of Karnataka

**Table 10.27: Physical Progress under MGNREGS 2014-15**

Job Cards issued ( since inception)	No	5385551
Person days generated	Lakh	238.67 lakh person days
Households provided employment	Lakh	6.65 lakh
Households completed 100 days of employment	No	25799
Average no of person days provided per household	No	36 days

Note: In consistency in issuance of job cards issued to the households is due to the introduction of the process of the job card validation. With this process, Fake/Duplicate/Ghost Job cards can be eliminated from the physical and MIS database.

Source: RDPR, Government of Karnataka

crore mandays (101.50 percent), Buildings 0.61 crore mandays (71.77 percent) followed by Watershed development 0.29 crore mandays (44.22 percent), Minor Irrigation 0.94 crore Mandays (39.16 percent), Major medium irrigation and Flood control 1.96 crore Mandays (38.38 percent), CADA 0.30 crore mandays (20.08 percent) and MGNREGS 2.38 crore mandays. During the corresponding period of the previous year 117.90 per cent of the annual target was achieved in Minor Irrigation followed by Roads and Bridges (93.53 per cent) and

Watershed development (92.21 per cent). Details are given in **Table 10.28**

### 10.7 Self Employment Programmes

#### 10.7.1 Swarna Jayanthi Grama Swarojgar Yojana- (SGSY)

SGSY is one of the major poverty reduction programmes being implemented by the Ministry of Rural Development. SGSY was completely closed during 2012-13 and it was restructured as NRLM. Hence there is no allocation of funds to SGSY during 2015-16.

**Table 10.28: Wage Employment Generation Under Major Programmes (2015-16)**  
(Man days in lakhs)

Programmes	Annual target		Target for 2015-16 (Dec.2015)	Achievement	
	2014-15	2015-16		2014-15 (up to Dec.14)	2015-16 (up to Dec. 15)
1.Major and Medium Irrigation & Flood Control	2056.14	511.01	367.71	861.08 (41.88)	196.14 (38.38)
2.Minor Irrigation	209.69	239.31	130.15	247.23 (117.90)	93.71 (39.16)
3.CADA	22.03	20.92	9.17	5.56 (25.24)	4.2 (20.08)
4.Watershed Development	260.08	65.72	46.01	92.21 (35.45)	29.06 (44.22)
5.Roads & Bridges	801.65	767.1	447.98	749.8 (93.53)	778.58 (101.50)
6.Buildings	99.2	84.64	38.93	76.88 (77.50)	60.75 (71.77)
Total Programmes (Targeted)	3448.79	1688.7	1039.95	2032.76 (58.94)	1162.44 (68.84)
N.R.E.G.S	*	*	*	312.4	238.31
Total Programmes	3448.79	1688.7	1039.95	2345.16	1400.75

Figures in brackets indicate percentage to annual target., \* Demand driven programme - no target

Source: Concerned departments of Government of Karnataka

**Table 10.29: Beneficiaries under Self Employment Schemes 2013-14 to 2015-16**

Programme/Scheme	Unit	Achievement		Target	Achievement
		2013-14	2014-15	2015-16	(upto Dec.-2015)
<b>Karnataka State Finance Corporation</b>					
a) Single Window	No.s	200	176	-	103
	Rs lakh	5126.55	4933.05	-	3104.75
b)Hospitals/Nursing Homes	Nos	28	22	-	25
	Rs lakh	2224.25	958.00	-	1191.50
c) Assistance to SC & ST	No.s	305	294	-	286
	Rs lakh	12317.05	11426.05	-	13502.49
d) Minority Community	No.s	155	89	-	59
	Rs lakh	11844.60	5960.60	-	3760.50
e) Women Entrepreneurs	No.s	334	273	-	176
	Rs lakh	24201.40	22694.30	-	12603.20
f) Credit Linked Capital Subsidy	No.s	22	14	-	8
	Rs lakh	1862.00	918.80	-	827.00

**Table 10.29: Beneficiaries under Self Employment Schemes 2013-14 to 2015-16**

Programme/Scheme	Unit	Achievement		Target	Achievement
		2013-14	2014-15	2015-16	(upto Dec.-2015)
g) Privileged Entrepreneurs	No.s	334	203	-	145
	Rs lakh	11067.75	7744.00	-	6039.50
<b>Dr. Devaraj Urs Backward Classes Development Corp. Ltd</b>					
i. Chaitanya Subsidies Cum Margin Money Scheme	No. of beneficiaries	4541	4210	4250	1833
	Rs lakh	1144.70	1156.72	1700.00	543.53
ii. Chaitanya Self Employment Direct Loan Scheme	No. of beneficiaries	8761	7036	5000	3217
	Rs lakh	2581.66	2256.91	2000.00	1115.93
iii. Micro Credit Scheme	No. of beneficiaries	4637	2259	3300	1009
	Rs lakh	653.95	338.85	495.00	151.35
iv. Arivu-Education Loan Scheme	No. of beneficiaries	325	297	500	1172
	Rs lakh	109.76	107.88	250.00	599.00
v. Ganga Kalyana Irrigation Scheme	No. of beneficiaries	3695	4261	3459	3871
	Rs lakh	6421.32	6243.99	7200.00	4362.45
vi. Assistance to Traditional Artisans and Occupational groups	No. of beneficiaries	15272	8894	8342	5749
	Rs lakh	5088.40	2918.06	3210.00	2059.72
vii. Interest Free Loan to the Students for Higher Studies in Foreign Universities	No. of beneficiaries	8	6	Target not fixed for this year	
	Rs lakh	26.25	21.00		
viii. NBCFDC Loan Schemes	No. of beneficiaries	11923	10528	10763	3328
	Rs lakh	2629.42	2558.42	3000.00	3328
<b>KSIIDC</b>					
a) Loan	No.s				
	Rs. crore	-	-	-	-
b) Equity	No.s	-	-	-	-
	Rs. crore	-	-	-	-
Disbursements					
a) Loans	(Rs.crore)	-	-	-	-
b) Equity	"-"	-	-	-	-
c) Recovery	"-"	40.40	14.87	26.13	11.80
<b>Stree Shakti Programme</b>					
a)No. of Groups taken loans from Bank	No. Cumulative	125713	2397	11721	1497
b) Loan amount	Rs. crore	1477.45	87.82	-	-
c) Revolving Fund Released by Govt.	Rs. Lakh	195.85	5884.95	5910.6	113.93
<b>Dr.B.R.Ambedkar Development Corporation Ltd.</b>					
i) Self Employment Scheme	Nos.	13589	10292	16482	5695
	Rs.Lakh	6176.66	4195.20	3700.00	1384.45

**Table 10.29: Beneficiaries under Self Employment Schemes 2013-14 to 2015-16**

Programme/Scheme	Unit	Achievement		Target	Achievement
		2013-14	2014-15	2015-16	(upto Dec.-2015)
ii) Land Purchase Scheme	Nos.	733	35	1800	223
	Rs.Lakh	3052.71	170.30	7500.00	728.93
iii)Ganga Kalyana Scheme	Nos.	1924	5665	12985	4765
	Rs.Lakh	5294.10	9434.98	20000.00	4096.67
iv)Micro Credit(Finance) Scheme	Nos.	14958	15029	18180	9017
	Rs.Lakh	2081.02	2254.35	3000.00	1352.55
v)Safai Karmachari Rehabilitation Scheme	Nos.	1733	2137	4000	208
	Rs.Lakh	1526.74	2010.36	400.00	20.80
<b>PMEGP</b>					
a) Projects	No.	1234	1059	956	738
b) Persons trained	No.	-	-	-	-
c)Total amount spent (Margin Money released from Khadi and Village Industries Commission, GOI)	Rs. Lakh	2720.25	2170.04	1912.80	1678.31*

Source: Concerned Departments of Government of Karnataka

\* Margin money is being released to the pending PMEGP claims of previous year.

**Table 10.30: Number of Persons Trained for Self-employment 2013-14 to 2015-16, (Numbers)**

Programme/Scheme	Achievement		Target	Achievement
	2013-14	2014-15	2015-16	(upto Sep, 2015)
<b>1.Entrepreneurship Development Programme Sponsored by CEDOK</b>				
a) Persons Trained	26,308	14,595	17,475	9656
b ) Programmes	250	267	352	178
<b>2. Entrepreneurship Development Programme (MSME) – I. Plan Scheme</b>				
i. Entrepreneurship Skill Development Programme (ESDPs)				
a) Persons Trained	1524	1450	-	50
b ) Programme Conducted	82	66	-	02
ii.Entrepreneurship Development Programmes (EDPs)				
a) Persons Trained	620	194	825	
b ) Programme conducted	29	09	33	
iii. Management Development Programmes ((M DP s)				
a) Persons Trained	429	53	-	
b ) Programme conducted	20	2	-	
iv . Business Skill Development Programmes(BS DPs)				
a) Persons Trained	-	-	-	-
b ) Programme conducted	-	-	-	-
v. Industrial Motivation Campaign IMC				
a) Persons Trained	4368	2284	1650	115
b ) Programme Conducted	95	42	33	02
II. Non-Plan Scheme				
1 .Skill Development Programme				
a) Persons Trained	-	50	25	7
b ) Programme Conducted	-	4	2	1
2 . CAD Training				
a) Persons Trained	53	50	20	7
b ) Programme conducted	2	4	2	1



**Table 10.30: Number of Persons Trained for Self-employment 2013-14 to 2015-16, (Numbers)**

Programme/Scheme	Achievement		Target	Achievement (upto Sep, 2015)
	2013-14	2014-15	2015-16	
<b>3 . CA M Training</b>				
a) Persons Trained	50	-	-	-
b ) Programme conducted	2	-	-	-
<b>4. IPR</b>				
a) Persons Trained	185	-	60	-
b ) Programme conducted	2	-	1	-
<b>5. Bar Coding</b>				
a) Persons Trained	264	248	320	149
b ) Programme conducted	8	8	8	06
<b>6. QMS/QTT</b>				
a) Persons Trained	-	40	200	70
b ) Programme conducted	-	1	4	2

\* Margin money is being released to the pending PMEGP claims of previous year.

Source: Concerned Departments of Government of Karnataka

### 10.7.2 Karnataka State Rural Livelihood Promotional Society (KSRLPS)

SGSY scheme has been restructured as National Rural Livelihood Mission. The Scheme is being implemented in the name of "Aajeevika". Every State has to establish State Mission to implement this scheme. Accordingly KSRLPS has been established in the State. The implementation of NRLM has commenced from 2013-14. The Empowered Committee of Ministry of Rural Development has approved an Annual Action Plan (2014-15) under NRLP for Rs.60.30 crore and under NRLM for Rs.30 crore. During 2014-15 20 taluks were covered under intensive approach and during 2015-16 another 64 taluks are planned to be covered under intensive approach. In other taluks NRLM Scheme is being implemented under non-intensive approach and will be covered under intensive approach in the coming two years. During 2015-16 Rs.30 Crore has been allocated for NRLM. Rs. 16.75 Crore has been released and Rs.21.85 Crores is expenditure incurred. The excess expenditure over the receipts is met out from the previous year outstanding balance. Similarly, An amount of Rs.60.30 Crore has been approved under NRLP, Rs.10.48 Crore is released and incurred an expenditure of Rs.14.84 crores. Here also the excess expenditure over the releases is met out from the previous year Outstanding

Balance (OB). Details are given in Table 10.31.

**Table 10.31: Releases and Expenditure Details of NRLM and NRLP 2015-16 (Rs. in crore)**

Particulars	NRLM	NRLP
Allocation/approved	30.00	60.30
Releases	16.75	10.48
Expenditure	21.85	14.84

Source: KSRLPS, RDPR Department, Government of Karnataka

### 10.8 Government Initiatives - Social Security Schemes

#### a) Social Security and Pension:

The Directorate of Social Security and Pension, Revenue Department of the Government is providing social security benefits to the old, widows and physically challenged. Under old age pension scheme any person aged above 60 years and below 65 years and belonging to BPL household is eligible to avail the pension of Rs. 200 per month and aged above 65 years and belonging to BPL household is eligible to avail the pension of Rs. 500 per month. Widows aged between 18 to 65 years belonging to BPL households are eligible to avail pension under Destitute Widow pension scheme of Rs. 500 per month. Under State's non-Plan a pension amount of Rs. 500 per month is given as pension for Disabled person having disability

**Table 10.32: Progress of Social Security Schemes**

Year	Old age pension		Financial assistance to Physically handicapped		Pension to destitute Widows		Sandhya Suraksha Yojane	
	Exp. (Rs. Lakhs)	Beneficiaries (000's)	Exp. (Rs. Lakhs)	Beneficiaries (000's)	Exp. (Rs. Lakhs)	Beneficiaries (000's)	Exp. (Rs. Lakhs)	Beneficiaries (000's)
2004-05	6070.00	469	5790.00	352	8365.00	613	-	-
2005-06	6570.00	495	6619.00	373	8237.00	634	-	-
2006-07	12777.00	550	9817.00	407	16504.00	690	-	-
2007-08	27841.00	686	22491.00	464	32874.00	771	87689.00	262
2008-09	26253.00	791	17802.00	530	38674.00	865	119848.00	539
2009-10	41758.00	818	35261.00	636	45408.00	1023	166936.00	1018
2010-11	36936.00	783	42133.00	686	52826.00	1125	197213.00	1405
2011-12	40123.00	572	51434.00	553	59747.00	936	73040.00	1130
2012-13	30455.00	581	43290.00	605	49883.00	1040	71543.00	1257
2013-14	32575.63	591	55474.17	672	63936.42	1207	86930.60	1558
2014-15	39335.00	702	68694.00	783	79983.00	1437	106839.00	1965
2015-16*	31254.47	723	58817.34	821	67828.90	1527	96669.79	2175

Source: Directorate of Social Security &amp; Pension, Government of Karnataka, \* ( End of Dec. 2015 )

above 40% and below 75% and Rs. 1200 per month for those having disability above 75%. Sandhya Suraksha Yojane is the programme initiated by the government in 2007 to provide social security benefits to small and marginal farmers, agricultural labourers, weavers, fisher men and other labourers from unorganized sector excluding construction workers. Under this programme workers in the age group of 65 years and above having income Rs. 20,000 per annum are eligible and they are paid Rs. 500 per month. The pension amount rose to Rs. 500 in case of DWP & PHP with effect from 01.09.2013. New Schemes "Manaswini" for unmarried women of age 40 to 64 and "Mythri" for Transgender implemented w.e.f .1.08.2013 beneficiaries under these schemes are paid pension amount of Rs.500 per month. The information about number of beneficiaries and expenditure details of these programmes are given in the Table 10.32

#### b) ESIS Medical Services

The E.S.I Scheme is a premier social security scheme implemented in accordance with the E.S.I. ACT, 1948 and rules framed there under. The scheme was launched in February, 1952 in the Industrial Town of Kanpur and Delhi. The scheme provides two types of services, namely Medical and Non-Medical. Medical services are rendered by ESIS (M) Services, which is under the control of State Government, Labour Secretariat. The none of their families through a network of 9 ESI Hospital (Including ESIC Model Hospital, Rajajinagar and Peenya in Bangalore) 107 full time ESI dispensaries, 11 I.M.P systems dispensaries and 1 Diagnostic Centre. The details of expenditure made by the Department from 2007-08 to 2015-16 (upto December 2015) are given in Table 10.33 and details of numbers of persons insured are given in Table 10.34.

**Table 10.33: Details of Expenditure under ESI by State Government (Rs. In Lakhs)**

Sl. No	Year	Allocation under plan scheme	Expenditure	Surrender	Achievement Rs. In lakhs (%)
1	2007-08	1673.14	1262.01	4011.13	75.42
2	2008-09	1821.32	1709.04	112.28	93.83
3	2009-10	1941.62	1762.70	178.92	90.78
4	2010-11	1760.00	1665.26	79.74	94.61
5	2011-12	5000.00 surrender-3000.00 2000.00	1552.51	447.49	77.62
6	2012-13	5200.00	4822.75	377.25	92.74
7	2013-14	5200.00	4877.87	322.13	93.80
8	2014-15	5516.12	5217.70	298.92	94.58
9	2015-16*	10101.00	7112.94	-	70.41

Source: Directorate of Employees State Insurance Scheme, Government of Karnataka, \*(up to Dec. 2015)

**Table 10.34: Number of Persons Insured in the State**

Sl. No	Year	Insured Persons ( in Lakhs)
1	2007-2008	9.86
2	2008-2009	14.09
3	2009-2010	15.55
4	2010-2011	15.55
5	2011-2012	16.00
6	2012-2013	18.52
7	2013-2014	20.80
8	2014-2015	21.45
9	2015-16	21.70

Source: Directorate of Employees State Insurance Scheme, Government of Karnataka

### c) Karnataka State Unorganized Workers Social Security Board

To improve the living conditions of the unorganized workers and to bring them under the social security net, the State Government has constituted the Karnataka State Unorganized Workers' Social Security Board under the provisions of Unorganised Workers Social Security Act, 2008. The State Government has identified 43 categories of unorganized workers for extending social security benefits. At present the Board is implementing the following Social security Schemes.

### d) Karnataka State Private Commercial Vehicle Drivers Accident Benefit Scheme

To safeguard the interest of the drivers engaged in private commercial vehicles, such as Auto, Taxi, Maxi cab, Lorry and Private Bus who meet with the accident resulting in either death or suffer permanent total or permanent partial disablement, an accident compensation through insurance coverage called "Karnataka State Private Commercial Vehicle Drivers Accident Benefit Scheme" is implemented by the Board from June 2012. From August, 2013 the benefit of reimbursement of hospitalization charges in case of Temporary Disablement has also been extended. Upto December, 2015 2,00,682 drivers have been registered under this scheme and 210 Accidental Death & Disability claims have been settled and a sum of Rs.3,14,92,815 has been disbursed by the Board.

### e) Rastriya Swasthya Bima Yojana

Rastriya Swasthya Bima Yojana is a prestigious health insurance scheme, implemented for the labourers of unorganized sector. A health insurance provision is provided to the family of the beneficiary which

is duly recognized by the Central and the State Governments along with the cooperation of Insurance Companies and Third Party Administrators. The scheme is extended to the families of BPL MGNREGA (Workers who have worked atleast 15 days in last Financial Year), Beedi workers, Domestic Workers, Licensed Railway -Porters – Vendors-Hawkers, Street Vendors, Construction workers, Rag Pickers, Auto rickshaw drivers, Cycle Rickshaw pullers, Mine workers, Sanitation workers, Weavers and Artisans. During the year 2014-15 BPL, MGNREGA, Beedi Workers, Domestic Workers, Licensed Railway -Porters – Vendors-Hawkers, Rag Pickers and Weavers totaling to 1.12 crore families. The smart card distributed to 67,48,538 families are also considered as beneficiaries under this scheme.

A total number of 67,48,538 beneficiary families were enrolled out of which 99,066 beneficiaries have availed the medical benefits under the scheme worth of Rs.53,30,85,381 and for this task four insurance companies were selected (Table 10.35).

### f) Building and other Construction Workers Welfare Board

District wise meetings were conducted in the office of the Deputy Commissioners of each district wherein the representatives of the development departments like PWD, Irrigation, Z.P., City Corporations and Local Bodies were invited. They have been apprised of the obligation to collect cess on the cost of the building and other construction works undertaken by them and to collect cess from the permission seekers for construction of building.

**Table 10.35: Enrollment in RSBY**

Sl No	Insurance Company	Premium Amount	Total Enrolled
1	IFFCO Tokyo General Insurance Company	Rs 219/-	16,82,690
2	ICICI Lombard General Insurance Company Limited,	Rs 219/-	8,71,956
3	The New India Assurance Company Limited	Rs 173/-	30,63,902
4	Future General India Insurance Company Limited	Rs 163/-	11,29,990
Total			67,48,538

Source: Labour Department, Government of Karnataka

This has facilitated a great deal in augmenting the cess collection. With the help of Legal Services Authorities in various districts meetings with construction workers are being held to educate them regarding registration as beneficiary and the welfare benefits available to them. Doordarshan/Akashwani programmes have been conducted to create awareness about the Boards' activities. The number of construction workers registered with construction welfare board is 9,55,044 workers of which 7,40,598 and 2,14,446 are male and female workers respectively (Table 10.36). The cumulative figure of cess collected so far is Rs. 3226.65 crores. The detailed information is given in Table 10.37.

**Table 10.36: No. of Construction Workers Registered with Construction Welfare Board- 2015-16**

<b>Registration Fee</b>		Rs.150+25
<b>Monthly Subscription</b>		150 (3 Years)
<b>Total no. of registered workers</b>	<b>Male</b>	7,40,598
	<b>Female</b>	2,14,446
	<b>Total</b>	9,55,044

Source: Labour Department, Government of Karnataka

**Table 10.37: Cess Collected by Construction Workers Welfare Board**

Year	Amount of Cess Collected (in Rs.)
2007-08	44,17,46,917.00
2008-09	154,61,10,472.55
2009-10	227,46,03,831.03
2010-11	325,20,20,673.72
2011-12	360,61,68,040.39
2012-13	467,58,87,732.90
2013-14	477,39,13,584.83
2014-15	665,21,03,717.83
2015-16 *	504,39,95,536.52
<b>Total</b>	<b>3226,65,50,506.77</b>

Source: Labour Department, Government of Karnataka, \*(up to Dec. 2015)

### g) Karnataka State Child Labour Eradication

Child labour survey was conducted in all the 30 districts of state in 2011-12. 24,103 child labourers were identified in hazardous works and 27,140 child labourers in non-hazardous sector. However, all Deputy Commissioners are informed to review the survey report to arrive at real figures.

In Karnataka state, National Child Labour Project (NCLP) of Central Govt and State Child Labour Project (SCLP) of State Government are being implemented. Child Labour Survey is being conducted in all the 17 districts under National Child Labour Project (NCLP) for the year 2015-16. Out of the 17 districts, Raichur district has completed the survey and child Labours were identified.

At present, in 17 districts National Child Labour Project (NCLP) and in 13 districts State Child Labour projects are implemented. Under NCLP scheme, 35 training centres are functioning. Out of 18 bridge centres, 17 are converted into special residential schools. Additional expenditure is met by the State Government for this purpose Schools functioning under SCLP are all special residential schools. Children are admitted into mainstream of education, based on their learning capacity, in the special residential schools.

Special study material called 'Aralu Malliage' has been developed with assistance of International Labour Organisation. Life skills are also being taught to the children learning in special residential schools. In order to monitor the rescued and rehabilitated child labourers a web based child labour tracking system has been developed and installed in all the 30 districts. The special residential schools are functioning under the supervision of respective Deputy Commissioners. Details of the rescued and rehabilitated child labourers during the last 6 years are given in Table 10.38

**Table 10.38: Number of Child Labourers Rehabilitated**

Year	No. of child labourers rehabilitated
2010-11	2059
2011-12	3902
2012-13	7582
2013-14	6676
2014-15	3146
2015-16*	2323

Source: Labour Department, Government of Karnataka, \*(Upto December 2015)

### 10.9. Skill Development

The challenge of skill development is of utmost importance in the economic development of nation today. The lack of an adequately skilled workforce is now regarded as a main obstacle to sustain the current rate of growth. The concern over skill development is also of social importance. A majority of the workforce has been left behind, untouched by the benefits of the current economic development because of their poor education and skill levels. This has prevented them from seizing gainful employment opportunities. The challenge for skill development in India is broad, complex and multidimensional, covering both quantitative and qualitative aspects. It is complicated because of the size of the population, combined with vast geographical, cultural and social diversities. The requirement of training is not just to those entering the labour force for the first time, but also to those currently unemployed to help them to build their employability. It also needs to be available to the existing workforce in order to maintain their employability and build productivity. Very few opportunities for skill development are available for young people who have dropped out of school or are working in the unorganized sector. The problem is most severe among women and vulnerable groups such as people with disabilities, ST/SC/OBC, minority communities. Most formal training requires a minimum of 10<sup>th</sup> standard as an entry requirement, which excludes a large number of school drop-outs and other people with no or limited education from receiving formal training. The duration of the training is too long, often 2-3 years, and requires full-

time attendance, which workers cannot afford.

### State Government Initiatives

The State Government has taken up skill development as a major development policy since 2008-09. The State has established its own Skill Commission with representatives from trade and industry. It has also developed Skill Development Policy in line with National Skill Development Policy. Government of Karnataka adapted a state policy on skill development in the year 2008. To accomplish the desired objectives of State Skill Policy, the State established Karnataka Vocational Training and Skill Development Corporation (KVTSDC) under the companies Act 1956, with a target of imparting skills and employment to 10 lakh persons in the succeeding five years from inception. KVTSDC has been proactively following the agenda of skill development in the State.

#### a. Human Resource Development Centres (HRDC)

Establishment of HRDCs is one of the activities of KVTSDC, through which value added services are provided to both employers and job seekers. The mismatch between the job market demand on one hand, and the supply provided by our education system on the other is a matter of serious concern. Large number of people are added to the work force each year and their under preparedness to avail the emerging job opportunities addresses the issue of skill development on priority. In this background, Government of Karnataka has taken the steps to convert the Employment Exchanges, which are first contact point for job seekers, into "Human Resource Development Centres" to improve the employability and to make Employment Exchanges more relevant to the job seekers.

At present, 8 HRDCs have already been established in 8 Districts, namely, Mangalore, Bijapur, Mandya, Chamarajanagar, Hubli, Kolar, Bellary and Gulbarga. In addition to 8 HRDCs, 6 more employment exchanges are being taken up for up-gradation. They are located at Chitradurga, Haveri, Bagalkot, Ramanagara, Koppala and Shimoga. An amount of Rs.30 lakhs will be spent through

KVTSDC to each HRDC based on the status of existing building. The HRDCs have facilities like reception hall, registration room, assessment room, counseling rooms, training/class room, computer lab, discussion room, record room, pantry, server room, candidate interview room, centre head/employment officer room, toilets and other amenities. The HRDCs possess State-of-the-art infrastructure and would function under Public Private Partnership model. The ideal space requirement would be about 300sq. meters to be able to provide value added services to job seekers effectively.

During 2014-15, 11 DEEs at Belgaum, Davangere, Udupi, Hassan, Tumkur, Chikkaballapur, Gadag, Madikeri, Bidar, Chikkamagalore and Raichur are converted as HRD Centre and provided basic interior basic facilities with a cost of Rs.10.00 lakh per each centre. Interior work is in progress at 25 HRDCs and also to provide computers, printers and other equipments purchases are in progress. The staffs are being recruited through outsource agencies to run the centers from Feb 2015. It has been planned

to set up 2 more HRDCs in Bangalore and Mysore. It is proposed to establish 25 more HRDCs in near future. Training Programmes will be commenced after establishing these HRDCs.

#### **b. Migrant Resource Centre (MRC)**

MRC would be established through KVTSDC in the new building which is under construction at Koushalya Bhavan. MRC will act as an instrument to build institutional capacity to assist potential and actual migrants in the State with regard to migration and decision making process. MRCs enable providing authentic and reliable information on options, procedures and reliable contacts for international migration. It also works as a grievance redressal mechanism for the migrants in distress within the State. MRC provides overseas employment information to the migration aspirants in the State. MRC also conducts pre-departure training for the State Government Officials in understanding the migration and related issues. Table 10.39 shows details of various activities carried out in the existing HRDCs.

**Table 10.39: Details of Activities Carried out in the Existing HRDCs- 2014-15**

Centers	Graduates registered	Employers Registered	Assessed	Training	Placed
1) Mangalore	417	8	0	0	120
2) Bijapur	463	27	21	60	269
3) Kolar	992	37	0	67	406
4) Mandya	1676	25	0	170	1179
5) Chamarajnagar	855	14	0	74	248
6) Hubli	1362	13	0	52	348
7) Bellary	4514	24	0	307	1237
8) Gulbarga	3933	27	0	351	685
Total	14212	175	21	1081	4492

**Note:** During the year 2015-16 (1-4-2015 to 31-12-2015) no training activities were conducted due to tender period is expired, now tendering is in process.

Source: Karnataka Vocational Training & Skill Development Corporation, Government of Karnataka

**Table 10.40: Details of Consolidated Skill Development Training Programmes**

Skill initiative through	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16 *	Total
Mes training through ATP's	9698	35088	26577	4583	306	-	-	-	76252
Sahayog programe in 219 colleges	-	-	14675	-	-	-	-	-	14675
E-learning lab-50 hostels	-	1600	6812	8340	-	-	-	-	16752
Human resources development centre	-	-	1037	645	2276	7575	1081	-	12614
Karnataka employment center	-	-	1130	1380	473	-	-	-	2983
Through minority department	-	-	1440	10820	-	-	-	-	12260
Elip training at govt ITI's	-	-	13887	12884	11906	-	-	-	38677
Training for engineering candidates	-	-	3347	6055	-	-	-	-	9402
Training - SDP	-	-	439	15380	-	-	-	-	15819
Pre training for airman selection	-	-	793	-	-	-	-	-	793
Special category training (for disabled)	-	-	-	887	-	-	-	-	887
Sabala program	-	-	-	4390	-	-	-	-	4390
Through Bharathi Walmart	-	-	-	-	1277	990	-	-	2267
NCVT & SCVT (CTS and MDTS)	68438	74676	71275	58675	86821	-	-	-	359885
Apprenticeship training (ATS)	8776	8567	9415	8752	20865	-	-	-	56375
MSDCS	-	-	-	510	990	-	-	-	1500
Urban development - DET	-	-	4100	-	-	-	-	-	4100
Other line department	29089	25660	-	-	124858	-	-	-	179607
Through VTP's (MES)	13402	20374	4425	22179	57215	-	-	-	117595
Through KGTTI	-	-	-	-	-	282	108	-	390
Total	129403	165965	159352	155480	306987	8847	1189	-	927223

Source: Karnataka Vocational Training &amp; Skill Development Corporation, Government of Karnataka, \*upto December



The consolidated placement details of various training programmes conducted through different organizations/institutions/departments/ NGOs are shown in Table 10.41.

**Table 10.41: Placement Details**

Descriptions	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16*	Grand Total
Skill and Job fairs & Mini Job fairs	21820	43658	24407	16596	1977	16751	1479	9297	135985
Post Training	1896	11938	19774	7658	32		-	-	41298
Employment Exchanges	2232	13142	6042				-	-	21416
HRDC Mangalore	-		2027	2426	1249	799	-	-	6501
HRDC Bijapur	-			1411	2275	1961	-	-	5647
HRDC Kolar	-			1370	1079	3730	-	-	6179
HRDC Chamarajnagar	-			633	974	1921	-	-	3528
HRDC Mandya	-			224	1641	1997	-	-	3862
HRDC Hubli	-			302	1791	1639	-	-	3732
HRDC Bellary	-			124	987	2149	-	-	3260
HRDC Gulbarga	-					202	-	-	202
KEC	-		1083	3563	2714		-	-	7360
CPC	-		1824	4313	1853		-	-	7990
Retail Training by Bharthi Walmart	-				257		-	-	257
Udyogasiri	-				122	578	-	-	700
ITI Placement Centers-DET	30121	29570	36836	43966			-	-	140493
Other Line Departments	-	4358	5000				-	-	9358
Apprentice Central and State	16472	13321	15000	8752			-	-	53545
BESCOM Infosys	3703		3000				-	-	6703
Sahayog Placement	-		76	899			-	-	975
Helpline	-		1784	883			-	-	2667
Disabled Placement	-				459		-	-	459
Total	76244	115987	1,16,853	93120	17410	31727	1479	9297	462117

Source: Karnataka Vocational Training & Skill Development Corporation, Government of Karnataka, \*(upto December)

### c. Skill and Job Fairs

In order to enhance the employability of unemployed/un-trained professionals through proper skill training is provided, this is followed by placement efforts done through “Skill and Job Fairs” by creating common platform for employers & job seekers. Skill and Job Fairs are being organized since October 2008, in a larger scale at State level and mini job fairs are conducted at district level. The consolidated training details of various training programmes conducted through different organizations /institutions/ departments/ NGOs are shown in Table 10.40.

### d. Karnataka Vocational Education & Training (KVET)

The KVET Society has been established under the Department of Employment & Training. Registration of VTPs through on-line, inspection of VTPs and implementation of modular employable skills (MES) training through VTPs will be carried out through VTPs. In Karnataka about 886 training centers have been registered as VTPs. About 66,000 candidates have been trained under MES. Integrated software is proposed to be developed in association with IBM/KEONICS, so as to maintain a record towards on-going training, passed out and placement details of candidates who are undergoing/have

undergone training at government and private institutions/VTPs. The software will also have the provision to access on real time basis the student information, attendance etc., The special feature of software would enable quality oriented monitoring mechanism of all skill training programmes both in government and private sectors. Acquisition of data pertaining to job seekers, job providers, placements etc. in respect of all training and placement activities of KVTSDC, KGTTI, DET, HRDCs, KGMSDCs, all other line Departments, Udyog Melas etc., would be done through proposed software. The proposed project would enable easy accessibility & help maintain authenticity of data; as there would be a single source of unique ID number per candidate to be obtained from DET. All training activities need to be converged through DET to have effective data capturing and monitoring mechanism.

### e. State Skill Target and Action Plan

Table 10.42 shows the nationally entrusted state target for 12th Five Year Plan with respect to Karnataka State. Table 10.43 shows the action plan made to achieve the State target of training 9.8 lakh candidates in 2015-16. Table 10.44 shows the KVTSDC’s financial target for 2015-16.

**Table 10.42: Skill Target**

Five Year	National Target in Lakhs	State Target In Lakhs	% of Total target
2012-13	85	4.3	11
2013-14	120	6.1	15
2014-15	160	7.9	20
2015-16	200	9.8	24
2016-17	235	12.2	30
Total	800	40.4	100

Source: Karnataka Vocational Training & Skill Development Corporation, Government of Karnataka

**Table 10.43: Action Plan to Achieve the State Skill Target**

Training Particulars	Target for 2013-14	Achievement for 2013-14	Short fall	Target for 2014-15	Achievement for 2014-15	Target for 2015-16	Achievement for 2015-16
Modular Employable Skills (MES) training through DET	175000	No Training Programmes were started	-	-	No Training Programmes were started	-	SCP, TSP, SDP, Minority & KSWDC – Training Programmes-
Skill Training through other Line Depts.	140000	No Training Programmes were started	-	-	No Training Programmes were started	-	The Verification of Documents of VTPs has been completed on 24.11.2015 Action plan has been prepared to implement skill training programme before the end of December-2015
Apprentices Training Scheme (ATS)	65000	No Training Programmes were started	-	-	No Training Programmes were started	-	
Craftsmen Training / Centre of Excellence (COE) Training	88000	No Training Programmes were started	-	-	No Training Programmes were started	-	
Skill Training through HRD Centers	30000	4064	25936	200000	1081	-	
Skill / Orientation training for Overseas Job Seekers	10000	No Training Programmes were started	-	-	No Training Programmes were started	-	
Hi-Tech Training Programme through Multi Skill Development Centre including special training programme for SC, ST and Minority group candidates.	10000	No Training Programmes were started	-	-	No Training Programmes were started	-	
Special Training Programme to the Candidates of Backward, More Backward and Most Backward Talukas	30000	No Training Programmes were started	30000	300000	No Training Programmes were started	-	SCP, TSP, SDP, Minority & KSWDC – Training Programmes-
Training through proposed 100 Skill Development Centers (SDCs) in Construction and other areas	40000	No Training Programmes were started	-	-	No Training Programmes were started	-	The Verification of Documents of VTPs has been completed on 24.11.2015 Action plan has been prepared to implement skill training programme before the end of December-2015
Special Need Based Training Programme for SC/ST/SDP/Minority/others/KSWDC Woman candidates through VTPs by KVTSDC	16000	No Training Programmes were started	16000	290000	No Training Programmes were started	980000	
Motor Driving Training Programme	6000	No Training Programmes were started	-	-	No Training Programmes were started	-	
Total	610000	4064	71936	790000	1081	980000	

Source: Karnataka Vocational Training &amp; Skill Development Corporation, Government of Karnataka

**Table 10.44: Financial Target of KVTSDC for 2015-16**

Particulars	Amount in Lakhs
Mega Job fairs 10 Nos * 500000	5.00
Mini Job fair - 300 Miniudyoga melas through 25 HRDCs @ The cost of Rs 40,000 for each mela (25,12,40,000) the cost of 40,000 for each mela 25*12*40000	1.20
Short term Skill Training for SC Candidates under Special Component Plan (SCP) Scheme	18.00
Short term Skill Training for ST Candidates under Tribal Sub Plan (TSP) Scheme	19.95
Short term Skill Training for Candidates of Backward, More Backward and Most Backward Region (As per Dr. Nanjundappa's Report)	13.23
Short term Skill under Special Development Programme (SDP) Training Programme to Minority candidates	0.83
Training Programmes through Karnataka State Women Development Corporation (KSWDC)	3.60
Training Programme for Backward & Most Backward Districts of Hyderabad Karnataka Region in Ballary, Bidar, Gulbarga, Yadagiri, Koppa & Raichur	1.39
Various Training Programmes to Youths through Govt ITI's & HRDCs in the State under "YUVA YUGA" Scheme.	10.00
Computer Literacy, Soft & Communications Skill to the Rural Youth in the State through Mobile Vans	15.00
Administration Expenditures 10,00,000*12 months (Salary, Travelling allowances and other Expenses)	2.00
HRDC – Salary and Other Expenses of 25 HRD Centers	2.00
<b>Grand Total</b>	<b>92.20</b>

Source: Karnataka Vocational Training & Skill Development Corporation, Government of Karnataka

### 10.10 Progress of Various Labour Laws Enacted in Karnataka

A major issue in the area of labour reforms is how to ensure minimum conditions of decent work and livelihood in the unorganized or informal sector of the economy. The limited applicability of important laws and the application of number filters have led to the emergency of a dual labour market with the resultant implication of the overwhelmingly larger sections of the unorganized sector labour being deprived of protection from laws in many spheres. Labour is a concurrent subject in the Constitution of India, on which both the Centre and the States can legislate in their respective spheres. Labour

regulations can be broadly grouped into four broad areas, based on the aspects of employment covered by them, conditions of work, wages and remuneration, employment security and industrial relations and social security and welfare of workers. The statistics regarding the progress of labour laws enacted in Karnataka State is provided in Table 10.45. The Table illustrates the remarkable achievements in the matter of enforcement of various Acts in terms of prosecution and imposition of fine by the Department. Table 10.46 illustrates the progress of various labour laws enacted by Karnataka Factories and Boiler Department.

**Table 10.45: Progress of Various Labour Laws Enacted by Labour Department (upto December 2015)**

Name of the Acts	No of establishments Inspected	No of Cases filed against the establishment	Convictions	Total Penalty imposed in Rs.
Karnataka Shops & Commercial Establishment ACT	80,555	1,819	1,867	57,72,953
U/S 24 of Karnataka Shops & Commercial Establishment ACT (Child Labour)	6,154	81	16	82,775
Minimum Wages Act	20,568	1,819	1,870	34,53,870
Payment of wages Act	13747	1247	1248	45,66,235
Equal Remuneration Act	7522	485	395	29,92,950
Motor Transport workers Act	92	4	2	3,750
Child Labour Act	16954	133	135	7,91,850
Contract Labour Act	1859	138	68	5,51,550
Inter State Migrant Workmen Act	153	21	4	7,600
Sales promotion employees Act	26	-	-	-
Trade Union Act	73	-	-	-
Payment of Gratuity Act	4285	18	7	42,450
Beedi & Cigar workers Act	86	24	-	-
Industrial establishment (N.F.H.) Act	596	7	1	2,000
Karnataka Labour Welfare Fund Act	145	6	4	8,500
Maternity Benefit Act	190	3	3	5000
Plantation Labour Act	91	-	-	-
Building & other constructions workers Act	1044	24	3	-
Payment of Bonus Act	476	5	2	-
Industrial employment (Standing Order) Act	30	-	-	-

Source: Labour Department, Government of Karnataka

**Table 10.46: Progress of Various Labour Laws Enacted in Karnataka by Factories & Boilers, 2015-16 (April - December)**

Name of Act	No of Cases filed against Employer	No of punishable cases	Total Penalty Amount (in Rs.)
Factories Act 1948	106	80	2382750
The maternity Benefit Act 1961	-	-	-
The Payment of wages Act 1936	11	1	-
The Building Construction Act 1996	6	7	40000

Source: Factories &amp; Boilers Department, Government of Karnataka

**Table 10.47: Progress Under the Industrial Disputes Act, 1947 (from Jan-2015 to Dec- 2015)**

Particular	No of Cases
No of disputes pending at the beginning of the year	685
No of disputes received	1183
<b>Total disputes</b>	1785
No of disputes settled	84
No of disputes referred for adjudication	1156
No of disputes Withdrawn	150
<b>Total</b>	1200
Pending disputes as on September 2015	478

Source: Labour Department, Government of Karnataka

### 10.11 Industrial Relations

**a. Strikes and Lockouts** – The number of strikes and lockouts indicate the level of industrial peace in a State. Karnataka is by and large, a peaceful state as far as industrial environment is concerned. The number of strikes, lockouts and layoffs and the consequent man days are shown in Table 10.48. There are three strikes and 2 lockouts and 10 layoff incidents in the current year. The number of man days lost due to strikes was 542 and the number of mandays loss due to lay-off was more in the current year compared to the previous year.

**b. Absenteeism** - In the year 2015-16, at the end of December month, the proportion of absenteeism of industrial workers was 16.67 % which was 22.35% in the previous year. Absenteeism of plantation labour was 22.45 % details are given in Table 10.49.

#### c. Occupational Safety and Health

Department of Factories, Boilers, Industrial Safety and Health is associated with the responsibility of ensuring Occupational Safety and Health of the persons employed in registered factories. The State of Karnataka is having 15618 registered factories having employment potential of around 16.74 lakh persons (Table 10.50). 4450 registered boilers are functioning in the State. 73 Factories located in 16 districts have been identified as

Major Accident Hazard Units considering the threshold of quantity of hazardous chemicals stored and handled at the worksite. 1181 factories have been identified as factories having hazardous processes. Special provisions are in place for Major accident hazard and hazardous are in respect of these categories of factories. Department provides more thrust in overseeing the compliance to the applicable provisions of rules in force to prevent the hazards in the workplace. The vision of the department is to ensure safety, health and welfare facilities to the working class. Basically the department is a regulatory department. Over the years the department has become proactive in its sphere of work and is making its constant endeavor in providing required services to meet the present day demand of the industrial captains in the changed industrial scenario. While doing so, the department has not compromised in ensuring the aim and objectives of the laws being enforced. Statements showing the synopsis of important works carried out during last 3 years are given in Table 10.51. In addition to the regular training programme, the department is associated with conducting awareness programme for the SC and ST personnel working in the industrial domain by organizing Special Component programmes and Tribal Special programmes (Table 10.52).

**Table 10.48: The Number of Strikes, Lockouts and Layoffs and Mandays Lost (Jan to December 2015)**

	Strikes	Lockouts	Lay Off
Number of Strike/Lockout/layoff	3	2	10
Workers Involved	143	479	290
Man days Lost	542	1,02,699	1,888

Source: Labour Department, Government of Karnataka

**Table 10.49: Absenteeism of Plantation Labour**

Absenteeism (Jan to December 2015)			
Particulars	No. of Man days Schedule to Work	No. of Man days Absent	Percentage of Absent
Industry	625853	104351	16.67%
Plantation	26550	5961	22.45%

Source: Labour Department, Government of Karnataka

**Table 10.50: Details of Factories and Boilers Relating to Occupational Safety**

Particulars	2010 - 11	2011 - 12	2012 - 13	2013-14	2014-15	2015-16*
No. of Factories registered	1118	858	949	1113	1225	758
Total No. of factories	13333	13823	13906	14094	15,476	15,618
No. of persons employed in lakhs	13.5	13.7	13.67	15.05	15,84,973	16,73,560
No. of Inspections conducted	7524	8489	8543	7839	7868	5679
No. of Prosecutions filed	204	217	235	283	424	213
No. of convictions	131	127	103	74731	104	100
No. of Complaints received	57	59	62	4378	4590	3565
No. of Boilers registered	218	205	254	199	223	161
Total No. of Boilers	339	3601	4051	2102	4289	4450
Total No. of Boilers Inspections	2229	2354	2613	1306	2918	2253

Source: Factories and Boilers Department, Government of Karnataka, \*(Apr-Dec)

**Table 10.51: Achievements of Occupational Safety Department**

Particulars	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16*
Total No. of Training programmes conducted	144	156	187	186	201	100
No. of beneficiaries	4442	4780	5834	8576	7064	3362
Major Programmes conducted	8	9	13	11	8	2
No. of persons participated	1485	1348	1484	606	252	302

Source: Factories and Boilers Department, Government of Karnataka, \*(Apr-Dec)

**Table 10.52: Details of Training Programmes for SC/ST under SCSP**

Particulars	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16*
Special Components Programme	-	9	96	92	92	Nil
No. of beneficiaries	-	488	4754	4700	4684	Nil
Tribal Special Programme	-	5	29	28	32	Nil
No. of Beneficiaries	-	267	1468	1450	1652	Nil

Source: Factories and Boilers Department, Government of Karnataka, \*(Apr-Dec)

**10.12 Outcomes and Challenges**

As the employment challenge that Karnataka faces consists both of creating new jobs and improving the quality of existing jobs, a faster economic growth is the key to meet this challenge. A faster growth even with relatively low employment elasticity can generate reasonably high employment growth with significant increase in productivity. With a view to making employment growth faster, sectors and activities with relatively higher employment elasticity could be targeted particularly for high economic growth. But the compulsion of raising productivity with a view to improving employment quality in major sectors of the economy makes it imperative that economy grows at a high rate to generate the required number of new employment opportunities. Thus the strategy for creating quality employment essentially consists of a strategy for a rapid and diversified economic growth.

A faster growth of agriculture based geographical and crop wise diversification is an essential element of such a strategy. Agricultural growth is to be achieved not for a quantitative increase in employment but for a qualitative improvement in employment of those working in the farm sector through increase in productivity and income. So far as the number of workers in agriculture are concerned one should expect a declining trend and more and more of them may move out to other sectors. Manufacturing offers itself as the best alternative for absorbing those moving out of agriculture as also to other job seekers seeking relatively good quality employment. Therefore, manufacturing must be the another major sector to be targeted for higher growth. Transport and trade are other sectors with significant potential for generating productive employment.





## ECONOMIC INFRASTRUCTURE

# 11

### 11.1 POWER SECTOR

Karnataka State has been experiencing conditions of power shortage because of the ever-growing demand for power influenced by the rapid economic progress. The State Government has been taking various initiatives to implement projects in the public as well as private sectors for adding new installed capacities for power generation. Power generation in the public sector is managed by the Karnataka Power Corporation Limited (KPCL) whereas the Karnataka Power Transmission Corporation Limited (KPTCL) deals with transmission of power and load despatch functions. As part of the restructuring of the power sector in the State, the erstwhile Karnataka Electricity Board (KEB) was restructured as KPTCL in 1999 by giving it a corporate status. As per the Electricity Act 2003, KPTCL, being the State's transmission utility, is not empowered to engage in trading in electricity. Therefore, the distribution companies directly procure power from power generators, both public and private and ESCOMS own distribution network, and use KPTCL's transmission network to distribute electricity.

#### 11.1.1 Power Sector Reforms:

Recognizing the crucial role of power in achieving economic progress, Karnataka was one of the first Indian States to implement power sector reforms. The institutional setup for undertaking the reforms was strengthened with the enactment of the Karnataka Electricity Reforms Act in 1999. The Karnataka Electricity Regulatory Commission (KERC) was established as a regulatory authority of the State's power sector. Among other functions of the KERK, it regulates the tariff for supply of power to different categories of consumers. Four Electricity Supply Companies (ESCOMs), Bengaluru Electricity Supply Company Ltd. (BESCOM), Mangaluru Electricity Supply

Company Ltd. (MESCOM), Hubli Electricity Supply Company Ltd. (HESCOM), and Kalaburagi Electricity Supply Company Ltd. (GESCOM) were established during 2002 and another ESCOM, Chamundeshwari Electricity Supply Corporation Ltd. (CESC) was established in 2005. The Hukkeri Rural Electric Co-operative Society (HRECS) is engaged in distribution business in Hukkeri Taluk. These five distribution companies and HRECS are engaged in retail supply of electricity to the end consumers.

Government of Karnataka accorded approval in April, 2007 for setting up of a Special Purpose Vehicle (SPV) viz., Power Company of Karnataka Limited (PCKL) to supplement the efforts of KPCL in capacity addition. PCKL was incorporated on 20<sup>th</sup> August, 2007 under the Companies Act 1956. PCKL is responsible for capacity addition by way of setting up of new powers projects through bidding process, under Case-II bidding guidelines issued by Ministry of Power, Government of India and long term procurement of power under Case-I bidding guidelines of Ministry of Power, GoI. In order to bridge the demand and supply gap, PCKL has been procuring power on behalf of the ESCOMS from various sources including purchase of power through Energy Exchange, Banking (SWAP) as well bilateral transactions. PCKL also co-ordinates with other States and Central Government agencies on power related issues as well as through the forum of SRPC (Southern Regional Power Committee).

#### 11.1.2 Power Generation

The state of Karnataka depends on several sources of supply for meeting its power requirements. The state has power generation infrastructure within the state belonging to both public and private sectors. In addition, it has guaranteed allocations



from the central power generating stations, and finally relies on imports from other states for bridging the demand-supply gap. Thus, the main sources of power supply in Karnataka are:

- a. Generating Stations of KPCL
- b. Independent Power Producers (IPP's) (Conventional and Non-conventional)
- c. States share from Central Generating Stations
- d. Procurement from other States through bilateral trade, purchase and energy exchanges
- e. Barter arrangement (power banking)

KPCL has been pioneering the capacity addition for power generation in the public sector in the State. Benefiting from the reform processes, various private generators have also established power plants in Karnataka. Further, the State Government has established the Karnataka Renewable Energy Development Ltd (KREDL) to harness renewable sources of energy.

The total installed generation capacity both in the public sector and private sector including the State's share in the Central Generation Station (CGS) up to December 2015 was 15720.43 MW. The installed capacity in the public sector was 9201.35 MW (including CGS allocation) and the private sector's share was 6519.08 MW. In the private sector capacity, the share of

renewable energy sources of power generation (Excluding the Share of IPP Thermal & Mini Hydel) is 68.77%. The status of power sector in terms of both installed capacity and electricity generation for Karnataka is provided in **Table 11.1**.

The status of the installed capacity of Hydel power generation as on 31-12-2015 includes share of 23.33% in total installed capacity (**Figure 11.1**). This share increases to 28.64% if mini-Hydel is included. The contribution from wind power is the third highest at 2876.54 MW after hydro and coal thermal.

It may be observed from **Table 11.1**, out of the total installed capacity of 15720.43 MW as on 31-12-2015, the renewable energy share is 33.09%. The Hydro Thermal mix in the State generation in public sector is in the ratio of about 4:3. The anticipated capacity addition during the financial year 2015-16 is 1721 MW.

The total power generation in 2014-15 of 60545 MU was substantially higher than 58783 MU in 2013-14 due to good Monsoon. The availability factors of most of the generating plants have been found to be relatively high suggesting an efficient preventive maintenance system being in place.

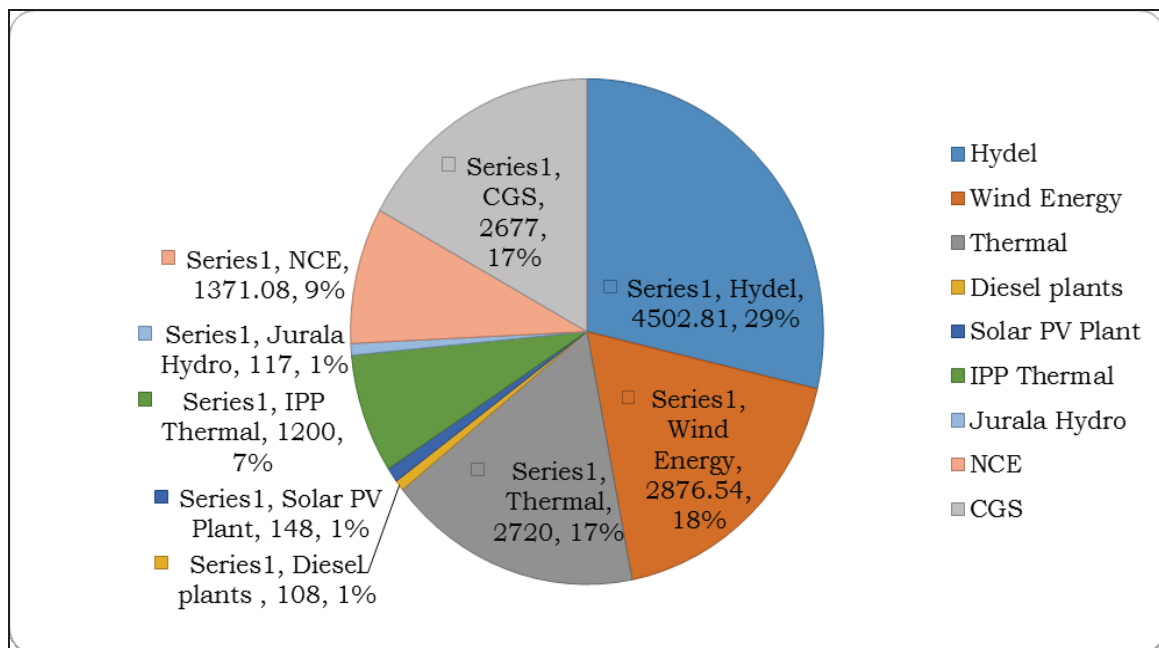
**Table 11.1: Progress in Power Sector**

Source	Units	2011-12	2012-13	2013-14	2014-15	2015-16*
<b>A. Installed Capacity</b>						
<b>1. Public Sector</b>						
a) Hydel	MW	3652	3652	3652	3652	3667.35
b) Wind energy	MW	5	5	5	5	5
c) Thermal	MW	2240	2720	2720	2720	2720
d) Diesel plants	MW	108	108	108	108	108
e) Solar PV plant	MW	9	14	14	14	24
<b>Total</b>		<b>6014</b>	<b>6499</b>	<b>6499</b>	<b>6499</b>	<b>6524.35</b>
f) Jurala Hydro	MW				117	117
<b>2. Private Sector</b>						
g) IPP Thermal	MW	709	1550	1550	1200	1200
h) Mini Hydel	MW	656	701	742.06	785	835.46
i) Wind energy	MW	1976	2177	2365.34	2677	2871.54

Source	Units	2011-12	2012-13	2013-14	2014-15	2015-16*
j) Co-generation & Biomass	MW	1001	1171	1247.58	1286	1371.08
k) Solar	MW			31.00	84	124
<b>Total</b>		<b>4342</b>	<b>5599</b>	<b>5935.98</b>	<b>6149</b>	<b>6519.08</b>
<b>3. Central Generating Station Allocation</b>	MW	1700	1836	1921	2169	2677
<b>TOTAL INSTALLED CAPACITY</b>		<b>12056</b>	<b>13934</b>	<b>14355.98</b>	<b>14817</b>	<b>15720.43</b>
<b>B.1 Electricity Generation(Net)</b>						
l) Hydel (KPCL)	MU	14024.05	9863.78	12178.80	12775.61	5621.71
m) Thermal(KPCL)	MU	12856.55	12414.98	14978.20	15428.83	11845.13
n) Diesel (KPCL)	MU					
o) Wind (KPCL)	MU					6.69
p) Solar PV plant	MU					20.47
q) Private sector	MU	14920.85	23328.29	19008.95	17999.75	19253
<b>Total</b>		<b>41801.45</b>	<b>45607.05</b>	<b>46165.95</b>	<b>46204.19</b>	<b>36747</b>
<b>2. Electricity imports</b>						
a) Central projects	MU	11571.81	11443.54	12617.30	14340.31	9311
b) Other States	MU					
<b>Total</b>	<b>MU</b>	<b>11571.81</b>	<b>11443.54</b>	<b>12617.30</b>	<b>14340.31</b>	<b>9311</b>
<b>Total Electricity supply</b>	<b>MU</b>	<b>53373.26</b>	<b>57050.59</b>	<b>58783.25</b>	<b>60544.50</b>	<b>46058</b>

Source: KPTCL \* (Upto Dec-2015)

**Figure 11.1: Installed capacity of Power generation in 2015-16 (in MW)  
(Up to Dec-2015)**



Source: KPTCL

**Plant Load Factors (Capacity Utilisation)****Table 11.2: Plant load Factors (PLF) and availability Factors of the KPCL,**

Station	2013-14			2014-15			2015-16		
	Installed Capacity	PLF%	% Av. Factor	Installed Capacity	PLF%	% Av. Factor	Installed Capacity	PLF%	% Av. Factor
Raichur Thermal Power Station(1-7)	1470	69.83	85.11	1470	77.59	87.9	1470	76.32	82.98
Raichur Thermal Power Station (u-8)	250	36.79	75.98	250	45.1	71.29	250	79.17	94.28
Ballari Thermal Power Station (u-I)	500	69.61	85.89	500	61.65	72.59	500	55.7	64.06
Ballari Thermal Power Station (u-II)	500	68.05	84.32	500	70.94	82.94	500	70.67	85.16
THERMAL TOTAL	2720			2720			2720		
Sharavathi Generating Station	1035	61.07	92.63	1035	57.45	92.72	1035	31.12	96.16
Gerusoppa Dam Power House	240	29.03	99.07	240	26.16	98.45	240	13.77	98.04
Linganamakki Dam Power House	55	55.18	88.71	55	52.5	94.78	55	20.7	91.72
Nagjhari Power House	885	33.75	87.41	885	41.58	87.79	900	24.5	72.79
Supa Dam Power House	100	53.17	95.39	100	51.18	84.92	100	36.98	98.17
Kadra Dam Power House	150	27.46	99.2	150	30.51	87.89	150	18.81	81.78
KodasalliDam Power House	120	30.88	97.36	120	36.42	95.79	120	20.03	95.39
Varahi Under Ground PH	460	32.56	99.23	460	27.98	97.58	460	17.2	80.82
Mani Dam Power House	9	41.69	96.22	9	35.45	99.46	9	18.73	78.69
Alamatti Dam Power House	290	19.81	94.69	290	18.82	74.1	290	7.62	76.14
Ghataprabha Dam Power House	32	29.15	89.7	32	23.31	99.97	32	11.58	93.9
Bhadra Dam Power House	39.2	18.38	57.74	39.2	14.59	56.75	39.2	11.65	59.24
Kalmala, Sirwar, Ganekal & Mallapur	10.75	0	0	10.75	0	0	10.75	0	0
Shivasamudram	42	58.88	98.81	42	59.62	88.49	42	70.27	81.11
Shimsha Hydro Electric Station	17.2	45	92.69	17.2	56.25	89.52	17.2	46.74	59.73
Mahatma Gandhi H E Station	139.2	21.71	61.46	139.2	28.26	88.03	139.2	23.03	92.39
Munirabad Power House	28	41.61	74.46	28	43.55	96.03	28	33.4	99.49
HYDRO TOTAL	3652.35			3652.35			3667.35		
Yelahanka DG Plant	108	2.42	0	108	0	0	108	0	0
Kappatagudda Wind Farm	4.56	34.25	97.66	4.56	24.04	82.45	4.555	0	0
Solar PV Plant	14	0	0	14	0	0	24	0	0
OTHERS TOTAL	126.55			126.55			136.555		
GRAND TOTAL	6498.905			6498.905			6523.905		

Source -KPCL

\*(Up to 31<sup>st</sup> Dec-15)

**Thermal and Hydel plants.**

**Table 11.2** indicates plant load factor from 2013-14 to 2015-16. As can be observed from **Table 11.3**, the average cost of power generation is higher in thermal plants as compared to Hydel plants and the State's reliance on thermal plants for power generation has increased over the years. As a result, the average cost of power generated (paise/kWh) has been increasing. Power generation, Imports, T & D losses and consumption of power since 1999-2000 is given at **Appendix 11.1**.

**Purchase of power from other States and energy exchanges**

Towards meeting shortages in electricity supply, Karnataka buys power from

neighbouring States, other States and from energy exchanges. The details of such purchases during 2011-12 to 2014-15 & in 2015-16 (Up to Dec-15) are given in **Table 11.4**.

There is an increase in power purchase from IPP's, in recent year due to growing demand and delay in completion of generation projects within the State and from Central Generating Stations. Further the corridor constraints existing between southern and other region has resulted in purchase of power at higher cost within southern region.

**Table 11.3: Plant Load Factor, Unit Cost of Power of Selected Power Stations**

Power Station	Plant Load Factor (%)				Unit Cost *2015-16 Paise/kWh
	2012-13	2013-14	2014-15	2015-16 (upto 31 <sup>st</sup> Dec-15)	
Sharavathi	51.50	61.07	57.45	31.12	23.88
Nagjhari	25.27	33.75	41.58	24.50	42.80
Supa	37.76	53.17	51.18	36.98	42.80
Varahi	25.55	32.56	27.98	17.20	115.24
RTPS Unit-1	63.68	58.70	71	91.58	390.00
RTPS Unit-2	53.63	67.63	74.39	83.33	390.00
RTPS Unit-3	79.05	70.06	79.60	38.09	390.00
RTPS Unit-4	82.90	79.07	83.53	84.12	390.00
RTPS Unit-5	79.24	76.46	74.58	81.55	390.00
RTPS Unit-6	76.77	77.28	85.65	79.69	390.00
RTPS Unit-7	78.31	59.63	74.39	75.91	390.00
RTPS Unit-8	28.79	36.79	45.10	79.17	455.00
BTPS Unit-1	68.28	69.61	61.64	55.70	399.17
BTPS Unit-2	-	68.05	70.94	70.67	396.82

\* Before accounting for T & D losses, Source: KPCL

**Table 11.4: Procurement from other States through bilateral trade & purchase through Energy exchanges:**

Year	Energy in MUs	Amount (Rs. in crore)	Average rate Rs/kWh
2011-12	6319.64	3035.29	4.80
2012-13	11046.36	4839.27	4.38
2013-14	6479.15	3212.87	4.96
2014-15	5915.71	3107.57	5.25
2015-16*	4851.77	2460.36	5.07

Source: Power Company of Karnataka Limited

\*(up to Dec.15)

**11.1.3 Power Transmission:****State Transmission Utility (KPTCL)**

Karnataka Power Transmission Company Ltd. (KPTCL) is the State Transmission Utility engaged in the business of transmission of electricity in the State. It is the responsibility of the KPTCL to construct power stations & lines, and strengthen the system for easing network congestion, power evacuation etc. The status of transmission

infrastructure as at the end of Dec 2015 is given in **Table 11.5**.

The transmission lines of different voltage classes, new substations and capacity augmentation in the existing substations added during the 12<sup>th</sup> Plan period from 2011-12 to 2014-15 are shown in **Tables 11.6 and 11.7**.

**Table 11.5: Power stations & transmission lines of KPTCL**

Voltage Level	No. of stations	Transmission Line in CKMs
400 kV	4	2683
220 kV	97	10528
110 kV	378	10114
66 kV	594	10390
33 kV	343	8749
Total	1416	42465

Source: KPTCL

**Table 11.6: Transmission lines of different voltage class added during 12th Plan period (Transmission line length in Ckms)**

Voltage class in KV	2011-12	2012-13	2013-14	2014-15	Total
400		671.84	0	0	671.84
220	317.73	193.13	98.65	245.48	854.99
110	266.85	287.70	351.97	318.423	1224.94
66	170.22	170.82	157.27	169.004	667.314
TOTAL	754.80	1323.49	607.89	732.907	3419.087

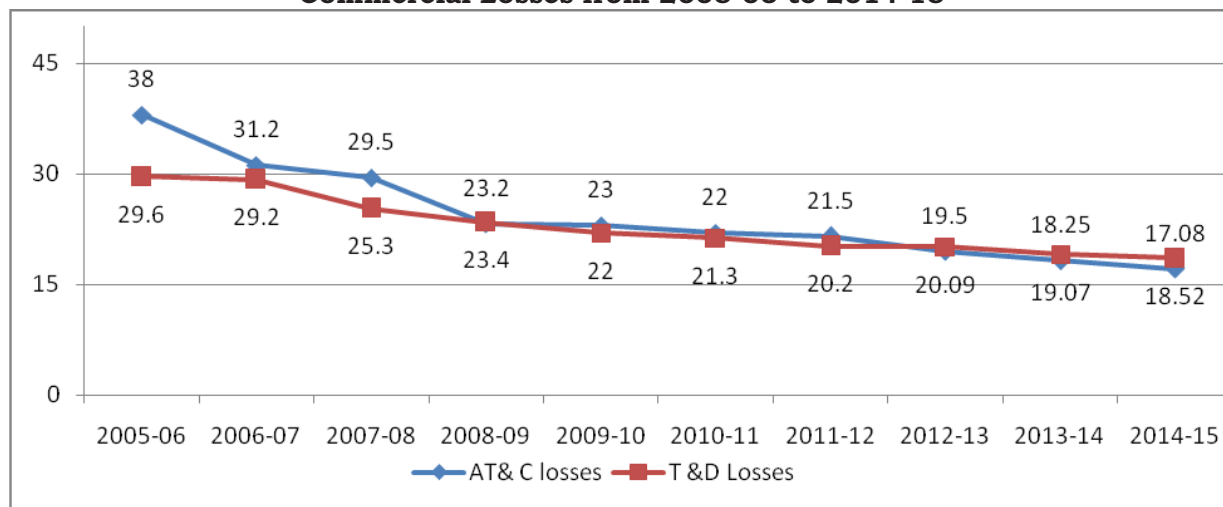
Source: KPTCL

**Table 11.7: Details of new sub stations added and capacity augmented during 12th Plan period.**

Voltage Class (KVA)	Substations added					Substations capacity augmented				
	2011-12	2012-13	2013-14	2014-15	TOTAL	2011-12	2012-13	2013-14	2014-15	TOTAL
400	-	-	-	-	-	-	-	-	2	2
220	1	3	1	1	6	1	2	4	2	9
110	17	13	15	16	61	26	15	27	18	86
66	8	17	10	15	50	29	34	43	21	127
TOTAL	26	33	26	32	117	56	51	74	43	224

Source: KPTCL



**Figure 11.2: Trends in Transmission & Distribution losses and Aggregate Technical & Commercial Losses from 2005-06 to 2014-15**

Source: Energy Department

**Table 11.8: Vigilance efforts by various authorities of the ESCOMs in reducing theft and pilferages**

Year	No of Installations Inspected	No. of Cases Detected	Penalty Imposed (Rs. in crore)
2010-11	615101	115687	150.44
2011-12	436798	89288	111.46
2012-13	412368	85955	129.41
2013-14	482251	91067	154.90
2014-15	408955	93412	157.62
<b>2015-16(Upto Dec.2015)</b>	<b>296638</b>	<b>33557</b>	<b>129.69</b>

Source: ESCOMs

**Transmission & Distribution Losses: (T&D Losses)**

Karnataka's power sector has reduced its T&D losses from 29.6% (in 2005-06) to 18.25% in 2014-15. (Figure 11.2). It is expected to bring down T&D losses to about 17.00% by March 2016. The utilities in the sector are making planned investment for strengthening and augmenting the network for reduction of technical losses.

Figure 11.2 also shows the trends in Aggregate Technical & Commercial (AT&C) losses during 2005-06 to 2014-15. The AT&C Loss which was 38% in 2005-06 has been brought down for 17.08%. The vigilance efforts by various authorities of the ESCOMs have contributed to the reduction in AT&C losses (Table 11.8).

**11.1.4 Power Consumption:**

As shown in Table 11.9, in the year 2014-15, the agricultural sector (water pumping through irrigation pump sets) accounted for highest share of electricity consumed with a share of 36 % with domestic occupying a distinct second position with a share of 21%. However, in terms of paying for the electricity, the agricultural sector pays the least where as the commercial consumers pay the highest tariff.

The ESCOMs supply electricity to various categories of consumers at different price slabs. Details of revenue realized from the different categories of consumers are given in Table 11.10. This shows that during the year 2014-15 nearly 63.37% of the ESCOMs revenue arises from LT category consumers even though they account for about 71.32% of the electricity consumption. The HT industrial & commercial sector while

accounting for only 24.08% of the electricity sales contributes 32.59% of the total revenue earned in 2014-15. Electricity supplied for lift irrigation fetches the lowest average revenue of Rs. 2.38/kWh where as the LT commercial category provides highest

revenue realisation of Rs. 8.12/kWh. Other than temporary installations, commercial LT consumers and HT industrial and commercial consumers pay higher prices for electricity consumed.

**Table 11.9: Electricity Consumption by various Category of Consumers**

Category of Consumers	Consumption (MU)		%of Sales		Demand (Rs. Crore)		ARR Ps / kWh	
	2014-15	2015-16 (Upto Dec-15)	2014-15	2015-16 (Upto Dec-15)	2014-15	2015-16 (Upto Dec-15)	2014-15	2015-16 (Upto Dec-15)
HT Industries	8352.78	6047.64	16.91%	16.28%	5617.52	4310.89	6.73	7.13
LT & HT IP Sets	17889.17	13153.99	36.21%	35.40%	6600.71	5376.38	3.69	4.09
Domestic	10592.76	8422.00	21.44%	22.67%	4950.01	3933.33	4.67	4.67
LT Industries	1889.14	1408.87	3.82%	3.79%	1185.06	907.27	6.27	6.44
LT & HT Water Works & Sewage pumping	2476.88	1877.79	5.01%	5.05%	1328.00	993.02	5.36	5.29
LT & HT Commercial Lighting	5812.56	4498.19	11.77%	12.11%	4780.25	3880.98	8.22	8.63
Public Lighting	876.34	654.08	1.77%	1.76%	609.36	460.60	6.95	7.04
Others(LT & HT)	1511.02	1093.71	3.06%	2.94%	1000.20	825.71	6.62	7.55
TOTAL	49400.64	37156.27	100%	100%	26071.11	20688.17	5.28	5.57

Source: ESCOMs \* After T & D losses as on 31.03.2015

**Table 11.10: Electricity sales and revenue realization by categories of consumers**

Category	Description	Sales (MU)		Revenue (Rs. Crores)		Average revenue realization (Rs./kWh)*	
		2014-15	2015-16 Up to Dec-15	2014-15	2015-16 Up to Dec-15	2014-15	2015-16 Up to Dec-15
LT1	BJ/KJ	546.00	413.73	266.59	199.92	4.88	4.83
LT2	AEH	9994.69	7996.22	4610.27	3721.77	4.61	4.65
LT3	Commercial	2839.28	2270.41	2305.71	1882.73	8.12	8.29
LT4	Irrigation Pump sets	17787.53	13086.44	6600.72	5361.09	3.71	4.10
LT5	Industries	1889.12	1408.87	1184.99	907.27	6.27	6.44
LT6	Street lights and water supply	1913.52	1425.83	1230.52	944.72	6.43	6.63
LT7	Temporary Installations	263.04	178.83	320.42	229.87	12.18	12.85
TotalLT		35233.18	26780.32	16519.22	13247.37	4.69	4.95
HT1	Water supply installations	1439.68	1106.04	706.16	508.90	4.90	4.60
HT2	HT Industrial & Commercial	11895.82	8753.91	8496.09	6671.64	7.14	7.62
HT3	Lift Irrigation	333.19	325.35	79.46	73.81	2.38	2.27
HT4	HT Residential	175.85	110.57	136.19	67.96	7.74	6.15
HT5	HT Temporary	322.86	80.09	116.84	97.26	3.62	12.14
Total HT		14167.40	10375.96	9534.74	7419.56	6.73	7.15
Others / Misc. Income		0.00	0.00	17.17	21.24		
Grand Total		49400.58	37156.27	26071.13	20688.17	5.28	5.57

**Table 11.11: Energy sales, average tariff and average cost of power supplied by ESCOMs**

ESCOMS	Energy sales(MU)		Average tariff (Rs./kWh)		Average cost (Rs./kWh)	
	2014-15 (As per Actuals)	2015-16 as approved by KERC (at approved level)	2014-15 (As per Actuals)	2015-16 as approved by KERC (at approved level)	2014-15 (As per Actuals)	2015-16 as approved by KERC (at approved level)
BESCOM	24,436.08	25,341.91	5.52	5.59	5.56	5.59
MESCOM	4,146.18	4,523.50	5.09	5.41	5.53	5.41
HESCOM	9,208.39	9,219.66	5.17	5.52	5.2	5.52
GESCOM	6,131.71	6,435.91	5.1	5.34	5.3	5.34
CESC	5,240.07	5,744.82	4.88	5.26	5.36	5.26
Hukkeri	238.21	127.53	4.78	4.85	5.44	4.85
Total	49,400.64	51,393.33	5.29	5.49	5.39	5.49

Source: ESCOMs.

**Table 11.12: Subsidy Released by the State Government**

Year	Subsidy released ( Rs . in crore)
2011 -12	4851.28
2012 -13	6500.00
2013 -14	5460.00
2014-15	6200.00
2015-16 (Up to Dec-2015)	4432.18

Source: Energy Department

There are a total of 2340563 Bhagya Jyothi/Kutira Jyothi (BJ / KJ) connections and 2344486 irrigation pump sets in the State as of December 2015. The power supply to IP sets and BJ / KJ consumers has been made free with effect from 01.08.2008. The entire cost of supply of free power to agricultural sector has been made good by the State Government through subsidy. The subsidy provided by the State Government during the last 4 years and in 2015-16 (Up to December 2015) is provided in **Table 11.12**.

#### 11.1.5 Electricity, Demand and Supply Status:

The core issue of power supply in Karnataka is the status of demand & supply to ensure that there is no shortage of supply in the State. The State of Karnataka has been facing power shortage as it is a progressive State and there is ever growing demand for power. The State Government has been planning through various means for capacity addition for adding more power to the grid to

meet the growing demand. 2015-16 is experiencing severe draught situation and the hydel availability has come down drastically. The State Government is sourcing power from all available sources to meet the demand. Still there has been shortage in supply.

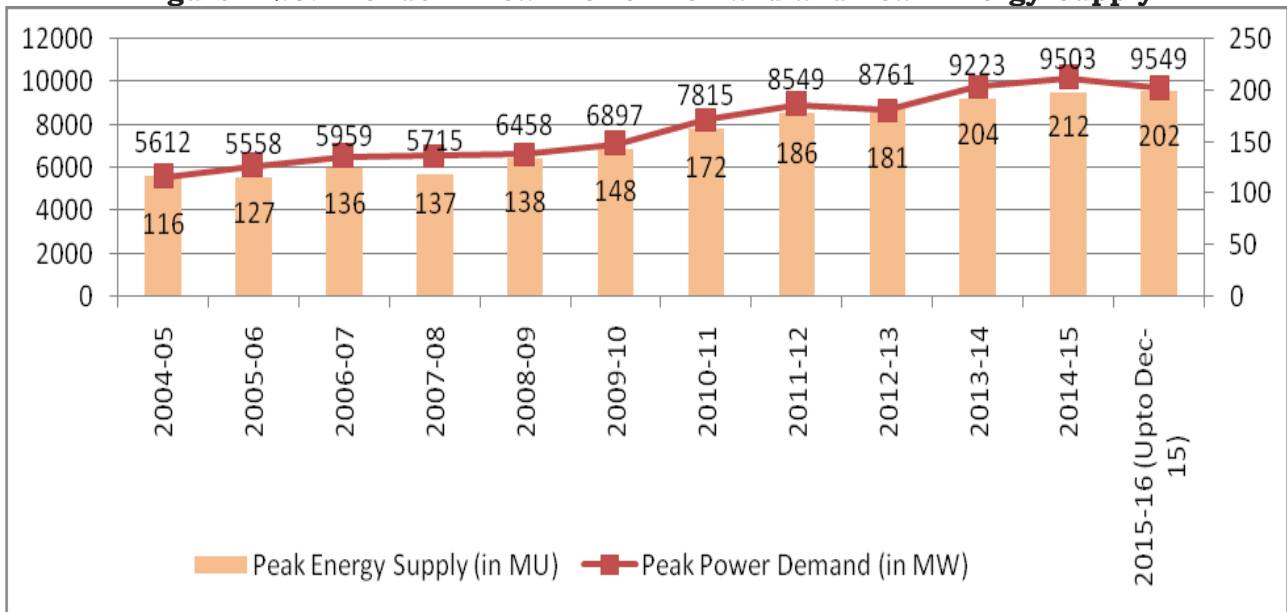
Apart from augmenting its generation, the State has been importing power from central power-generating stations, from neighbouring States, and also through energy exchanges for minimising power shortages. In addition, the State Government is taking steps for conservation of energy through demand side management programmes. In cases where it is highly difficult to bridge the supply-demand gap, load shedding is imposed.

Trends in peak demand for power and peak energy supply per day during the years

2005-06 to 2015-16 (Up to December - 2015) are given in **Figure 11.3**. It may be observed that both the peak demand and peak energy supply per day are showing increasing trends since 2007-08. The peak demand met during 2014-15 was 9503 MW, and during 2015-16 it is 9549 MW which indicates an increase of 0.48%. The anticipated peak demand during 2015-16 is likely to be around 10,000 MW.

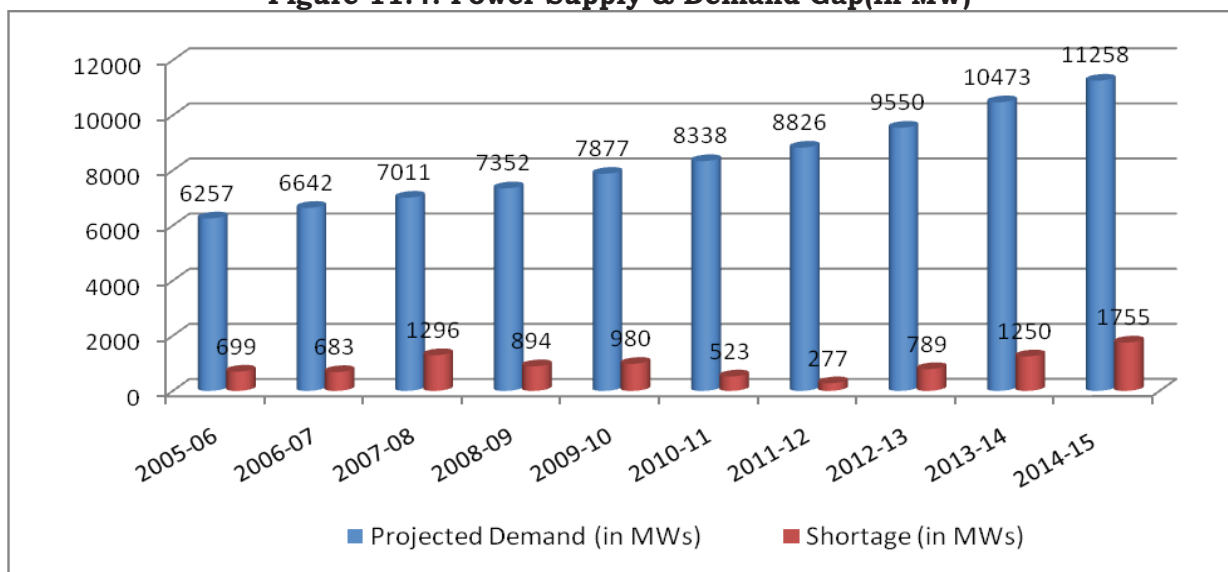
**Figures 11.4 and 11.5** shows the trends in estimated gaps in demand and supply for both power and energy. The power supply shortage was highest at 1755 MW in 2014-15 (**Figure 11.4**) and energy supply shortage was highest at 8226 MUs in 2006-07 (**Figure 11.5**) From the above it can be seen a substantial improvement in power supply situation in the State mainly due to the government’s initiatives in expanding power infrastructure.

**Figure 12.3: Trends in Peak Power Demand and Peak Energy Supply**

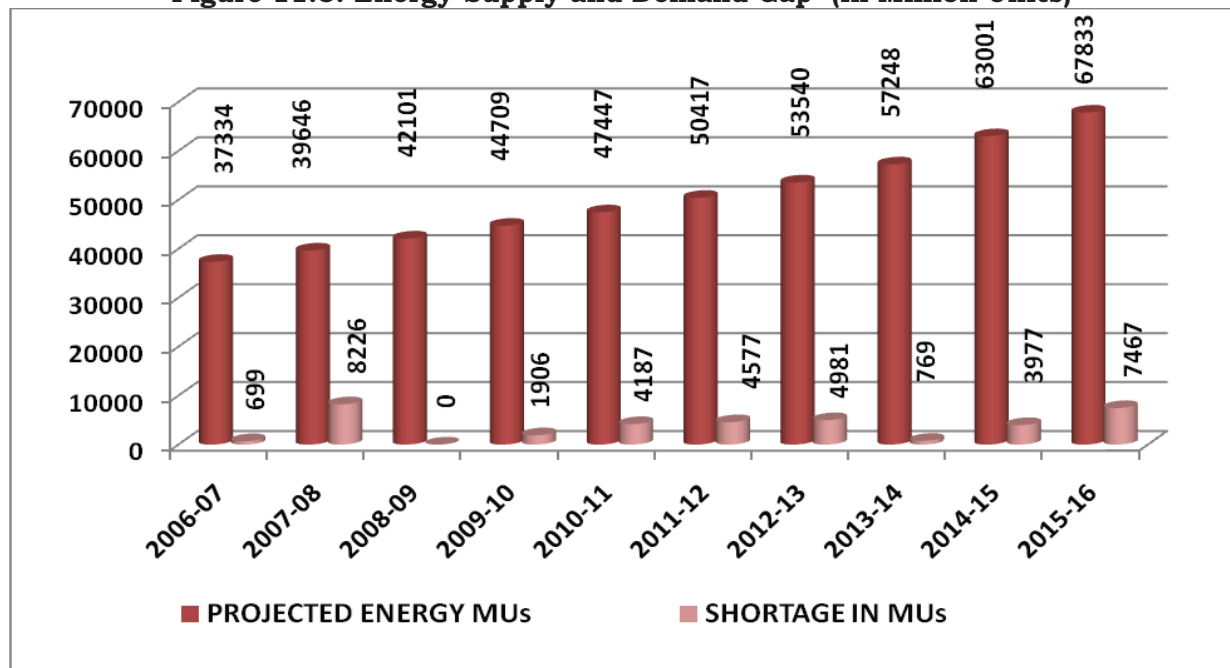


Source: KPTCL

**Figure 11.4: Power Supply & Demand Gap(in MW)**



Source: KPTCL

**Figure 11.5: Energy Supply and Demand Gap (in Million Units)**

### Demand Side Management (DSM)

The Government of Karnataka has implemented and in few cases proposes to implement new programmes to conserve energy as part of its demand side management (DSM) initiatives. Some of the important programmes are:

1. Making the currently optional Time of Day Tariff compulsory for industrial consumers and especially for HT consumers having sanction load of 500 KVA and above.
2. Installing Energy efficient street lighting systems and Electronic Time Switches for street light installations for switching "ON" and "OFF".
3. Segregating agricultural loads from the existing 11KV feeders through Niranthara Jyothi scheme to provide 24X7 uninterrupted power supply to non-agricultural loads in rural areas.
4. Adoption of High Voltage Distribution System (HVDS) for agricultural loads.
5. Encouraging consumers to use solar water heaters.
6. Mandatory use of solar water heating systems for all residential buildings with a built up area of 600Sq. feet and above falling within the limits of Municipalities / Corporations and Bengaluru Development Authority, etc.
7. Mandatory use of CFLs in Government buildings/Aided institutions /Boards / Corporations.
8. Mandatory uses of energy efficient irrigation pump sets that conform to standards prescribed by the Bureau of Energy Efficiency.
9. Promotion of energy efficient building designs.
10. Mandatory uses of electronic ballasts (Choke) instead of conventional copper choke in fluorescent tube lights.
11. Adoption of Bachat Lamp Yojana launched by Bureau of Energy Efficiency (BEE), Ministry of Power, Government of India.
12. Implementation of solar rooftop programme under net-metering concept.
13. Vidhyuth Jagruthi Yojana, an awareness programme on DSM activities for students of schools / colleges.
14. Belaku Yojane Scheme, an initiative by GoK through KREDL (Nodal agency) for distribution of CFLs.
15. Surya Raitha Scheme, a pilot project for arranging power supply to IP sets through solar under net-metering concept for IP sets.
16. Establishing Solar Power Park at Pavagada in Tumakuru District.

ESCOMs are currently implementing a smart grid pilot project and a project for implementation of smart meter technologies for online recording of energy consumption and provision of post-paid/pre-paid options to consumers of electricity.

#### 11.1.6 Rural Electrification:

Towards meeting the targets stipulated by the National Electricity Policy (NEP), the State Government has planned initiatives for energization of villages, hamlets, Harijan bastis and thandas. In Karnataka, almost all the villages have been electrified except a few for which extending the grid is extremely difficult. Electrification of such villages is being taken up by concerned ESCOMs through Decentralised Distributed Generation (DDG) under Rajiv Gandhi Grameena Vidhyut Yojane (RGGVY) scheme.

The ESCOMs have planned to energise hamlets and thandas in a phased manner. The details of electrification status in hamlets, Harijan bastis, thandas and IP sets during the last five years and in the current financial year are provided in **Table 11.13** and progress of Rural Electrification since 1999-00 is given at **Appendix 11.2**.

#### 11.1.7 Karnataka Renewable Energy Development Limited (KREDL)

KREDL is the nodal agency for the development of renewable energy sources in Karnataka. To harness green and clean renewable energy sources in the State for environmental benefits and energy security, and to initiate energy conservation & efficiency measures in all the sectors for sustainable development, the Government of Karnataka enacted a policy on renewable energy (for the period 2009-14) on 19.01.2010. The State Government has also published its Solar Policy for 2014-2021 for giving impetus to exploitation of solar energy. KREDL, the Nodal agency envisages private sector investment for renewable energy development in the State. The capacity addition under renewable energy during 2014-15 was 445.75 MW and it is 355.85 MW during 2015-16 upto December (as shown in **Table 11.14**).

The cumulative achievements in installed capacity additions in the renewable energy sector in the State as on 31-12-2015 are shown in **Table 11.15**. Wind energy accounts for major share in the capacity. In the renewable energy sector about 355.85 MW of new installed capacity is added during 2015-16 up to Dec. 15 (**Table 11.16**).

**Table 11.13: Progress in Rural Electrification**

Year	Irrigation Pump sets Electrified Cumulative No.(in lakhs)	Hamlets/Harijan Bastis Thandas Electrified (No.s)
2011 -12	19.49	272
2012 -13	20.52	741
2013 -14	21.49	08
2014-15	22.03	182
2015-16 (Upto Dec-2015)	23.44	25

Source: Energy Department

**Table 11.14: Capacity additions under Renewable Energy (in MW)**

Sources	Capacity addition during			
	2012-13	2013-14	2014-15	2015-16 (upto 31 <sup>st</sup> December 2015)
Wind Power	201.65	183	311.60	186.10
Small/Mini Hydro	51.01	40.65	43.15	50.25
Co-Generation	180.50	76	28.00	79.50
Solar	5.00	17	53.00	40.00
Biomass	2.45	12.09	10.00	0.00
Total	440.59	328.74	445.75	355.85

Source: KREDL

**Table 11.15: Cumulative Progress in Renewable Energy (in MW)**

Sources	Potential Available	Allotted Capacity	Installed Capacity
Wind Power	55857	13416.32	2871.54
Small/Mini Hydro	3000	3006.36	835.46
Co-Generation	2000	1832.85	1252.05
Solar	24700	1124.00	124
Biomass	1000	369.98	113.03
Total	86557	19749.51	5196.1

Source: KREDL

**Table 11.16: Capacity addition of Renewable energy sources during 2015-16**

Sources	Capacity addition (MW) up to Dec 15
Wind Power	186.10
Small/Mini Hydro	50.25
Co-generation	79.50
Solar	0.00
Biomass/Bio-gas	40.00
Waste to Energy	0.00
Total	355.85

Source: KREDL

### 11.1.8 National Biogas Manure and Management Programme (NBMMP)

[Biogas is a clean, non-polluting, smoke and soot-free fuel, containing methane gas produced from cattle dung, human waste and other organic matter in a biogas plant through a process called anaerobic digestion. The digested slurry can be used as good quality manure in agricultural fields. It is a centrally sponsored scheme being implemented since 1982-83. This is mainly

100% women programme. The Government of India has provided central subsidy under NBMMP. The details of central subsidy is given below.

Based on the cattle population in the State, 6.80 lakh biogas plants can be constructed. Beneficiaries are selected by GP level under NBMMP. In 2015-16, the State Government has provided State and Central share of Rs.1256.00 lakh in the State budget.

Particulars	Existing subsidy (in Rs.)
Central Subsidy	9000
Turn Key Fee	1500
Latrine linked bio gas Plants	1000

- State has provided subsidy of Rs.3500/- per plant

Year	Physical (Nos)		Financial (Rs.in lakhs)	
	Target	Achievement (State+central)	Target (State+central)	Achievement (State+Central)
2014-15	10500	8222	1139.24	326.78
2015-16*	16000	3555	1256.00	**

\*(up to end of Dec.15)

\*\*Central Subsidy is expected

**The Karnataka State Biofuel Policy-2009**

The Karnataka State Biofuel Policy-2009 has come into force from March 1st, 2009. It is a State Plan programme. Karnataka Biofuel Policy is implemented through Karnataka State Biofuel Development Board. An amount of Rs.150.00 lakhs was provided in the state budget for the year 2015-16. Rs.112.50 lakhs has been released to Karnataka State Biofuel Development Board for implementation of biofuel activities

**Soura Belaku - Installation of Solar Street Lights at Grama Panchayats**

Soura Belaku Programme is started in the year 2009-10 for installation of Solar Street Lights at Grama Panchayat level. The Programme is implemented only in each selected pilot district from each revenue division. The programme is implemented through E-Procurement. In the State budget, for 2015-16, Rs.310.00 lakh is provided. Bagalkote, Bellary, Mandya & Gadag districts are selected during the year 2015-16 & E-Tendering activities under process. Rs.155.00 lakh released to pilot districts.

**Institutional support for Rural Energy Development:**

**Mahatma Gandhi Institute of Rural Energy & Development:** The Mahatma Gandhi Institute of Rural Energy & Development, Bangalore, (MGIRED) is a Southern Regional Institute established with the assistance of Ministry of New and Renewable Energy, Government of India and the Department of Rural Development and Panchayat Raj, Government of Karnataka. The Institute is a registered society set up in the year 2000 to cater to the training needs of Southern States/Union

Territories. It is the vision of the MGIRED to create awareness and propagate the latest development in the Rural Energy, Ground Water Conservation, Rain Water Harvesting and Environmental Protection to the rural masses. MGIRED is committed itself to the following activities:-

1. Capacity Building
2. Demonstration of Rural/Renewable Energy Technologies.
3. Demonstration of De-centralized Rural Energy Based Industry.
4. Documentation and dissemination of information on Rural Energy Development/Rain Water Harvesting/ Environmental Protection etc.
5. Research on Rural Energy and Advisory Services and Consultancy on Rural Energy, village adoption for implementing Rural Energy and related Rural Development Programme.

**11.1.9 Investment in Power Sector: (Planned by KPCL)**

KPCL has planned various projects to augment the generation capacity in the State during the 12<sup>th</sup> Five Year Plan period (2012-17). The total planned capacity addition from these projects is expected to be about 2335 MW in the next five years. Similarly, KPTCL is constructing power stations and lines, and strengthen the system for easing network congestion etc. The Plan Outlay and expenditure incurred during the last four years are given at **Table 11.17** and investment in power development since 1999-00 is given at **Appendix 11.3**

**Table: 11.17 Investment in Power Sector (Rs. In Crores)**

Year		2013-14	2014-15	2015-16*	
IEBR	KPCL	Plan Outlay	2808	2850	2685
		Expr.	2339.26	2588.55	327.7
	KPTCL & ESCOMs	Plan Outlay	1250	1200	1200
		Expr.	1250	1200	1262.38
Capital Outlay for Power Projects		Plan Outlay	758.7	820	847.02
		Expr.	758.7	770	619.88
Loans for Power Projects		Plan Outlay	81.74	80	73
		Expr.	81.74	57.59	0
Total Outlay		Plan Outlay	4898.44	4950	4805.02
		Expr.	4429.7	4616.14	2209.96

Source: Details of Provision for Plan Schemes, Finance Department, GoK \*(Upto Dec- 2015)



Power Company of Karnataka Limited (PCKL) will implement the following projects through bidding process, under Case-II bidding guidelines issued by Ministry of Power,

- i) 1320 MW Coal based Thermal Power Project at Kalaburagi
- ii) 1320 MW Coal Based Thermal Power project at Ghataprabha.

Further, PCKL is the Nodal agency to implement the following projects under IPP and Central Projects.

- i. Establishing 500 MW Coal based thermal power project at Hassan by M/s. Hassan Thermal Power (P) Limited (HTPPL) (IPP).
- ii. Kudigi Regional Thermal Power Plant 4000 MW (Central Sector).
- iii. Enhancement of Units 5 & 6 from 2X220 MW to 2X700 MW at Kaiga (Central Sector).

### Centrally Sponsored Scheme:

#### 1. Deendayal Upadhyaya Gram Jyothi Yojana (DDUGJY)

- Ministry of Power, Government of India vide OM No 44/44/2014-RE dated 03.12.2014 has conveyed the sanction for launch/implementation of Deendayal Upadhyaya Gram Jyothi Yojana (DDUGJY) with the following components:
  - i. Separation of agriculture and non-agriculture feeders facilitating judicious rostering of supply to agricultural and non-agricultural consumers in the rural areas;
  - ii. Strengthening and augmentation of sub-transmission & distribution infrastructure in rural areas, including metering of distribution transformers/feeders/consumers and
  - iii. Rural electrification, as per CCEA approval dated 01.08.2013 for completion of the targets laid down under RGGVY for 12th and 13th Plans by carrying forward the approved outlay for RGGVY to DDUGJY.
- The Monitoring Committee of Ministry of Power on 06.08.2015 has approved the projects under DDUGJY. The sanction details for the State is as follows:

(Amount in Crores)

Item	Cost approved by Monitoring Committee
Electrification of un-electrified villages	54.93
System Strengthening and Access to Rural Households	279.67
Metering	518.44
SAGY	50.26
Feeder Separation	842.24
Grand Total	1745.54
PMA Charges @ 0.5%	8.73
Total Project Cost	1754.27

#### 2. Integrated Power Development Scheme (IPDS)

- Ministry of Power, Government of India vide OM No 26/1/2014-APDRP dated 03.12.2014 has conveyed the sanction for launch/implementation of Integrated Power Development Scheme (IPDS) with the following components:
  - i. Strengthening of sub-transmission and distribution networks in the urban areas;
  - ii. Metering of distribution transformers/feeders/consumers in the urban areas.
  - iii. IT enablement of distribution sector and strengthening of distribution network, as per CCEA approval dated 21.06.2013 for completion of the targets laid down under R-APDRP for 12<sup>th</sup> and 13<sup>th</sup> Plans by carrying forward the approved outlay for R-APDRP to IPDS.
- The Monitoring Committee of Ministry of Power on 06.08.2015 has approved the projects under IPDS. The sanction details for the State is as follows:

(Amount in Crores)

Name of the Company	No. of towns	DPR approved by MoP	
		DPR Cost	PMA cost @0.5% of Project Cost
BESCOM	45	457.16	2.29
CESCOM	33	170.03	0.85
GESCOM	42	183.41	0.92
MESCOM	29	157.8	0.79
HESCOM	73	170.35	0.85
TOTAL	222	1138.75	5.70

Source: Energy Department

### 11.1.10 New Initiatives, challenges and Outcome:

#### Initiative taken up in 2015-16

- The State Government has proposed to implement solar energy projects through Karnataka Renewable Energy Development Ltd.(KREDL) for providing solar water pumps to beneficiaries.
- Providing solar water pumps to SCP/TSP beneficiaries under SCSP and TSP schemes.
- Installing LED street lights in all the ESCOMs in a phased manner under Nagara Jyothi Yojane.
- Upgradation of Distribution Automation System in other corporation areas.
- The HVDS implemented on pilot basis will be continued in other sub division of ESCOMs after detailed study of the scheme.
- Smart Grid and Smart Meters scheme will be implemented on pilot basis.
- Implementation of Green Energy Corridor scheme with the assistance of KPTCL and KFW.
- Augmenting Transmission Capacity to future growth and evacuation.
- Developing infrastructure for establishment of 2000MW of Solar Power through joint venture at Pavagada in Tumakuru District. Action has been initiated to acquire 11,000 acres of land for this Solar Park. Deputy Commissioner, Tumakuru has been requested to fix the annual lease rent value for the acquired land.

#### Distribution Automation System (DAS):

- Upgradation of Distribution Automation System for providing assured quality and reliability of power supply and to improve quality of service and consumers satisfaction.
- BESCOM has been implementing under JICA financial assistance. The State Government has initiated similar programme in other ESCOMs through budgetary support, during 2014-15 and intended to continue in 2015-16 also.

#### Specific challenges and the future outlook of the department

- Optimum utilisation of natural resources under renewable energy sector.

- Generation capacity addition to meet the growing demand for achieving self sufficiency.
- Reduction of Transmission & Distribution Loss.
- Reduction of Aggregate Technical & Commercial Loss.
- Making Power Supply Consumer friendly.
- Reduction of Electrical Accidents.

#### Outcome:

- The State Government has published its Solar Policy for 2014-2021 for giving impetus to exploitation of solar energy. The State Govt is able to harness renewable energy sources and save natural resources like coal.
- Niranthara Jyothi Yojane is a major project that aims to segregate the rural area loads into agricultural and non-agricultural loads so as to provide 24 hours of quality power supply to rural areas and assured hours of power supply to the irrigation pumpsets. As on December 2015, 1508 Niranthara Jyothi feeder works (798 feeders in phase1 and 710feeders in phase 2) are completed and of which 1408 feeders have been commissioned at the end of December 2015.
- Some of the energy conservation programs like demand side management (DSM) and smart grid pilot project have resulted in saving energy.

## 11.2 ROADS, TRANSPORT, INFRASTRUCTURE & COMMUNICATION

### 11.2.1 ROADS

The State's road network consists of National Highways (NH), State Highways (SH), Major District Roads (MDR), Municipal roads and other roads including village connectivity roads. The road development works in the State are carried out by multiple agencies, which include Public Works Department (PWD) of the State Government, local Governments such as Zilla Panchayat and its wings & in urban areas, the City Corporations, City Municipal Corporations (CMC) etc.

In the State, the average length of the PWD roads (viz; NH, SH &MDR) per 100 sq km area is 40.07 Km.Among the districts, the road length per 100 sq.km in Mandya

district has the highest road length of 69.34 Km and Kalaburagi district has the lowest length of 26.02 Km. Further, the road length per 100 sq.km in Chamarajanagar, Raichur, Bidar, Chikkaballapura, Vijayapura, D.Kannada, Yadgir, Chikkamagaluru, Kodagu, Chitradurga, U.Kannada, Ballari, Bagalakote, Kodagu, & Udupi districts are below the State average. In 2014-15, there has been substantial increase in the length of National Highways and reduction in length of State Highways due to declaration of new National Highways during May-2014 and there is marginal

increase in length in respect of Major District Roads. (**Table 11.18**).

All the National Highways and large extent of State Highways (99.4%) are covered with black top and 93% of Major District Roads are covered with black top (**Figure 11.6**).

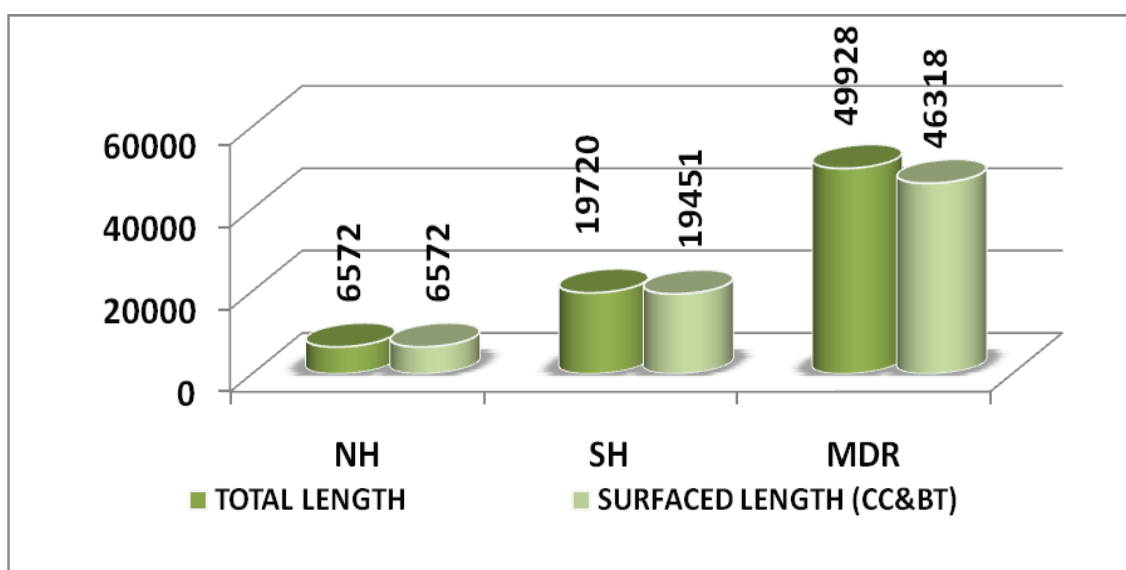
The carriage width details of the roads show that about 18% of National Highways and 1% of State Highways have four lane widths. Similarly, 62% of NH, 17% of SH and 1.4% of MDRs have two lane width. **Appendix 11.4** highlights the Road length in Karnataka from 1999-00 to 2014-15.

**Table 11.18 Road length in Karnataka (In km)**

Category of Road	Year	
	2013-14	2014-15
National Highways	4688	6572
State Highways	20773	19720
Major District Roads	49683	49928
Municipal Roads	8366	8366
Other Roads	155545	155545
All Roads	239055	240131

Source: Public Works Ports and Inland Water Transport Department and Rural Development & Panchayath Raj Department.

**Figure 11.6 Length of Black Top & Cement Concrete surface (in kms)**



Source: Public Works Ports and Inland Water Transport Department.



### 1. ROAD DEVELOPMENT PLAN 2001-2021:

The Government of India, Ministry of Surface Transport (Road Wings) has prepared the Road Development Plan for India 2001-2021. In this plan, the concept of Primary, Secondary & Tertiary road system has been introduced for the purpose of transport planning, functional identification, earmarking administrative jurisdiction and assigning priorities on a road network.

The primary system consists of Express Highways and the National Highways. The secondary system consists of the State Highways and Major District Roads and the Tertiary system consist of the Other District Road and Village Roads. The latter two categories are also commonly known by the term "Rural Roads" since they represent the links to the rural area of the country.

In this plan, road length is defined in terms of certain fixed and tangible objectives, having due regard to the popular demands for better type of roads as suggested here under.

- a) The length of the National Highways is calculated on the basis of the demand from the various states, subject to the consideration that the National Highways may not be very close to each other, except in areas where no other convenient transport facility exists.
- b) The length of the State Highways is calculated in such a fashion that the State Highways connect major Industrial centers, District Places, Taluk/ Tahasil head-quarters, places of commercial interest, tourist centers, major agricultural produce markets and also major growth centers in tribal areas.
- c) All villages in the population group of 1500 and above should lie at least on Major District Roads.
- d) All villages in the population group of 1000 to 1500 should lie at least on Other District Roads.

As per the Road Development Plan, PWD initiated State Highways Development Programme for the improvement and

strengthening of the existing State Highways based on the following criteria.

- a. District HQ to District HQ connectivity.
- b. District HQ to Taluk HQ connectivity.
- c. Taluk HQ to Taluk HQ connectivity.
- d. Connectivity to tourist places, religious centers and other economic activity center.

3745 km of State Highways in 66 packages under phase-I has been taken up in 2012-13 at an estimated cost of Rs. 1439 crore. As per the site conditions, 3343 km of road length is improved incurring an expenditure of Rs.1606.96 crore.

Under SHDP-II, improvements of 3127 km of State Highways in 70 packages at an estimated amount of Rs.1498 crore are being implemented. So far, 2924 km length has been completed incurring an expenditure of Rs.1639.04 crore. Both SHDP-I & II will be completed by March-2016.

Under SHDP-III, the Administrative Approval has been accorded to take up the improvement of 2795 km of State Highway and 1520 km Major District Road at an estimated amount of Rs. 3500 crore in 127 packages.

In 1999, Karnataka Road Development Corporation Limited (KRDC) was created as a State-owned enterprise for the development of road infrastructure facilities in the State. Through this agency, the construction of 642 bridges and development of 1398 km length of road have been completed. Further, the development of 7 State highways for a length of 194 km is taken up at an amount of Rs.644 crore and these works are under final stage of completion. Under PPP, a length of 102 km is being developed. Further, 360 km State Highway will be improved with World Bank co-finance (annuity).

Under KSHIP-II, Phase-I, it is proposed to develop 1216 km of roads with the assistance of World Bank and under the Asian Development Bank component, 615 km road length is proposed to be developed.

Road length of 552 km has been developed since inception incurring an expenditure of Rs.1270.08 crore.

The improvement of rural roads (MDRs and VRs) and construction/reconstruction of bridges are being taken up through NABARD assisted Rural Infrastructure Development Fund since 1996-97 (RIDF-II). The tranches from RIDF-II to RIDF-XV are completed and RIDF-XVI to XIX is under progress. Further, in 2015-16, 153 roads and 75 bridges have been identified under NABARD RIDF-XXI at an amount of Rs.275 crore and NABARD has communicated sanction to 128 road and 54 bridge projects amounting to Rs.221.87 crore and sanction in respect of remaining projects is expected.

Pradhana Manthri Gram Sadak Yojana (PMGSY) was launched in the State during December 2000 with the objective of providing rural connectivity by way of all weather roads to eligible habitations having a population of 500 and above by the end of 2007. Under this programme, Rs 4233.96 crore has been spent and 17391.67 km of road length has been asphalted as on October-2015. In order to implement the scheme more effectively, Karnataka Rural Road Development Agency has been formed during January 2005. The agency is involved in preparation of detailed project reports in each stage, implementation of the works (as approved by Government of India) as per the required standards and, release of grants provided by Government of India. As on date, the State still yet to connect 1771 (population between 250-499) & 10269 (population less than 250) unconnected habitations. **Table 11.19** shows Plan Outlay and Expenditure from 2012-13 to 2014-15.

### Issues & Challenges and Outcome:

#### (a) Issues & Challenges

- The road network in the State shows disparity in inter-district connectivity of National Highways and State Highways. This disparity in connectivity needs to be

set right based on Dr.Nanjudappa Report on redressal of Regional Imbalance.

- Rural Roads - Rural connectivity is a key component in the overall development of the state. Rapid development of roads can have a multiplier effect on the overall growth of backward regions. Investment in roads has one of the largest impacts on poverty alleviation and increase in total factor productivity.
- About 29% of State Highways and 82% of Major District Roads carriage way width are Single Lane. To ease the traffic congestion most of the State Highways and some of the Major District Roads needs to be upgraded to two lane width. (Widening of SHs are being taken up through KRDC and KSHIP on Core road network concept)
- The vehicular population in the State has risen to about 14.50 lakh year-on year from March-2014 to March 2015. To accommodate growing population of vehicles, roads have to be widened on National Highways. At present only 19% of National Highways are having 4 lane carriageway width.

#### (b) Outcome

- Under State Highway Development Programme (SHDP) existing State Highways which have connectivity between District Headquarter to District Headquarter, District Headquarter to Taluk Headquarter and Taluk Headquarter to Taluk Headquarter are being developed in phased manner.
- Road widening projects taken up by PWD based on the PCU factor (Passenger car unit) has resulted in adequacy of carriage way width of State Highways and National Highways to reduce traffic congestion.

### 11.2.2 TRANSPORT

Karnataka provides efficient public transport to people of different income groups across the State as well as in neighbouring States. The Govt. of Karnataka decided to divide the Corporation into four separate Corporations to fulfil the diverse needs of commuters through effective and efficient control by distributing areas. Accordingly KSRTC was

bifurcated into BMTC on 15-08-1997(for Bengaluru city), NWKRTC on 01-11-1997 (for North West districts) and NEKRTC on 01-10-2000 (for North East districts). KSRTC remained as an independent Corporation with effect from October -2000.

The progress achieved by each of the corporations during last two financial years is presented in **Table 11.20**. A number of new buses are being regularly added in all the four corporations. With the addition of new buses, over-aged buses have been withdrawn to some extent in all the corporations.

**Table 11.19 Plan Outlay & Expenditure, PWD (Rs. In Crores)**

Year	IEBR		Capital Outlay		Total Revenue		Total Plan Outlay	Expr.
	Plan Outlay	Expr.	Plan Outlay	Expr.	Plan Outlay	Expr.		
2012-13	318.03	270.52	4215.92	3950.61	191.00	180.12	4724.95	4401.25
2013-14	468.98	366.22	4483.62	4228.48	140.00	103.34	5092.60	4698.04
2014-15	552.71	348.90	4879.67	4614.40	160.90	152.29	5593.28	5115.59

Source: Public Works, Ports & Inland Water Transport Dept.

**Table 11.20 : Passenger fleet strength and utilization of Fleet by different corporations**

PARTICULARS		Total No. of Vehicles (including scrapped vehicles)	% over aged vehicles	% Fleet utilization
2014-15 (upto December14)	KSRTC	8361	5.9	91.6
	BMTC	6642	8.5	90.1
	NWKRTC	5019	29.9	94.8
	NEKRTC	4550	15.3	87.9
2015-16 (upto December.15)	KSRTC	8138	8.3	90.7
	BMTC	6417	12.5	90.8
	NWKRTC	4966	36.2	96.2
	NEKRTC	4670	25.6	89.3

**Table 11.21 The Plan outlay and expenditure incurred during the last four years**

(Rs. in Crores)

IEBR	2012-13		2013-14		2014-15		2015-16	
	Outlay	Expr	Outlay	Expr	Outlay	Expr	Outlay	Expr
KSRTC	250.00	262.00	274.12	297.00	255.00	213.54	140.0	108.55
BMTC	250.00	173.00	258.45	171.00	258.00	101.04	5.0	12.58
NWKRTC	50.00	117.00	52.35	194.00	50.00	65.72	58.0	55.50
NEKRTC	100.00	128.00	50.00	55.00	50.00	42.57	50.0	52.04
Capital Outlay	131.00	113.66	106.00	106.00	93.43	93.43	72.03	14.95
Total Outlay *	796.11	792.66	745.42	825.50	613.00	613.00	325.03	243.62

Source: Details of Provision for Plan Schemes, Finance Department,

\* Includes Revenue outlay

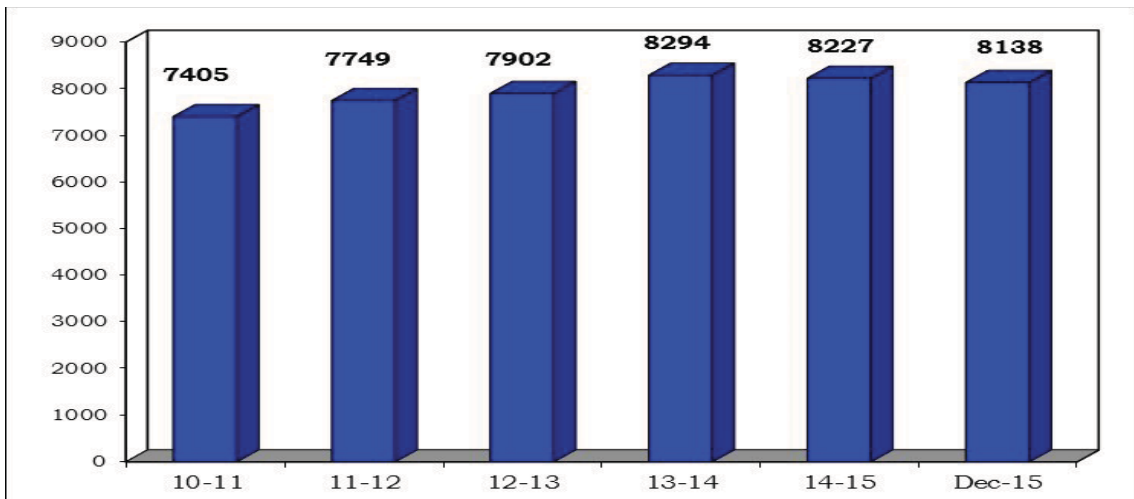
**I. KARNATAKA STATE ROAD TRANSPORT CORPORATION (KSRTC)**

KSRTC was established in 1961 to provide efficient, adequate, economic and well coordinated transport services to commuters. KSRTC with its Corporate office at Bengaluru, has jurisdiction seventeen southern districts of Karnataka and provides services to 14296 villages out of 20005 villages, the percentage service provided being 71.5. As on 21.11.2015 it had 15 divisions, 78 depots, two Regional Workshops, one Central and two Regional

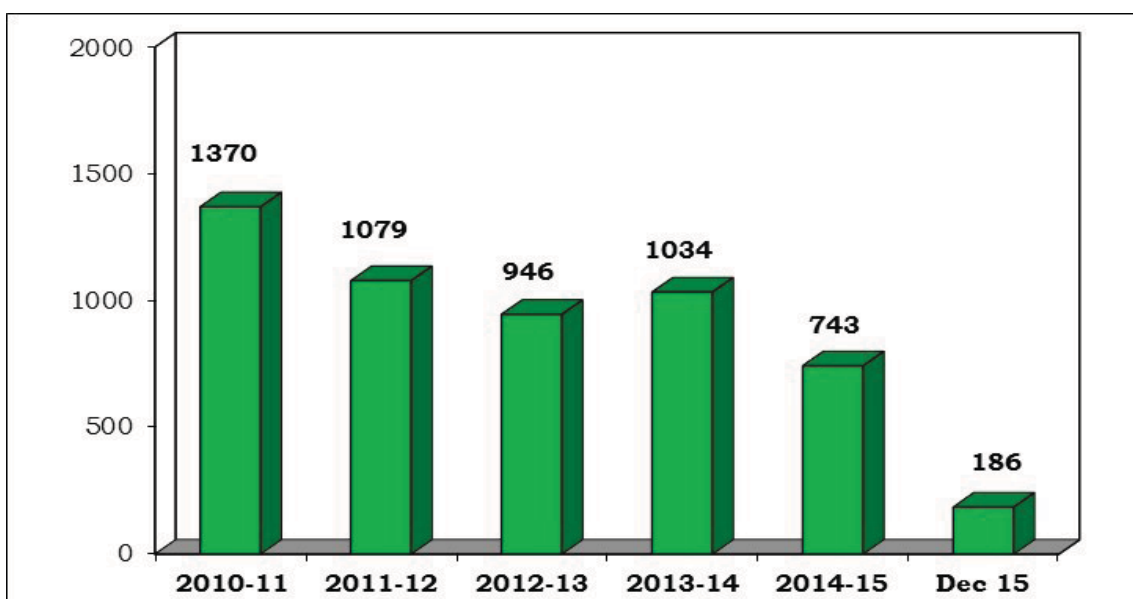
Training Institutes, one printing press and a hospital. It operated 7565 schedules utilizing 8130 vehicles, operating 26.29 lakh kms/day earning gross revenue of Rs.803.07 lakh and carrying 26.25 lakh commuters daily with workforce of 36367 employees. Operational performance statistics is presented in **Appendix 11.5.**

Year wise fleet held and new vehicles inducted from 2010-11 to December 2015 are given in the following charts.

**Figure 11.7A: Vehicles held as on last day**



**Figure 11.7B: New vehicles added**





Further, during the year 2015-16(April 15 to December 15), the Corporation has operated 7247.83 lakh kms as against 7454.35 lakh kms. Operated during 2014-15 (April 14 to December 14).During the period under review, the percentage fleet utilization decreased to 90.7 from 91.6 which was achieved during the same period of 2014-15. During the year current year period(April-15 to December 15)it inducted 186 new buses and replaced 218 old vehicles which were not fit for operation. The percentage of vehicles scrapped to the total vehicles was 2.7.

During this year, the Corporation by utilizing its internal resources and grants released by the Government under SDP scheme, 184 works were taken at an approximate cost of Rs. 7000.11 lakhs and spent Rs. 5543.87 lakhs. Appendix 11.6 shows the financial performance of the KSRTC

- Under SDP scheme 28 works were taken up and out of which 18 works were completed and the remaining 10 works were under progress. The expenditure incurred during the year was Rs. 908.16 lakhs.
- By utilizing the internal resources of the Corporation, it had taken up 155 works during the year under report, out of which 122 works were completed and the remaining 33 works were under progress. The expenditure incurred under this head during the year was Rs.4635.71 lakhs.
- During the year 2015-16, one new depot has commissioned at Honnali and five new bus stations started functioning at Magadi, Kalasapura, Mulubagal, Sargur and Jagalur.

#### **Social Obligations:**

KSRTC has been issuing free passes for the students till 7th standard, 25% concession to girl students studying in high schools, 50% concessional travel facility to the drama troupes/yakshagana troupes sponsored by the Karnataka Sangeetha Nataka Academy, free passes to Olympians, Para Olympians and Arjuna awardees. Free bus passes are issued to National Showrya Prashasti Award

winning children up to the age of 18 years, free travel facility provided to all freedom fighters including in Volvo buses, within and outside the State. For freedom fighters aged 75 years and above, free travel is allowed along with a companion. Concessional travel facility has been extended to all the physically handicapped persons (for all four Corporations) within the State, restricting travel upto 100 kms from the address given by them. Free travelling coupons of Rs.2000/- are given to wife/widows of freedom fighters to travel within and outside the State. 25% concession in fare for senior citizens of age 60 years and above, free travel facility to the totally blind persons to travel within the State, free traveling facility to Ex-MLAs & Ex-MLCs to travel within and outside the State in any bus along with a companion is also given. Free traveling facility to sitting MLAs & MLCs to travel within the State is given and they are issued with a Gold Card for travelling in any type of bus within the State. Free passes are given to accredited journalists working in their district and Bangalore based journalists and are permitted to travel throughout the State in all type of buses including Volvo. Home guards (in uniform) are allowed to travel free in city services while on duty. During the year 2014-15, two Scania Multi Axle buses and JnNURM city buses were introduced on trial operation.

City/Suburban services are in operation in the city of Mysore. City services were introduced in the cities of Tumkur, Kolar, Chikkaballapura, Mandya, Hassan, Chikkamagalore, Mangalore and Davanagere during the year 2014-15. Operation of City/Suburban schedules as on 31-03-2015 represented 3.89% of the total schedule kms.

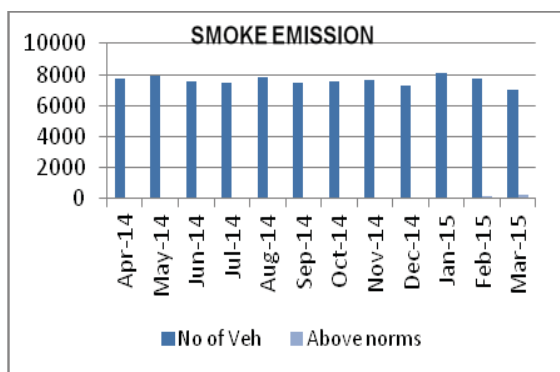
To reward the frequent traveler "Prayanothsava- Travel More Save More" scheme was introduced, which offers 30% discount for the 4th travel with KSRTC. For the benefit of commuters to avoid weekend rush KSRTC introduced "Prayanothsava-beat the weekend rush" scheme, which offers 10% discount on ticket fare for the commuters who travel from tuesday to thursday, the offer was initiated for honouring frequent commuters through this friendly measure.

### Smoke Emission Checks:

The Corporation continued the programme of routine/surprise smoke emission checks at Bus Stations/Depots covering the entire fleet at regular intervals during the year. Totally 88071 vehicles were checked for smoke emission levels (shown below graphically) during the year under report and out of which 1079 (1.10%) buses found to be slightly above the limit. These buses were attended to and put back to operation. The limit of smoke level of heavy duty diesel vehicles being 65 Hartridge, no vehicle above the norm was allowed to operate. The Pollution Under Control(PUC) Centers in the divisions are connected to network as per Central Motor Vehicle Act 1989 Rule 115 and online smoke emission checking's were conducted once in 6 months. All the vehicles were tested for emission level and a certificate sticker was displayed on each of the vehicles.

A reward of Rs.1000/- to any person identifying the operation of vehicle with black smoke is in force. Upgraded smoke meters are provided to all the depots.

**Figure 11.8 Smoke Emission Checks - 2014-15**



### Mobile-One:

AWATAR online Reservation system is integrated with Mobile-one portal of Government of Karnataka and the same has been inaugurated by Honourable President of India, on December 8<sup>th</sup>, 2014. M-One will act as a single window to 637 services offered by the government both central &

state among all the services AWATAR KSRTC booking is also included.

### Depot.Computerisation System (DCS):

- Training has been provided to all staff working in Depots & Divisions for successful implementation of DCS.
- Monthly counselling option has been incorporated in duty rota system and same has been interfaced with Leave KIOSK.
- Modification has been done in MIS module of DCS as per user requirements.
- Modification has been done in Administrative module of DCS to provide interface to KIOSK.
- IT department is co-ordinating with depot/divisions to give technical support.
- Required I T infrastructure has been provided to the new depots.
- Old ETM machines have been replaced with Bluetooth enabled ETMs
- Co-ordinated with M/s Quantum Power System and M/s CMC for integration of ETM with VTMS application.
- ETM firmware modified and implemented in all the depots for re-introduction of ARF.
- Coordinated with Stores Department for codification of items.
- Modification in workshop module to capture VTMS scheduling status as per the requirement from VTMS cell.

### LEAVE KIOSK

- In order to bring transparency in leave management at depots, KSRTC has implemented Leave Management KIOSK in all the depots of KSRTC.
- Technical coordination in design, development and testing of application.
- Coordinated with the firm and division/depot officials to resolve technical issues.
- Training was provided to EST/System supervisors regarding usage of KIOSK.



**Vehicle Tracking and Monitoring System:**

- For implementation of VTMS project the required support is being given for fulfillment of all requirements in integration of ETM, AWATAR with VTMS project.
- Primary and secondary (leased line) internet connectivity provided to Central Control Station (Reliance and KSWAN).
- Integration of displaying vacant seat details from AWATAR on PIS Display Board is completed.
- Six character place code have been provided and implemented in 11 depots.
- Apart from all these, KSRTC has initiated for upgradation, integration and centralisation of all IT applications in enabling web based service platform and supporting all offices of KSRTC by providing required computers accessories and technical support for computerisation.

**Mysore Dasara Packages:**

Special package tour service for Commuters to Mysore namely Giridarshini, Jaladarshini, Devadarshini and Nagadarshini during Dasara season.

**Social Media Marketing:**

Social media marketing is successfully implemented for effective/constant communication with the online users. Social media channels used are Facebook, Twitter etc, Tweets on twitter, Face book are updated regularly. Social media marketing helped to increase traffic to KSRTC website, promote offers and also for feedback management. Commuters and public are informed about any new service/event happening in KSRTC. Some of the instances are-information about new schedules, Awards received by KSRTC, promotion of new services, new technology introduced, festival greetings, obtaining opinion and views from public about branding, Mysore Dasara packages, etc. Online visibility, awareness about the brand and online reach is expanded through website and social marketing media. So far around 23,000 website users are part of KSRTC's facebook services. Around 2,313 followers are present in the twitter account.

**KSRTC introduced booking through windows and android mobile Apps:**

KSRTC launches its first ever official mobile application that enables booking of its bus services. The app is now made available to the Android Market.

**New Initiatives:**

- KSRTC has planned implementation of Vehicle Tracking Monitoring System (VTMS) and PIS Project in 4000 buses and PIS at 45 major Bus Stations.
- Pilot I of this Project is completed in 138 buses of Depot – 4- Bengaluru Central Division and 81 buses of Harohally Depot – Ramanagara Division (Total 219 Buses) and Testing is completed. Pilot II is completed in Bengaluru Central (All Schedules), Ramanagara, Mysore Rural, Mangaluru and Puttur division all depots for Express and above schedules. VMUs have been fixed in 1904 buses and testing is in progress. Pilot III, balance 2007 VMUs yet to be supplied will be installed in remaining divisions express and above schedules.
- The 'Status' of a service and 'Expected time of arrival' is available at any point of time.
- Two-way voice communication helps to contact crew during needy hours.
- Better control by operational managers to monitor the operations and improve efficiency.
- Instant access to historical data for analysis and improvement.
- Analytical data for top management.
- As per Karnataka Guarantee of Services to Citizens Act, 2011, services related to KSRTC viz., issue of bus pass to school children, Accident Relief Fund, issue of bus passes to physically challenged, issue of free bus pass to freedom fighters, issue of free bus pass to blind persons, issue of Rs. 2000/- worth of free bus coupons to wife/widow of freedom fighters were implemented under SAKAL portal.
- Inside the buses, layout of the hatch exit, seat belts and fire extinguishers

are displayed on online through social media tools like Face book, twitter.

- **KSRTC website:** Implemented website, concentrating more on user friendly booking interface for online users. Undertaken user interface changes in service availability pages, booking pages as per international business portal standard.
- **Dynamic service search/booking facility:** Modified the booking process of dynamic service search/booking on the lines of international standard to be user friendly.

**II. Bengaluru Metropolitan Transport Corporation (BMTc)**

Bengaluru Metropolitan Transport Corporation (BMTc) was formed, as an independent Corporation with effect from 15-08-1997 after bifurcation from Karnataka State Road Transport Corporation, vide GO No. HTD/ 127/ TRA/ 96 dated 7-8-1997, in which it consisted of two Divisions headed by Director (BTS) since 1993. Prior to that since from 1961 it was under MSRTC/KSRTC.

Consequent upon the formation of BMTc, the organization was structured to function under a two-tier system-viz., Depots and the Corporate office and during 2011-12 the systems was switched over to three tier systems viz, Depots, Divisions and Corporate office with a view to have closer liaison and better control.

BMTc is having Corporate office at Bengaluru, is operating in 25 kms radius from BBMP area of Bengaluru, with 5 divisions, 40 maintenance and service

depots, two Central Workshops, one Training Institute and one Dispensary. With a workforce of 36848 and 6420 fleet, BMTc is operating 12.33 lakh kms, earning daily Rs.5.46 crores, carrying around 52 lakh commuters and providing services to commuters in and around suburbs of Bengaluru city.

During the year 2014-15 the kilometers operated is decreased by 1.8%. During the year, Corporation inducted 197 new buses and replaced 450 old vehicles. The percentage of vehicles scrapped was in the order of 6.9%.

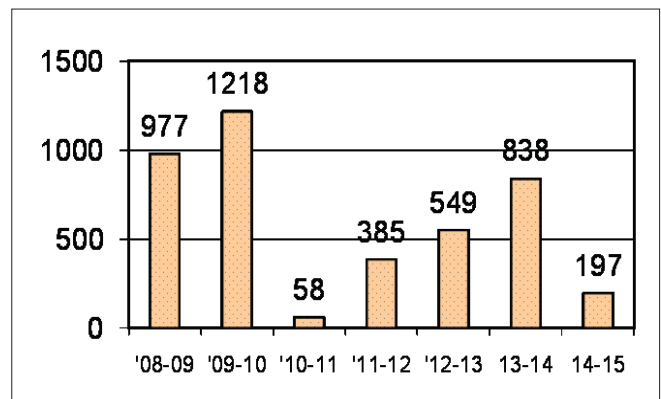
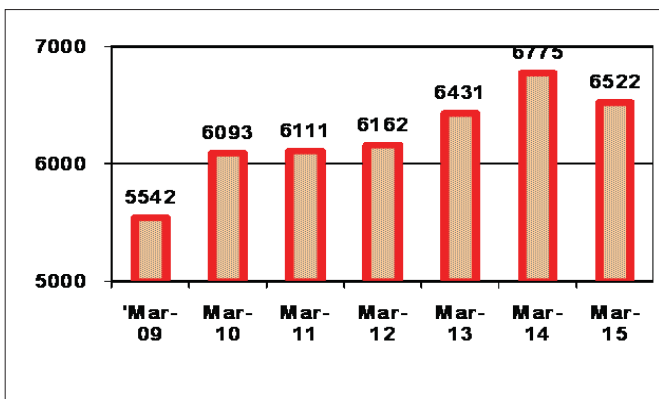
**Financial Performance:**

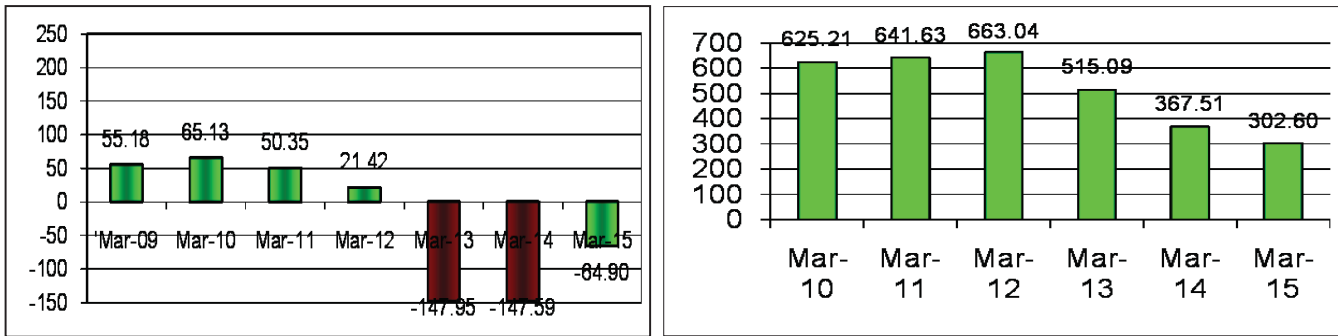
The year-wise fleet held and new vehicles inducted depicted in the following charts. Operational performance and Financial performance reflected in the **Appendix 11.7 and 11.8** respectively.

BMTc had an accumulated loss of Rs.80.50 crores as on 1997-98. Wiping out all that accumulated loss BMTc currently has a surplus of Rs.302.60 crores. During the year 2014-15 it has incurred a loss of Rs. 64.90 crore. Further during the year 2014-15 it has operated 6244 schedules utilizing 6522 vehicles. The Corporation earned gross revenue of Rs. 2256.84 crore by operating 47.09 lakhs kms. with a work force of 36474.

The Corporation running under financial loss in 1997-98 made a turn around and started making profit since 1998-99. The year wise profit made and accumulated loss is shown in the below charts.

**Figure 11.9 Vehicle held as on last day (in No.s)New vehicles added (in No.s)**



**Figure 11.10 Profit/Loss Accumulated Loss/Profit****Social Obligations :**

- For the benefit of student community, BMTC has issued concessional Student Passes.
- Free passes are issued for the students till 7<sup>th</sup> Standard.
- 25% concession to girl students studying in High school.
- Concessional travel facility has been extended to Physically Challenged Persons.
- 25% concession on Tickets of all services (except Vayu Vajra) to Senior citizens.
- 10% concession on Monthly Pass to Senior Citizens.
- Concessional passes to fire force personnel, Police duty personnel and summon issued police personnel.
- Concessional Pass facility to Journalist (with accreditation card)
- Concessional Pass facility to Journalist (without accreditation card).
- Free travel facility to Police personnel (with uniform)
- Free travel facility to Gunmen.
- Free pass to home guards (with uniform).

**Details of the passes issued by KSRTC and which are honoured by BMTC.**

- Free pass facility to widow of freedom fighters.
- Free pass facility to freedom fighters.
- Free pass facility to dependents of Martyrs.
- Free pass facility to Athletes and Cultural Artists.

**New Initiatives:**

**User friendly integrated web portal:** BMTC has recently launched newly designed web based portal [www.mybmtc.com](http://www.mybmtc.com) which is

user friendly, dynamic and reliable. The website is both in English and Kannada with customised mobile version too, which is accessible for mobile and Tablet users. The website has a Trip Planner which facilitates users to plan their trip through search based on origin/destination, route number, type of service and fare. Accurate information on the aerial distance between the destination and origin with approximate journey time is provided besides a printable time-table with map and enroute bus stop details. This is made possible due to computerisation of all Form-IV data with provision to make modifications online which will automatically get updated in the Trip planner and Time-Table. The website also provides for feedback/suggestion from the public besides registering the complaints received by way of complaint id number wherein a sms is sent to the complainant on registering the complaint and subsequent to action taken as well. The website was developed using Open source technology with Linux as the operating system, Apache web server, PHP to develop the language, MySQL for database and Drupal was used as Content Management Tool.

**Passenger Information Kiosks:** BMTC has installed Passenger Information kiosks in 12 places like major Bus Stations and TTMCs with the objective of disseminating information about the Corporation to the commuters. All the information contained in the website [www.mybmtc.com](http://www.mybmtc.com) is accessible through the kiosk. Any updation in the website is automatically reflected in the Passenger Information System.

Metro Station



Tunnel of Metro



**Kiosk based Leave Management System:**

The LMS KIOSK's were introduced in all Depots and workshops to maintain transparency and accountability in the employee leave management system. The objective was to sanction leave to the employees transparently.

The LMS system is user friendly, secured, transparent and fast in dealing the leave management process. The employee is the main user who would get his leave balance, file leave application online and get to know about the information on whether leave was sanctioned or not. The Depot Manager would get details on the dashboard like, number of employees sanctioned, working, and weekly off, on leave, on OOD and other details which helps him to plan the operation. The Divisional Controller/Administrative Officers in the division would get the leave details updated and it is easy to record the details in service register. Both the employee/management is benefitted from this system.

**Introduction of Closed Circuit Cameras in buses and Bus Stations:**

BMTC has adopted Closed Circuit Camera Surveillance system along with Digital Video Recorder (Mobile) as per the safety policy of the Government keeping in view the safety of ladies and child passengers from miscreants travelling in the buses. The installation of Closed Circuit Camera Surveillance system is a new requirement in BMTC having storage capacity for 7 days and the recorded data can be downloaded on weekly basis. In each bus, there will be two CC Camera and one MDVR (Mobile Digital Video recorder) with all software, hardware and other accessories. The CC Camera Surveillance system will cover all locations of the bus saloon area and have minimum 48 hours continuous recording (Video) facility, providing high picture quality through Digital signal processing and real colour picture.

Kempegowda Bus Station in Subhashnagar and Shivajinagar bus station are the biggest and oldest bus stations of BMTC with highest number of passengers travelling enroute these bus stations. As an initiative to

keep close vigilance of the activities in the Bus Station and to control the activities of anti-social elements, BMTC has taken steps to install 193 Fixed Cameras, 42 Pan Tilt Zoom (PTZ) cameras, 21 DVR in Major bus stations, Central Work Shop-1 and TTMCs.

**SAKALA Implementation:** As per Karnataka Guarantee of Services to Citizen's Act, 2011, the services related to BMTC viz., issue of bus passes to school children and issue of bus passes to physically challenged have been implemented under SAKALA portal. Information Technology Department has provided all the technical support and logistics towards implementation of SAKALA.

**III. North West Karnataka Road Transport Corporation (NWKRTC)**

NWKRTC was established in the year 1997, has been providing efficient, adequate, economic and well coordinated Transport Services to the Commuters. It has its Corporate Office at Hubli and covers six Districts in the State. During 2015-16 the Corporation has a workforce of about 23947 employees, operated 15.88 lakh Kms daily by utilizing Fleet strength of 4762, catering to 22.75 lakh passengers on an average and earns Rs. 450.00 lakhs daily. NWKRTC has extended services to 4600 villages out of 4719 villages (97.4%) which are in the nationalized routes. Operational Performance indicated in **Appendix 11.9**

The total loss incurred by NWKRTC in 2014-15 has decreased to Rs. 53.08 Crores from Rs. 66.78 crores in 2013-14. During 2015-16 (up to 31.12.2015) loss has decreased to Rs.34.58 crores from Rs.70.39 crores during the corresponding period of the previous year. The Financial Statistics presented in **Appendix 11.10**

NWKRTC is operating both city and mofussil services apart from premier services such as Rajhamsa, Meghdhoot, Sleeper Coach and Volvo buses.

**IV. North Eastern Karnataka Road Transport Corporation (NEKRTC)**

North Eastern Karnataka Road Transport Corporation was established in the year



2000, has been providing adequate and efficient transport facility to the passengers of the North Eastern region of Karnataka State. Presently the Corporation is having 9 Divisions, 48 Depots.

- a) The Corporation has jurisdiction of 7 districts namely Kalaburagi, Yadgiri, Raichuru, Bidar, Koppala, Ballari and Vijayapura. The corporation has provided transport facility to all the villages of the jurisdiction which are having motorable roads.
- b) **Financial Performance:** During the year, the Corporation operated 4055 schedules utilizing 4450 vehicles, inducted 367 new vehicles and scrapped 220 old vehicles which were not fit for operation. During the year 2015-16 (up to Dec-2015), the Corporation earned total revenue of Rs. 10.63 crore and making a cumulative profit of Rs.17.23 crore. During the previous year period, it earned total revenue of Rs.10.79 crore and expended Rs.11.20 crore, thereby incurred losses of Rs. 42.57 crore. Thus, the quantum of profitability of the Corporation has improved by Rs. 59.80 crore as compared to previous year period. Operational performance and financial performance is reflected in the **Annexure 11.11 and 11.12** respectively.

#### **New Initiatives:**

**City Buses in NEKRTC:** NEKRTC has introduced city bus services in Kalaburagi, Bidar, Vijaypur, Yadgiri, Ballari, Koppal, Raichur, Hospet and Sedam. These city buses have been fitted with GPS based present and next stop announcement, LED destination boards, pneumatic doors and comfortably ergonomically designed seat facility.

- **Computerized Audio-Video Announcement System:**

The Corporation has provided the Computerized Audio-Video Announcement System in 43 bus stands.

**Leave Management System:** The computerized leave sanction and maintenance system is introduced in 45 bus

depots of the Corporation. NEKRTC is the first STU to implement this system in the country. This system is introduced to maintain the transparency in sanctioning of leave. With this system the employees can see the leave balance at his credit at any time and they can avail of the leave without intervention or help of anybody.

#### **V. D.Devaraj Urs Truck Terminals Ltd:**

The Government of Karnataka as established D. Devaraj Urs Truck Terminal Ltd., Company under the Companies Act, 1956 with the primary objective of establishing Truck Terminals for the benefit of Lorry/Truck Transporters at Highways in Bengaluru and other cities of the State. The Company has constructed Two Truck Terminals at Mysore and Dharwad, which are operational. The Company has constructed Truck Terminal at Dasanapura, Bengaluru North (NH-4). The project cost is Rs. 20.48 crore. Terminal work is completed except Approach Road to the Terminal. After completion of Approach Road, Project will be open for operation during 2015-16. It is proposed to construct Truck Terminal at Amaravathi of Hospet Taluk in an area of 37.82 acres during the year 2015-16 for which Detailed Project Report is prepared and Project Plan has been approved by the Hospet Urban Development Authority. It is also proposed to take up the construction of Truck Terminal at Anchatageri of Hubli in an area of 56.13 Acres of land for which land is allotted by the Government. It is proposed to take up the construction of Truck Terminals in major cities such as Vijayapura, Raichuru, Chikkmagaluru. The activities of the project are mainly depends on availability of Land.

#### **VI. Vehicle Population:**

The details of motor vehicles under different categories from 2012-13 to 2015-16 (up to end of December 2015) is presented in **Table 11.22**. It may be observed that highest addition is two wheelers and followed by cars. As on March 2015 out of 14784961 vehicles 1404626 vehicles were transport vehicles. Out of 13380335 non-transport vehicles, 10644368 vehicles were two wheelers.

**Table 11.22 Number of Motor Vehicles under different categories  
(From 2012-13 to December 2015) (cumulative)('000)**

Vehicles	2012-13	2013-14	2014-15	As on Dec. 2015
TWO WHEELS	8575	9534	10644	11478
MOTOR CARS	1421	1572	1742	1864
JEEPS	43	44	45	46
OMNIBUSES	117	120	124	126
TRACTORS	386	413	443	462
TRAILORS	267	283	301	312
CONSTRUCTION EQUIPMENT VEHICLE	8	9	9	10
OTHER VEHICLES	65	70	72	74
TOTAL NON-TRANSPORT	10882	12045	13380	14372
K.S.R.T.C. BUSES	36	38	39	40
PRIVATE BUSES	12	13	14	16
CONTRACT CARRIAGES	2	2	2	3
EDUCATIONAL INSTITUTION BUSES	12	13	16	18
OTHER BUSES	8	8	9	9
GOODS VEHICLES	506	555	606	634
AUTO RICKSHAWS	286	312	342	365
TAXIES	163	181	205	233
4 TO 6 SEATERS	35	37	39	41
OTHER VEHICLES	121	131	132	134
TOTAL TRANSPORT	1181	1290	1404	1493
TOTAL NON TRANSPORT AND TRANSPORT VEHICLES IN KARNATAKA STATE	12063	13335	14784	15865

Source: Transport Department

As on December, 2015 out of 158 lakh vehicles on road in the State, 15 lakh vehicles are transport vehicles, and 143 lakh vehicles are Non-Transport vehicles. out of 143 lakh Non-Transport Vehicles, 80 percent or 115 lakh vehicles are Two Wheelers. From April 2015 to December 2015 total 10.81 lakh new vehicles have been registered.

### 11.2.3 INFRASTRUCTURE

Vision 2020 for Karnataka seeks to propel a holistic growth by promoting equitable development of sectors and districts, by providing employment to all sections of people and regions of the State. Karnataka aims to grow its State GDP of 9%, which requires infrastructure investment of 9% year every year. Since the public funds may not be adequate, Planning Commission has articulated 50% of the fund requirement to come from the private sector in the 12<sup>th</sup> Five Year Plan.

There is a need to generate more project ideas which can be taken up on Public Private Partnership (PPP). While studying the State Project Development Machinery, several constraints for developing PPP projects by State Dept/agencies were noticed. Karnataka has identified that to bring in investment in Infrastructure through PPP route, the State has to adopt a program based approach, given the huge demand for infra projects in various sectors. To overcome the project development issues and to build sustainability in Infrastructure Project Development in the State, the Infrastructure Development Department has assisted the several departments by way of organizing programmes for the officers in capacity building to identify suitable projects that can be implemented under PPP mode and the concerned departments/agencies have been requested to take them forward.

Some of the important projects proposed for development under PPP:

1. International Convention Centre, Bengaluru.
2. Devanahalli Business Park
3. Port at Tadadi
4. Light Rail Transit System in Bengaluru
5. Road Projects.
6. Airports at Ballari, Vijayapura, Kalaburagi, Shivamogga, and Hassan.
7. City Gas Distribution Project

### **RAILWAYS**

The Rail density in State is 16.60 kms per 1000 kms. The State Government with a view to increase the Rail density and to increase the pace of implementation of Rail projects, decided to take up new railway projects on 50:50 cost-sharing basis and to provide land free of cost. As on date following 5 projects have been completed & commissioned for traffic.

1. Sholapur – Gadag (GC)
2. Shivamogga – Talaguppa (GC)
3. Kadur – Chikkamagaluru New Railway Line Project
4. Kottur- Harihara New Railway Line Project
5. Kolar-Chikkaballapur Gauge Conversion Railway Project

The progress of the on-going railway projects during 2015-16 are as follows:

**Ramanagaram – Mysuru Doubling Railway Line Project** - Total length of the project is 93 Kms. This project is taken up on 1/3rd:2/3rd cost sharing basis between Government of Karnataka & Ministry of Railway. The State Government has agreed to share 50% of the cost of Electrification from Kengeri to Mysuru section. Railways have submitted the revised estimate of Rs.874.57 crore including cost of electrification (Rs.208.72 crore) In which GoK share is Rs.503.98 crores & Railway share is Rs.370.60 crores. So far, Government of Karnataka has released Rs.468.14 crores. Except 1.5 kms at Cauvery bridge and shifting of Tippu Armoury, the entire length have been commissioned for traffic.

**Bengaluru–Hassan New Railway Line Project** - Total length of the project is 166 Kms. Before 2010, South Western Railways had taken up project and completed the work between Hassan-Shravanabelagola at the cost of Rs.355.00 crore. From 2010 onwards, the remaining works of the project has been taken up on 50:50 cost sharing basis between Government of Karnataka & Ministry of Railway. As per the revised estimate of Rs.1295.17 crore, the share of Government of Karnataka is Rs.467.21 Crores and railways is Rs.822.71 crore. Government of Karnataka has released Rs.375.17 crore so far and work in 139 km is completed, the remaining 28 km is in progress.

**Bidar-Kalaburagi New Railway Line Project** - The total length of the project is 107 Kms. This project was approved by Ministry of Railways during 2007 and has been taken up on 50:50 cost sharing basis by Government of Karnataka & Ministry of Railways. Railways have submitted revised estimate for Rs.844.15 crores and the State Government has released Rs.422.01 crores so far. Overall progress of this project is as 80%. Margutti Tunnel work is in progress. The project is targeted to complete by March 2017.

**Bagalkot-Kudachi New Railway Line Project**-The total length of the project is 142 Kms and the estimated cost is Rs.816.14 crore, which has been taken up on 50:50 cost sharing basis between Government of Karnataka & Ministry of Railways. In addition, cost of land is borne by the State. Land acquisition process is under progress. So far, Rs.190.893 crore has been released (Including cost of land acquisition) Alignment of the track has been modified from the initial proposal and work has been completed for a length of 10 km.

**Munirabad-Mehaboobnagar Railway Line Project**-The total length of the project is 170 kms. Administration approval for the project has been accorded to take up Munirabad – Mehboobnagar New Broad Gauge Railway Line Project on 50:50 cost sharing basis between Government of Karnataka and the

Ministry of Railways at a revised cost of Rs. 1350.91 crore. So far, Government of Karnataka has released Rs.225.00 crore out of its share of Rs. 675.45 crore. Work has been completed on a stretch of 14 km & progress on a 13 km stretch.

**Tumakuru-Rayadurga Broad Gauge Railway Line Project**-Government of Karnataka has accorded sanction for taking up New Broad Gauge line between Tumakuru – Rayadurga via Kalyanadurga at the project cost of Rs.1027.89 crore out of which, the cost of the project for railway line in Karnataka is Rs. 479.59 crore. The length of the line is 102.63 km. The railway project has been taken up on 50:50 cost sharing basis (GoK share Rs.239.80 crore and MoR share Rs 239.80 crore). Government of Karnataka has released Rs. 100.00 crore, out of its share of Rs. 239.80 crore. Work has been completed in a stretch of 40 km & the work is in progress in 15 km stretch.

**Chikkamagaluru – Sakaleshpura Railway Line Project**-The length of the project is 46 km. Govt of Karnataka has accorded administrative approval to take up the work on the defrozen Chikkamagaluru – Sakaleshpur section of the earlier approved Kadur-Chikkamagaluru-Sakaleshpur New Railway Line Project at a cost of Rs.657.80 crore on 50:50 cost sharing basis between Ministry of Railways and Govt of Karnataka, in addition to providing land. Govt of Karnataka has released Rs.25.00 crore to the SWR for the construction of Chikkamagaluru – Sakaleshpur New Railway Line Project. Govt of Karnataka has released Rs.15.49 crore towards the cost of land acquisition to the Deputy Commissioner, Chikkamagaluru.

**Gadag – Wadi New Railway Line Project**-The total length of the project is 252.50 km and Govt of Karnataka has accorded administrative approval for construction of Gadag – Wadi New Railway Line at a cost of Rs.1922.14 crore on 50:50 cost sharing basis between Govt of Karnataka and Ministry of Railways, in addition to providing land. Land acquisition is under progress.

**Hejjala – Chamarajnagar New Broad Gauge Railway Line Project**-Government has accorded administrative approval for construction of Hejjala – Chamarajnagar New Railway Line at a cost of Rs.1245.71 crore on 50:50 cost sharing basis between Govt of Karnataka and Ministry of Railways in addition to providing land. Land Acquisition is in progress.

**Kolar Coach Factory**-Government of Karnataka has agreed to set up Rail Coach Factory in Kolar district by sharing 50% of the construction cost in addition to providing land (Government land: 550.28 acres and Private land: 568.10 acres in Srinivasapura and Kolar taluks).

**Railway Fiat Coach Factory, Yadagiri**-Govt of Karnataka has approved setting up of FIAT bogie manufacturing factory by Ministry of Railways at Yadgairi district. The entire cost will be funded by the Ministry of Railways. 150 acres of land has been handed over to Railways.

#### **Bengaluru Metro Rail Project (Namma Metro)**

Metro Rail' is a vital component of the transformation of the urban transport scenario in India. With urban population continuously growing, there is a need for green solutions. Mass Rapid Transit Systems are fast, safe and comfortable to travel. This alone will encourage people to switch over from personalized vehicles to public transport.

The Project is being implemented through a Special Purpose Vehicle (SPV) Bangalore Metro Rail Corporation Limited (BMRCL), with an equal share holding owned by Government of India and Government of Karnataka.

The Phase-I Bangalore Metro Rail Project Commenced in mid April 2007 and project under implementation consist of two corridors totalling to 42.3 Km.

The East-West corridor is 18.10 km. long, starting from Baiyyappanahalli and terminating at Mysore Road terminal, going

via Old Madras Road, Indira Nagar, Ulsoor, Trinity Circle, M.G. Road, Cricket Stadium, Vidhana Soudha, Majestic, City Railway Station, Magadi Road, Hosahalli, Vijayanagar and Deepanjali Nagar.

The North-South Corridor is 24.20 Kms long starting from Hesarghatta Cross terminal and goes upto Puttenahalli Cross via Jalahalli, Peenya Industrial Area, Peenya Village, Yeshwantpur industrial Area, Yeshwantpur, Soap factory, Mahalakshmi Lay-out, Rajajinagar, Kuvempu Road, Malleshwaram, Swastik, Majestic, Chikkapete, City Market, K.R. Road, Lalbagh, South End Circle, Jayanagar, RV Road, Banashankari and Jayprakash Nagar.

#### Phase-1 Project Progress:

1. Bangalore Metro Rail Project Phase-1 physical progress is 96% and financial progress is 96% as on December-2015.
2. The section between Baiyappanahalli and M.G. Road (6.7 Km with 6 stations)

including Baiyappanahalli Depot was commissioned on 20-10-2011.

3. The section between Peenya and Sampige Road part of North-South Carridor along with Peenya Depot (10.30 Km. and 10 stations) has been commissioned on 28-02-2014.
4. The extension of Reach-3a that is 3b from Jalahalli to Nagasandra Station commissioned on 1st May 2015.
5. The section between Magadi Road and Mysore Road terminal having 6.50 Km. with 6 stations commissioned on 16th November 2015.
6. The entire phase-1 is expected to complete by mid of 2016.

#### Phase-2

The Phase-2 of the Bangalore Metro Rail project was sanctioned by GoI in February 2014. The Project consists of Four Extensions to the existing lines and two New Lines. The total length of Phase-2 is 72.095 km with 61 stations (49 Elevated and 12 Underground). The estimated project cost is Rs.26,405 Crore.

#### Summary of Break-up of costs

Name of the Line	Length of the Line in Km	Estimated Completion Cost (Rs. in Crore)
Baiyappanahalli to ITPL-Whitefield	15.500	4845.00
Mysore Road Terminal to Kengeri	6.465	1867.95
Hesaraghatta Crossto BIEC	3.770	1168.22
Puttenahalli Cross to Anjanapura Township	6.290	1765.88
R.V. Road to Bommasandra	18.820	5744.09
Gottigere to Nagawara	21.250	11014.00
Total	72.095	26405.14

**STATUS OF PHASE-2**

Phase-2 preliminary works such as Geo Technical surveys and concept designs of structures have been completed. The process for land acquisition, shifting of utilities and calling of tender for civil works has been started. Reach-4 Extension (Puttenahalli to Anjanapura) tenders for civil work have already been invited and technical evaluation is under progress. The tenders for civil works in Reach-2 Extension (Mysore Road to Kengeri) have been awarded and work started.

**AIRPORTS :****Kempegowda International Airport:**

Kempegowda International Airport is the country's first Greenfield international airport, conceived under the Public Private Partnership (PPP) mode, with 26% shareholding by State promoters (13% each by Government of India and Government of Karnataka) and the balance 74% by private promoters. The airport has been developed at a cost of Rs. 2470.29 crore at Devanahalli near Bengaluru.

The airport began operations in May 2008 and handled 8.70 million passengers in the first year. Presently, it is handling around 15.40 million passengers annually. With the aim of establishing Kempegowda International Airport as India's leading airport in terms of quality and efficiency and to set a benchmark for the future amongst Indian airports, it is built and operated to the best international standards and is a new start in Indian aviation with regard to the passenger experience on ground. Presently, Kempegowda International Airport is the 3rd largest airport in the country in terms of passenger traffic. The traffic at the airport is growing at a pace higher than the national average. Expansion of the existing terminal building, apron area and other related facilities have been completed to cater to the growing demand. Terminal-1 has been expanded at a cost of Rs. 1479 crore to cater passenger traffic of 20.00 million.

Planning and preparatory works of construction of second parallel runway and terminal 2 has been taken up. With this, the airport would have the capacity to handle 35 million passengers per annum. The airport has won several awards and accolades including the 'Best Airport India' award by Skytrax World Airport Awards in 2011. The 'Best Emerging Airport-Indian Subcontinent' award in 2010 and 2011, the 'Best Managed Airport' in CNBC Awaz Travel Award 2010. "Best Regional Airport in Central Asia" award at the Skytrax World Airport Awards in 2015, in Paris on March 11, 2015.

**Mysuru Airport:** The existing airport at Mysuru has been operationalised.

**Hubballi Airport:** The existing airport at Hubballi is being upgraded to cater to larger air crafts. Memorandum of Understanding [MoU] has been signed with AAI on 23.01.2013 for the development of Hubballi Airport. The required land of 600 acres has been handed over to Airports Authority of India [AAI].

**Belagavi Airport:** MoU was signed for the expansion of Belagavi Airport on 19-01-2012. 370 acres of land has been acquired and handed over to AAI.

**Mangaluru Airport:** The airport at Mangaluru has been upgraded. The second runway and new terminal building complex have been constructed. This airport is maintained by AAI and has been declared as an International Airport on 29.10.2012.

**Minor airports:** Minor airports at Shivamogga, Hassan and Ballari are being developed on PPP basis through private operators. The progress of these Minor Air Ports are as follows.

**Kalaburagi airport:** Kalaburagi airport development has been entrusted to State PWP & IWT Department for completion of balance works.

**Shivamogga airport:** Shivamogga airport project is being re-bid for development under PPP mode.

**Table 11.23 Cargo handled by Ports (1000 MT)**

Ports	2011	2012	2013	2014	2015
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	-12	-13	-14	-15	-16*
Old Mangaluru	87.83	165.93	120.26	115.89	66.16
Karwar	497.20	441.19	377.10	525.07	481.40
Malpe, Belekeri, Hangarkatta & Kundapur	6.81	4.74	3.00	2.31	1.22
Total	591.84	611.86	500.36	643.27	548.71

Source: Public Works, Ports and Inland Water Transport, \* Upto Dec-15

**Hassan Airport:** The development of Hassan Airport is being taken up on PPP basis. 536 acres of land has been acquired and transferred to the developer. The requirement of balance land of 225 acres is in the process of acquisition. A concession agreement was signed with the developers on 06.09.2007 and “in-principle” approval has been obtained from the Ministry of Civil Aviation. Environmental clearance has also been obtained from the Ministry of Environment and Forests, Govt of India.

**Bidar Airport:** The Government is pursuing the matter with AAI for commencing civil aviation operations at the Defence Airport at Bidar.

#### PORTS AND INLAND WATER TRANSPORT

Karnataka has a coastline of 300 km with one major port and 12 minor ports. While the New Mangaluru major port is under the control of Ministry of Shipping, Government of India & remaining 12 minor ports are under the control of the State Government. Among the 12 minor ports, Karwar and Old Mangaluru ports have handled significant volumes of cargo (**Table 11.23**). By end of March-2016, it is likely to reach the target of 780 thousand MT

To provide infrastructure facility by developing minor ports under PPP mode, “Karnataka Minor Port Policy-2014” is implemented and development of Karwar Port 2nd stage under D-BOOST concept on PPP Mode is initiated. The issue of bid document is under the consideration.

The port land has been sanctioned on lease basis to M/s Honnavar Port Limited, Hyderabad at Honnavar port and M/s Renuka Sugars Limited at Manki port with 5 MTPA and 2 MTPA capacities respectively on PPP mode. Government initiated development of Belekeri port & setting up of free trade housing zone at on BOOST basis and i-deck already prepared RFP, Pre-feasibility report and Draft concessional agreement.

The Government initiated development of newly declared port at Pavinakurve in Uttara Kannada district under PPP Mode. Preparation of pre-feasibility report & Draft concessional agreement is under progress. Development of modern sea port at Tadri has been taken up at the estimated amount of Rs.3,000 crore by Infrastructure Development Department (IDD)

The Government of Karnataka allotted 8000 sq m of port land at Mangaluru old port and signed agreement for construction of dedicated jetty for the use of Lakshadweep administration.

State Government provided Rs.19.59 crore towards improving and upgrading the infrastructure of the minor ports for the year 2015-16

#### Issues, Challenges & Outcome

##### (a) Railways and Airways

- i. Karnataka has poor railway density, with very few districts having direct train connectivity. Karnataka has the lowest rail route and broad gauge densities as compared to other Southern States. The rail density in the State is 16.60 km per 1000 km. In 2010 The State Government with a view to increase the rail density and increase the pace of implementation, has agreed for new railway projects to be taken up on 50:50 cost-sharing basis, and with land to be given free of cost.
- ii. While studying the State Project Development Machinery, several constraints for developing PPP projects by State Dept/agencies were noticed. It is now understood that to bring in

investment in Infrastructure through PPP route, the State has to adopt a program based approach, given the huge demand for infra projects in various sectors.

### (b) Outcome

Some of the important projects proposed by the Infrastructure Department under PPP mode are as follows:

1. International Convention Centre, Bengaluru.
2. Devanahalli Business Park
3. Port at Tadadi
4. Light Rail Transit System in Bengaluru
5. Road Projects
6. Airports at Ballari, Vijayapura, Kalaburagi, Shivamogga, Hassan
7. City Gas Distribution Project

#### 11.2.4 TELECOMMUNICATION

The telecommunication system in the State is operated by both private and public sector undertakings. Apart from BSNL, a number of private companies are like Vodafone, Reliance, Aircel, Bharati, BSNL, Idea, TATA, MNTL etc. are providing the wireless and wireline phones. The number and percentage of Wireless and wireline Subscribers in Southern States is presented in **Table 11.24**.

The teledensity (both BSNL and private cellular operators) in the southern States is presented in **Table 11.25**. Urban teledensity in Karnataka (172.11) is above all India teledensity (145.78). However, Karnataka stands in 3rd position among the southern States in Urban teledensity and 4th in rural teledensity.

The number of telephone exchanges has increased over the years. In the last 8 years 218 new exchanges were added in the State. Though the number of exchanges has increased, the number of landline connections has declined significantly. The decline in landlines can be partly attributed due to increased private participation in the mobile telephony sector and switchover to mobile phones. The trends in postal services suggest that there is a decline in the total number of post offices over the years. This may be due to merger of post offices in urban areas. The details of number of post offices, telephone exchanges and number of telephones are presented in **Table 11.26**. **Appendix 11.13, 11.14 and 11.15** indicates the No. of Post Offices, No. of Telephone Exchanges and No. of Telephones in Karnataka from 2007-08 to 2014-15.

**Table 11.24 Number of Wireless and Wireline Subscribers in Southern States (subscribers in Millions)**

States	Subscribers	Percentage
Tamil Nadu	82.69	25.0
Kerala	34.48	10.4
Maharashtra	78.96	23.9
Karnataka	60.44	18.3
Andhra Pradesh	73.76	22.4
Total	330.33	100.00

Source: Indian Telecom Services Performance Indicator Report for Quarter ending June, 2015

**Table 11.25 Southern States Teledensity (as on 30th June, 2015)**

Service Area	Rural Teledensity	Urban Teledensity	Total Teledensity
Tamil Nadu	82.46	140.55	116.81
Kerala	68.29	180.70	96.80
Maharashtra	60.74	127.41	92.84
Karnataka	50.55	172.11	97.50
Andhra Pradesh	48.72	174.91	83.92
All India	43.96	145.78	79.98

Source: Indian Telecom Services Performance Indicator Report for Quarter ending June, 2015



**Table 11.26 Number of Post Offices, Exchanges and Telephones**

Year	Post offices	Telephone Exchanges	Telephones
2007-08	9826	2626	2610353
2008-09	9862	2651	2326532
2009-10	9820	2694	2187802
2010-11	9772	2789	2040456
2011-12	9703	2884	1951878
2012-13	9686	2802	1670378
2013-14	9681	2806	1535931
2014-15	9340	2844	1389192

Source: Chief General Manager Telecom Office, Karnataka Circle, Bengaluru.& Chief Post Master General office, Karnataka Circle, Bengaluru.

### **11.3 BANKING AND FINANCE INCLUDING COOPERATIVES**

#### **11.3.1 Introduction:**

Karnataka State has a fairly well developed financial infrastructure. The State has pioneered in establishment of many leading commercial banks and is home to a wide network of commercial bank branches in the country. The banking business is predominantly contributed by seven commercial banks constituting almost three-fourths of the banking business. Currently, twenty six public sector banks, sixteen private commercial banks and three regional rural banks are operating in the State.

Disbursement of credit in rural areas takes place through co-operatives, commercial banks and regional rural banks. Credit for industry and service sectors flow from a major State-run lending institution, such as Karnataka State Financial Corporation (KSFC), which undertakes promotion and development of industries in the State. The Karnataka State Industrial Investment and Development Corporation (KSIIDC) is another financial institution which acts as a nodal agency to formulate proposals for implementation of infrastructure projects.

National Bank for Agriculture and Rural Development (NABARD), as an apex level financial institution, plays a lead role in the promotion of agriculture and rural

development, by preparing Potential Linked Credit Plans (PLPs) and annual action plans at the grass root level.

The ever growing demand for institutional finance in the state has resulted in expansion of banking network and credit flow. There were 755 bank branches at the time of nationalization in 1969. Since then, 9319 bank branches have been added by March 2015 thus taking the total number of branches to 10074. The branch expansion pattern depicted in Table 11.27 brings out that the branch network has significantly increased over the years. This increased network is providing better access of financial services to people in urban as well as in rural areas. Nevertheless, in last couple of years there has been special impetus to increase branch network in the rural and semi-urban areas compared to Urban and Metro areas.

The population per branch in Karnataka is 7748 which is less than national average and also many states. The state holds 4<sup>th</sup> position in aggregate deposits and Gross credit respectively. Thus, Karnataka state is moderate in its banking network as well deposit mobilization and in gross credit flow.

**Table 11.27: Branch Network**

Branch Network	March 2013	March 2014	March 2015	Increase in 2014-2015
Rural	3295	3532	3790	258
Semi-Urban	1828	2210	2359	149
Urban	1699	1845	1979	134
Metro/PT	1608	1779	1946	167
Total Branches	8430	9366	10074	708

Source: SLBC, Karnataka

**Table 11.28: Category wise Bank Branch Network - year ending**

Banks	March 2013	March 2014	March 2015
Commercial Banks	6052	6876	7440
Regional Rural Banks	1460	1547	1671
Karnataka State Co-operative Apex Banks	40	0	0
KASCARD	178	201	201
DCC Bank	630	672	692
Karnataka Industrial Co-operative Bank	38	38	38
KSFC	32	32	32
Total	8430	9366	10074

Source: SLBC, Karnataka

**Table 11.29: Aggregate bank deposits and Gross credit in selected states (Rs. in Crore)**

State	2014-15				
	Number of Reporting Offices	Aggregate Deposit	Rank	Gross Credit	Rank
MAHARASHTRA	11,505	2023380.91	1	1898531.30	1
NCT OF DELHI	3,334	928158.35	2	848510.17	2
UTTAR PRADESH	15,621	683363.12	3	298859.54	8
KARNATAKA	9,215	640866.78	4	429423.19	4
WEST BENGAL	7,416	566580.49	5	315415.47	7
TAMIL NADU	9,689	556327.86	6	639846.54	3
GUJARAT	7,094	486272.32	7	343924.99	5
KERALA	6,039	335133.49	8	207973.87	9
TELANGANA	4,648	328105.02	9	338914.52	6
MADHYA PRADESH	5,941	288349.48	10	157223.16	14
PUNJAB	5,953	268274.09	11	191445.71	12
RAJASTHAN	6,408	240691.03	12	203902.05	10
HARYANA	4,409	230260.67	13	160380.86	13
BIHAR	6,249	221517.45	14	71894.73	16
ODISHA	4,387	193656.52	15	74580.29	15
ANDHRA PRADESH	6,274	190915.29	16	196896.63	11
ALL - INDIA	129,151	8940250.05		6705977.24	

Source: Quarterly statistics issued by R.B. I. - Sept. 2015

As of September 2015 - District and bank group-wise distribution of the number of reporting offices, Aggregate Deposits and gross bank credit of all scheduled commercial banks - show in Appendix 11.16

**Table 11.30: Performance of Scheduled Commercial Banks**

Sl. No	Indicator	Unit	2012-13	2013-14	2014-15
1	Branch network				
	A) Commercial Banks	No.	6052	6876	7440
	B) Regional Rural Banks	No.	1460	1547	1671
	C) Co-operative Banks etc	No.	918	943	963
	Total	No.	8430	9366	10074
2	Deposits				
	A) Commercial Banks	Rs. in Crore	422145.50	485183.32	563989.16
	B) Regional Rural Banks	Rs. in Crore	17727.60	22009.36	25926.05
	C) Co-operative Banks etc	Rs. in Crore	19051.90	18232.69	22782.16
	Total	Rs. in Crore	458925.00	525425.37	612697.37
3	Advances				
	A) Commercial Banks	Rs. in Crore	296123.90	355415.27	408511.23
	B) Regional Rural Banks	Rs. in Crore	15143.10	18202.34	21264.38
	C) Co-operative Banks etc	Rs. in Crore	33603.00	21710.24	28261.40
	Total	Rs. in Crore	344870 .00	395327.85	458037.01
4	Credit-Deposit Ratio				
	A) Commercial Banks	%	70.15	73.25	72.43
	B) Regional Rural Banks	%	85.42	82.70	82.02
	C) Co-operative Banks etc	%	176.38	119.07	124.04
	Total	%	75.15	75.24	74.76

Source: State Level Bankers' Committee, Karnataka

**11.3.2: Deposits and Advances:** The aggregate deposits of all the banks (commercial, RRBs and cooperative) stood at Rs.612697 crore as at the end of March 2015, an increase of Rs.87272 Crore compared to last year (March 2014), registering a growth of 14.49 percent. Similarly, the total outstanding advances of all the banks in the state stood at Rs.395327.85 Crore as against the level of advances of Rs.344870 crore recorded a year ago indicating a growth rate of 14.63 per cent. The credit-deposit ratio (C-D ratio) of the state as on March 2015 is 74.76 per cent, which is marginally lower compared to last year. (Table 11.30).

**11.3.3 Priority Sector Advances:**

The Priority sector advances of all banks in the State amounted to Rs.184503 Crore in March 2015 as against Rs.158455 Crore as at March 2014 showing an increase of Rs.26048 Crore and recording a growth of

16.44%. It contributed to 40.28% in total advances, which is marginally higher than the benchmark level of 40% stipulated by RBI.

The agricultural advances as on March 2015 were to the tune of Rs.87860 Crore constituting 19.18 percent of the total advances of Banks as against the mandatory level of 18 percent. Out of which, direct advances to agriculture stood at Rs.80223 Crore forming 17.51 percent of total advances.

Advances to weaker section stood at Rs.67765 Crore constituting 14.79% of the total advances with an increase of Rs.9887 Crore over the previous year. The advances to Small & Marginal farmers was to the tune of Rs.44733 Crore covering about 50.40 lakh accounts, constituting 50.91% of the total Agriculture credit and 55.76 % of direct agriculture credit.

**Table 11.31: Distribution of Priority sector advances (Amount in Crore)**

Indicator	March 2013		March 2014		March 2015	
	Advances	% to Total Advances	Advances	% to Total Advances	Advances	% to Total Advances
Total Advances	344870	-	395328	-	458037	-
Total Priority Sector Advances (PSA)	139283	40.39	158455	40.08	184503	40.28
Agriculture	63724	18.48	77971	19.72	87860	19.18
MSME	65953	19.12	57051	14.43	66925	14.61
Weaker sections	49704	14.41	57878	14.64	67765	14.79
SCs/STs	9676	2.81	9966	2.52	12480	2.72
Women	27590	8.00	26977	6.82	33206	7.25
Minorities	14971	10.75	16968	10.71	19801	10.73

Source: State Level Bankers Committee

The advances paid to Minority communities amounted to Rs.19801 Crore, marking an increase of Rs.2833 Crore against the advances paid during the last year. Credit disbursed by banks to MSME sectors in the state in March 2015 is Rs.66925 Crore from Rs.57051 Crore in the previous year. Advances to SCs/STs accelerated to Rs.12480 Crore in March 2015 as against Rs.9966 Crore recorded in March 2014 which recorded as increase of Rs.2514 Crore.

Similarly, advances to women stood at Rs.33206 Crore in March 2015 as against Rs.26977 Crore made in the corresponding period of 2014. Details of advances to priority sector by banks in Karnataka from 2013 to 2015 are given in Table 11.31.

#### **11.3.4 One Beneficiary One account for All Government Benefits:**

The Principal Secretary, Finance Dept., GoK vide letter No.FD.06.CAM.2013(P) dated 19.3.2015 has informed that the Pradhan Mantri Jan Dhan Yojana (PMJDY) launched in August 2014, sought to enable all households, urban and rural to gain easy and universal access to financial services. With the active involvement of the State Govt, Banks in Karnataka have covered 98.37% of total households with one bank account per household. In addition, the PMJDY aims to make the transfer of various

government benefits more efficiently by focusing on opening of accounts of individual beneficiaries so that the payment of benefits is done through Bank accounts. The GoI is also encouraging transfer of benefits through PMJDY bank accounts so that these recently opened accounts remain active.

In this context, GoI guidelines of “**One Beneficiary-One Account for all Government benefits**” may be recalled under which it was stated that one single account is sufficient for transfer of benefits / subsidy under various schemes of Central / State Govt.

#### **11.3.5 Status of implementation of Rural Infrastructure Development Fund (RIDF):**

Govt. of India, in 1995 announced the scheme for setting up of Rural Infrastructure Development Fund (RIDF) within the apex institution, NABARD for financing rural infrastructure projects. Domestic Scheduled Commercial Banks, both in public and private sectors which are unable to meet their targets for priority sector / agricultural lending are required to deposit the shortfall amount in to the RIDF with NABARD such amounts as may be allocated to them by the Reserve Bank of India, depending upon the extent of their shortfall, subject to a ceiling of 1.5%. The initial corpus fund was Rs.2000 crore in 1995-96 and this fund has since been enhanced with an additional corpus being announced every year in the Union Budget. Karnataka got a normative allocation of Rs.800 Crore in 2015-16 for implementing works under RIDF-XXI. The rate of interest charged on loans to State Government is at 6.25% with effect from 29.09.2015.

Government utilized institutional finance from National Bank for Agriculture and Rural Development (NABARD) under Rural Infrastructure Development Fund Scheme for financing various developmental programmes in the State to supplement plan financing. In order to select and prioritise the works for loan assistance from NABARD, Institutional mechanism has been set up & a

Cabinet Sub-Committee on RIDF has been constituted under the chairmanship of the Hon'ble Minister for Public Works. A High Power Committee (HPC) has also been constituted under the Chairmanship of the Additional Chief Secretary to Government and Development Commissioner for periodically reviewing the implementation of RIDF projects in the State. The progress in the implementation of the scheme is also being monitored by NABARD.

The benefits accrued from RIDF programme, which have already made by State Governments in creation of additional irrigation potential, generation of additional employment, all-weather connectivity/improved connectivity to villages and marketing centers and improvements in the quality of life through facilities in education health and drinking water supply.

**Programme status:**

In Karnataka, till October 2015 an aggregate amount of Rs.7,915.46 Crore has been sanctioned by the National Bank for Agriculture and Rural Development (NABARD) under various tranches of RIDF. The completed projects include rural roads, rural bridges, minor irrigation projects, medium irrigation projects, school buildings, hostels, rural godowns, rural markets, Anganwadi buildings, Health facilities, polytechnic buildings, Rural service centers and fish jetties.

**11.3.6 National Urban Livelihood Mission (Nulm) & State Urban Livelihood Mission (Sulm)**

**Chief Minister's programme (State Urban Livelihoods Mission)**

**National Urban Livelihoods Mission State Programme.**

National Urban livelihood Mission (NULM) - State Programme scheme is replica of the Central Sponsored Scheme National Urban Livelihood Mission of the financial year 2014-15. This scheme is being implemented in towns/cities other than those taken up under National Urban livelihood Mission (NULM) in Karnataka by the State government. This state sponsored scheme is being rolled out in 179 TMCS/Municipality areas in the state.

- a. Directorate of Municipal Administration is the State Level Nodal Agency for the implementation of SULM. Under Self-Employment Programme (Individual and Group Enterprises) [SEP(I&G)], 6252 individual beneficiaries & 179 groups are the state annual target for the sanctioning of loan and the same bifurcated up to district/ULB level.
- b. Self-Employment- ( Individual and Group Enterprises)

This component focuses on financial assistance to individuals/groups of urban poor for setting up gainful self-employment ventures/ micro-enterprises, suited to their skills, training, aptitude and local conditions. The under-employed and unemployed urban poor will be encouraged to set up small enterprises relating to manufacturing, servicing and petty business for which there is considerable local demand. Local skills and local crafts should be particularly encouraged. Each City/Town develop a compendium of such activities/projects keeping in view skills available, marketability of products, costs, economic viability etc. No minimum or maximum educational qualification is prescribed for the selection of beneficiaries under SEP.

1. Setting up of both individual and group micro enterprises needs to be supported.

The project cost ceiling will be Rs.2.00 lakh for individual enterprises and Rs.10.00 Lakh for group enterprises. Individual and groups will be provided loan from the banks and the application for such loans be preferably recommended by the SHGs.

2. Interest subsidy over and above 7 percent rate of interest will be available on a bank loan for setting up of an individual or group enterprise. No collateral is envisaged other than the microenterprise itself.

#### **B. SHG - Bank Linkage:**

1. Interest Subsidy over and above 7 percent rate of interest will be applicable to all SHGs accessing bank loan. An additional 3 percent interest subvention will be provided to all women SHGs who timely repay their loan.
2. The interest subvention will be subject to timely repayment by the beneficiaries. Suitable certification from banks will be obtained in this regard. The difference between 7 percent or 4 percent as the case may be and the prevailing rate of interest will be provided to banks under NULM.

#### **Status of Physical Achievement of the NULM Cities**

<b>Progress for the year 2015-16 (up to NOV. 2015)</b>										
<b>Self-Employment Program (Individual &amp; Group)</b>										
<b>Individual</b>						<b>Groups</b>				
<b>Scheme</b>	<b>Target</b>	<b>No. of applications received</b>	<b>No of Applications Sent to Bank</b>	<b>No of application sanctioned by the bank</b>	<b>Applications Pending with Bank</b>	<b>Target</b>	<b>No. of applications received</b>	<b>No of Applications Sent to Bank</b>	<b>No of application sanctioned by the bank</b>	<b>Applications Pending with Bank</b>
NULM	4765	9343	7606	709	6348	105	105	106	19	82
SULM	3182	8810	8539	1528	5567	357	460	460	135	289

### 11.3.7 Micro Credit Delivery Innovations-Self Help Groups (SHGs): STREE SHAKTI PROGRAMME

The Women & Child Welfare Development, GoK has communicated the targets for linkage of Stree Shakti Groups for the year 2015-16 is as under:

No. of Stree Shakti Groups formed	:	140000
No. of Groups credit linked	:	129430
No. of Groups having only Bank A/cs	:	10570

The progress under Stree Shakti Programme as furnished by the Women & Child Development Department, Govt. of Karnataka for June 2015 is as under:

No. of Stree Shakti Groups formed	140000
No. of groups maintaining accounts with banks	140000
Cumulative amount saved by the Group Members	Rs. 1695.31 Cr
No. of groups credit linked	129430
Loan disbursal by banks	Rs. 2661.14 Cr

#### The Micro Finance Profile of the State:

Number of SHGs Promoted & Saving Linked during 2014-15	79,955
Cumulative Number of SHGs Saving linked as on 31.03.2015 (Number of live SB accounts of SHGs)	7,48,129
Number of SHGs credit linked during 2013-14	2,31,073
Bank Loan disbursed during the year 2014-15 (Rs. crore)	3515.00
Bank Loan outstanding as on 31.03.2015 (Rs. crore)	6907.00
Average Loan per SHG (Rs. lakh)	1.25
Percentage of Women SHGs	93%

Source: NABARD Focus Paper

#### Target and Achievement for the year 2015-16:

Targets for the year 2015-16			Achievement as on 30.09.2015		
New SHGs	Credit Linkage of SHGs	Credit Linkage of JLGs	New SHGs	Credit Linkage of SHGs	Credit Linkage of JLGs
0	1,56,250	25,000	17,763	45,005	28,809

### Activities undertaken during 2015-16 by NABARD

- Formation of Women SHGs(WSHG) under Women SHG Scheme of DFS, GOI in Chitradurga & Gulbarga districts with facilitation of Anchor NGOs viz.SKDRDP and MYRADA respectively.
- Conduct need based capacity building training programmes in all districts of Karnataka for Bankers/NGOs/PRI/SHG members at taluk and district levels. SHG-Bank Linkage Programme sensitisation programme exclusively for bankers. Micro Entrepreneurs Development Programme (MEDP) for SHG members.
- Conducted Strategy Meets of Commercial Banks, RRBs and Cooperative Banks for formulation of strategies for rejuvenation of SHG-BLP and offtake of Joint Liability Group (JLG) programme in the State.
- Sanction of grant assistance to Self-Help Groups Promoting Institutions (SHPI) and Joint-Liability Groups Promoting Institutions (JLGPI) for formation/linkage of Self-Help Groups/Joint-Liability Groups in the State.
- 40 SHPIs viz., 34 NGOs, 5 DCCBs and 1 PACS are promoting and credit linking SHGs with the grant assistance of NABARD. Support to SHPIs including e-book keeping along with assistance for formation of SHGs, credit linkage and handholding services provided to SHGs by NABARD.
- Process for digitisation of SHGs data has started in Mysore district on a pilot basis and after completion of the pilot, it would be extended to all the districts under E-Shakti Programme.

### 11.3.8 Lending Through Micro-Finance Institutions (MFIs):

Association of Karnataka Micro-finance Institutions (AKMI) registered under the Societies Act of 1860 and overseeing the activities of various (21) MFIs. It has informed that the loan outstanding given by various MFIs as on September 2015 is Rs.9006.24 Crore covering 65,65,888 accounts, out of which overdue stands at Rs.53.59 Crore spread over 33,406 accounts.

### 11.3.9 Kissan Credit Cards:

For timely flow of credit to farmers the Kissan Credit Card (KCC) Scheme was introduced by the Government of India (GoI) during 1998-99. The scheme aims at providing adequate and timely credit for the requirements of farmers under a single window with flexible and simplified procedure adopting whole farm approach including short term and term credit needs. The scheme has also been tied up with Personal Accident Insurance Scheme (PAIS) wherein card holders are insured up to Rs 50,000/- at a nominal premium of Rs 15 for three years.

NABARD is monitoring the issue of ATM enabled KCCs and the coverage of eligible farmers and also supporting RRBs and Cooperative Banks out of FITF for providing RuPay KCC to their farm loanees, which are operable in ATMs and POS services. The interchange charges is being reimbursed to RRBs and Co-operatives by NABARD. The KCCs have been issued by all the banks including Co-operative Institutions/Banks. A total number of 19,13,443 Kisan Credit Cards have been issued involving a credit limit of Rs.14,891 Crore upto Sept. 2015. Agency-wise number of Cards issued and limit sanctioned as on 30.09.2015 is as under:

**Table 11.32: Distribution of KCC cards agency wise (as on Sept. 2015)**  
(` in Crore)

Agency	Target for 2015-16 (Amount)	During the Year		Outstanding Balance	
		No. of cards Issued	Limit sanctioned	No. of cards	Amount
Comm.Banks	25452	411135	5959	1358285	22201
RRBs	6136	465301	3885	863995	8600
Cooperatives	10012	1037007	5047	2241785	9518
Total	41600	1913443	14891	4464065	40319

Source: SLBC, Karnataka



### 11.3.10 Regional Rural Banks (RRBs):

The Regional Rural Banks (RRBs) have evolved into a major institution towards credit dispensation in rural area since their inception. These banks have been promoted to serve the rural areas with specific objectives. Owing to various reform measures, these banks have achieved considerable operational and financial stability in recent years. Considering operation feasibility these banks were amalgamated from 13 to 6 in 2005 and from 6 to 4 in November 2012 and 4 to 3 in August 2013.

In accordance with the policy decision taken by the Government of India, 4 RRBs sponsored by Canara Bank were amalgamated into one and renamed as Pragathi Grameena Bank. Similarly, another 4 RRBs sponsored by Syndicate Bank were amalgamated and renamed as Karnataka Vikas Grameena Bank. The RRBs sponsored by the State Bank of Mysore, Corporation Bank, and Vijaya Bank were amalgamated into one w.e.f 1-11-2012 and renamed as Kaveri Grameena Bank, Mysore under the sponsorship of State Bank of Mysore. Similarly Pragathi Grameena Bank and Krishna Grameena Bank were amalgamated into a single RRB w.e.f 23.08.2013 and renamed as Pragathi Krishna Grameena Bank. The State Government in accordance with the provisions of Section 6 of RRB Act 1976 has made 15 per cent contribution towards equity share to all the RRBs in the state.

### 11.3.11 State Term Lending Institutions:

Karnataka State Financial Corporation (KSFC) is a State Level Financial Institution established by the State Government in 1959 under the provisions of SFCs Act, 1951 which is a Central Act. The basic objective of the Corporation is the development of Micro, Small & Medium Enterprises (MSMEs), backward areas & first generation entrepreneurs in the State of Karnataka. The Corporation has worked in this direction since the beginning and has been successful in achieving the same. Since its inception up to the end of 31st March 2015, the Corporation has extended assistance to the extent of 67% for Small Scale Industries,

54% for Development of Backward Areas and 51% for the promotion of First Generation Entrepreneurs.

### Major initiatives:

During the FY 2014-15, the Corporation has been successful in formulating a Financial Restructuring Plan and concluding One Time Settlement with SIDBI. Through this settlement, the Corporation got interest benefit of Rs.2201.00 lakhs and principal relief of Rs.24293.00 lakhs. The settlement improved the financials and changed the landscape of the Corporation.

### Major achievements during fy: 2014-15 :

- During the FY: 2014-15, the Corporation Sanctioned Rs.67514.60 lakh, Disbursed Rs.55362.41 lakh & Recovered Rs.81399.70 lakh.
- The Cumulative Gross Sanctions of the Corporation reached Rs.1381068.01 lakh covering 1,69,244 cases as on 31<sup>st</sup> March 2015.
- The Cumulative Disbursements reached Rs.1082112.00 lakhs as on 31<sup>st</sup> March 2015.
- The Cumulative Recovery touched Rs.1390842.00 lakhs as on 31<sup>st</sup> March 2015.
- The State Government infused an additional share capital of Rs.7500.00 lakhs for making the part payment of settlement amount with SIDBI.
- The State Government extended Guarantee support of Rs.48500.00 lakhs for raising the resources for issue of private placement bonds towards meeting settlement amount with SIDBI and business requirements.
- The State Government extended the Interest Subsidy Scheme for the SC/ST Entrepreneurs and provided Rs.1100.00 lakhs during the FY: 2014-15.
- The State Government approved the Interest Subsidy Scheme for First Generation Entrepreneurs for establishing new Micro & Small Industries.
- The State Government approved the Interest Subsidy Scheme for the Construction of Warehouses and Cold

Storages for Agriculture and Horticulture Produce around Villages and Towns.

- The Corporation earned a net profit of Rs.4446.98 lakhs during the FY: 2014-15.

**PERFORMANCE OF THE CORPORATION DURING THE FY: 2015-16 (April to Dec 2015) :**

During the FY: 2015-16 (April to December 2015) the Corporation has assisted 763 cases to an extent of Rs.44331.44 lakhs, disbursed Rs.38863.15 lakhs and recovered Rs.61339.34 lakhs.

The performance of the Corporation in the key areas of operations is summarized in Table-11.33.

**11.3.12 Non-Performing Assets (NPA) in Banks:**

The health of banking sector largely depends on Non-Performing Assets (NPA). In the State the NPAs have increased compared to last year. The NPA was Rs.15,563 crore on March 2014 and it is Rs.16,803.12 crore as on March 2015 accounting for 3.67 per cent of total advances.

**Table 11.33. – Performance of KSFC (` in lakhs)**

Period	Sanctions		Disbursements	Recovery
	No.	Amount	Amount	Amount
April'11 to Dec.'11	1037	58909.18	41402.68	45707.37
FY 2011-12	1485	81731.68	59707.84	66089.70
April'12 to Dec.'12	1129	65642.52	50093.20	53401.41
FY 2012-13	1598	94405.52	73470.44	79288.81
April'13 to Dec.'13	991	62117.59	46448.44	60695.85
FY 2013-14	1426	90926.05	70746.78	83651.82
April'14 to Dec.'14	730	40228.95	38922.32	58309.04
FY 2014-15	1092	67514.60	55362.41	81399.70
April'15 to Dec.'15	763	44331.44	38863.15	61339.34

Source: KSFC

**Table 11.34 : NPA across the type of banks (` in lakh)**

Type of Banks	As on 30/3/2014		As on 30/3/2015	
	A/Cs	Amount	A/Cs	Amount
Commercial	561261	1379234	542404	1513826
RRBs	66293	52792	101327	71842
Cooperatives/KSFC	51257	124326	43910	94644
Total	678811	1556352	687641	1680312

Source: SLBC Karnataka

There were 687641 NPA accounts involving an amount of Rs.16803.12 Crore as of March-2015, accounting for 3.67% of total advances. The Farm sector accounts 296601 with a balance of Rs.3,966.70 Crore constituting 4.52 per cent of advances to agriculture. NPA under MSE and OPSA works out to 5.40% and 2.45% respectively.

### 11.3.13 Interest Subsidy Schemes:

Governments of Karnataka vide Govt. Order No. AGD76ASC 2012 Dated: 16.08.2012 has enhanced the maximum limit of crop loans provided to the farmers by Public Sector Commercials Banks and Regional Rural Banks in Karnataka upto Rs.1,00,000/- with the following conditions:

1. This enhancement is applicable for short-term crop loans approved & disbursed on or after 01.04.2012
2. In view of additional incentive of 3% subvention by the GOI to those farmers who repay the loans promptly, the interest subsidy payable by the State Govt. would be 1% to enable the loans at 3% interest rate per annum.
3. No interest subsidy is allowed by the State Govt. for the loans above Rs.1,00,000/-

The Interest subsidy claims in respect of 65,301 farmers to the tune of Rs.3.59 crore has been submitted to Dept. of Agriculture upto Sept. 2015. The amount settled during the FY is Rs.1.94 crore involving 44,479 farmers.

### 11.3.14 Co-operative Credit: Co-operative Credit:

The Cooperative credit system in Karnataka has its own place in the credit delivery of rural and urban areas. Apart from urban

cooperative banks, the major Primary Agricultural cooperative society (PACS)/banks are operating in rural areas. Unlike in other states, in Karnataka two type of Cooperative credit institutions are functioning, one is looking after short term credit and another looking after long term credit needs.

### a. Short Term Credit Cooperative Credit Structure (STCCS):

The Karnataka State Cooperative Apex Bank through its affiliated District Central Cooperative Bank (DCCB) and Primary Agriculture Cooperative Societies (PACS) at the villages level extends short term credit to the farmers and others. There are 21 DCCBs with 680 branches and 5051 PACS functioning in the state. These institutions have prepared Business Development Plan (BDP) with a view to strengthen capital base of their financial and organization set up in accordance with guidelines of NABARD, an MoU is signed by NABARD, State Government and Apex bank in June 1995, same was renewed from time to time.

As on 31-3-2014 the working capital of DCCBs was Rs.21429.24 Crore by the end of March 2015, it had grown to Rs.24940.01 Crore indicating a growth of 16.38 per cent. The total amount of Deposit in DCCBs was Rs.13022.89 as on 31-3-2014. It had grown by 15.74 per cent to Rs.15072.93 Crore as on 31-3-2015. During 2014-15, 20 DCCBs in the State have recorded profits. Only Shimoga, Davanagere and Kolar DCCBs have had accumulated loss. These credit institutions provide short, medium and long term credit to PACS and other societies at gross root level and deal directly with individual borrowers also.

**Table 11.35: Consolidated financial Status of DCCB (Rs. in crore)**

Particulars	2012-13	2013-14	2014-15
No of DCCBs	21	21	21
Total share capital	537.24	628.75	808.26
States' share capital	22.56	15.73	15.73
Share of state share capital %	4.20	2.50	1.57
Deposits	107738.70	13022.89	15072.93
Borrowings	4799.92	5642.23	7188.86
Loans & Adv O/S	13181.49	15617.21	16560.67
Banks showing profit	20	21	20

### b. Long Term Credit Co-operative Credit Structure (LTCCS):

Apex Bank, Karnataka State Co-operative Agriculture and Rural development Bank (KASCARD) at the State level and Primary Co-operative Agriculture and Rural Development bank at taluk level numbering 177 cater to the long term credit needs in the two tier credit delivery system. The National Bank for Agriculture and Rural Development (NABARD) provides refinance to the KASCARD Bank.

### c. Agricultural loan disbursement:

As on 31-3-2015, the short term (ST), Medium term (MT) and Long term (LT) loans issued by the co-operative credit system in the state was Rs.9285.99 Crore, Rs.292.95

Crore and Rs.317.66 Crore respectively as against Rs.7559.73 Crore, Rs.309.08 Crore and Rs.212.0 Crore issued a year ago indicating a marked improvement in the issue of all type of Agricultural loans. In the current fiscal as at end of Sept 2015, the cooperative credit system issued ST, MT and LT loans to the extent of Rs.4765.71, Rs.120.17 and Rs.43.76 Crore respectively.

### d. Recovery of Loans:

The Comparative position of recovery of Short, Medium and Long term loans under the Cooperative Credit System in the State for the years from 2012-13 to 2015-16 (upto-Sept-15) is presented vide Table 11.37. The recovery figures show that there is high overdue in long term loan compared to other term and short term loans, the recovery has fallen drastically in the current year.

**Table 11.36: Performance of Short Term, Medium Term and Long Term Credit (Rs. in Crore)**

	Type of Loan	Target	Achievement	per cent
2012-13	Short term	6400.00	6030.28	94.22
	Medium term	300.00	314.38	104.79
	Long term	180.00	205.52	114.18
2013-14	Short term	7936.00	7559.73	95.26
	Medium term	375.00	309.08	82.42
	Long term	183.98	212.00	115.23
2014-15	Short term	10000.00	9285.99	92.86
	Medium term	400.00	292.95	73.24
	Long term	300.00	317.66	105.89
2015-16 (Sept)	Short term	10500.00	4765.71	47.66
	Medium term	400.00	120.17	30.04
	Long term	300.00	43.76	14.59

**Table 11.37 : Recovery of loans in Karnataka (Rs. in Crore)**

Type of loan	2012-13	2013-14	2014-15	2015-16 (September)
Short term	87.59	96.87	97.28	95.48
Medium term	84.16	86.35	89.64	63.25
Long term	57.20	65.54	51.61	14.36

**Table 11.38 Improvement under the project of Business Development (Rs. in crore)**

Details	2012-13			2013-14			2014-15		
	Annual Target	Annual achievement	Percentage of achievement	Annual Target	Annual achievement	Percentage of achievement	Annual Target	Annual achievement	Percentage of achievement
Credit	10098.09	9327.87	92.37	11227.40	10447.11	93.05	13388.16	12317.11	92.00
Non-Credit	1901.35	1559.72	82.03	2139.41	1540.21	71.99	2229.60	1761.384	79.00
Total	11999.44	10887.59	90.73	13366.82	11987.32	89.68	15636.33	14078.49	90.04

### **E. Business Development Plans (BDP) for Primary Co-operative Agricultural Credit Societies:**

Business Development Plans (BDP) are being implemented by primary credit cooperative societies from 1995-96. 4783 societies have been brought under this programme by the end of March 2015.

The 4783 cooperative societies which have been implementing business development scheme have done credit business of Rs.12317.11 Crore and non credit business of Rs.1761.38 Crore and totaling to Rs.14078.49 Crore and has achieved 90.04 % of annual target.

### **F. Subsidised loan to farmers @ 3,1, and 0 per cent**

The State Government has implemented the scheme of lending agricultural loans to the farmers at 6 % from 01.04.2004 through agricultural cooperative credit institutions in the state. The rates was further reduced during the subsequent years. During 2006-07 and 2007-08, the rate was reduced to 4% and from the year 2008-09 to 2010-11 interest rate was further reduced to 3% and 1% for 2011-12 and 0% upto 1 lakh and 1% upto 3.00 lakh 2012-13 for crop loans. For the 2013-14 Govt reduced the interest rate to 0% up to 2.00 lakhs and 1% upto 3 lakhs for short term agricultural loans. The medium term and long term agricultural loans up to 10.00 lakhs are disbursed to farmers at 3%.

During the year 2014-15 Short Term loan upto 3 lakhs are disbursed at 0% and MT and LT loans upto 10.00 lakhs are disbursed

at 3%.The scheme has been continued for the year 2015-16 also.

The Government is reimbursing the differential interest at pre-determined rate to concerned institutions. An amount of Rs.624.44 Crore had been earmarked to implement the scheme for the year 2014-15 and entire amount has been released by government to 1587328 farmers through concerned cooperative institutions. During the year 2015-16 a budget provision of Rs.737.41 Crore has been provided, upto Oct 2015 Rs.368.70 Crore of interest subsidy amount has been released to 919119 farmers through cooperative institutions.

### **G. Interest subsidy to Self Help Groups:-**

The scheme of advancing loans to Self Help Groups in Karnataka at 4 % has been implemented from 01-04-2007. Government is providing interest subsidy to cooperative institutions in order to implement the scheme. During the year 2014-15 an amount of Rs.647.92 Crore of loan has been disbursed to 37304 groups and Rs.20.00 Crore of interest subsidy has been released.

During the year 2015-16 till the end of Sept 2015 is 4758 groups have been formed which have led to formation of 233152 groups. Out of these groups 15230 groups have been provided Rs.257.37 crore of loans. A budget provision of Rs.86.00 Crore has been provided in current year & Rs.13.09 Crore of interest subsidy amount has been released to groups through co-operative institutions. (as at end of Sept. 2015)

**H. Interest waiver Scheme:**

Interest waiver Scheme on Postponement of Installments of Medium and Long term agri loan for one year due to be paid to Cooperative institution by farmers for the year 2015-16

In order to give relief to farmers suffering due to severe drought in the State in the current year, Government has declared the postponement of the re-payment of regular medium-term and long-term agricultural loan installments by the farmers to the cooperative banks by one-year. The Government has decided to bear the interest

burden of Rs.65.87 Crore on account of this postponement in respect of 2.93 lakh farmers.

**I. Interest waiver on Overdue Agricultural loans**

Government has also waived the interest on Overdue of short term, medium term and long term Agricultural loans as on 30-9-2015, provided that farmers pay the principal amount within 31-03-2016. This will approximate benefit 2.07 lakh farmers and amounting to Rs.188.37 Crore to the provisioned by the state government.



# Human Development

## 12

### 12.1 EDUCATION

In recent years there is an unimaginable advancement in the field of knowledge and social and national aspirations of the people all over the world. Thus changes in the field of education have become indispensable for the better. It is the responsibility of education to nurture the all-round development of an individual's personality, thus help him/her become a active member of a knowledge society and a productive citizen of this country. There are significant developments in all fields of education. Education is having both intrinsic and instrumental value and provides useful services for the development of nation and enrichment of an individual's life.

The positive externalities of Education make it a public good, and therefore it needs to be supplied by the State as markets cannot provide it to the socially optimal levels. The human development paradigm recognizes the role of education in the expansion of choices for wellbeing, security and comfort. Therefore, the right to education is recognized as one of the fundamental human rights and, the drive towards universal elementary education aims at ensuring its delivery. Karnataka State is a fast growing economy and this growth is largely based on the knowledge base of the society. The State has embarked on significant reforms in the education sector with increased public investment to ensure access, equity and quality in education, with community involvement.

#### 12.1.1 LITERACY IN KARNATAKA

A review of growth of literacy during the 2001–2011 decade shows that Karnataka has achieved significant progress. The literacy rate in the State during 2001 was 66.64 per cent, which increased to 75.60 per cent in 2011 (Table 12.1)

From the Table it is evident that the overall literacy rate, male and female literacy rates in Karnataka are above the state average. Urban male literacy rate in the State has crossed 90 per cent. However, rural female literacy rate in the State is yet to cross 60 per cent. The literacy rank of the State was 9<sup>th</sup> among 16 major States (States with a population of more than 100 lakh) during 2001. And the same position is maintained in 2011. The overall increase in literacy rate in the State during this decade is 9 per cent. Districts like Kalaburagi (undivided), Bengaluru Rural, Bagalkot, Raichur, Kolar, ChamaraJanagar, Vijayapura and Bidar with a lower literacy rate in 2001 have crossed the State average literacy rate. By and large this is due to the literacy programmes implemented by the Department of Education with a focus on backward districts/regions of the State. This can also be attributed to SSA and RMSA initiatives resulting in good schooling facilities, attractive incentive schemes to improve learning, quality assurance measures and increased awareness among the community.

**Table 12.1: Literacy rates in Karnataka and India**

	Karnataka	India	Karnataka (Rural)	Karnataka (Urban)
Persons	75.60	74.04	68.86	86.21
Males	82.85	82.14	77.92	90.54
Females	68.13	65.46	59.60	81.71

Source: 2011 Census



### 12.1.2 STATUS OF SCHOOL EDUCATION

In the state general education system is divided into different levels such as pre-primary level, primary level, upper primary, secondary education, under graduate and post-graduate education. School education in Karnataka is imparted through Lower Primary Schools (LPS, class I to V), Higher Primary Schools (HPS, class I to VII / VIII) and High Schools (VIII to X). These schools fall under three categories based on type of management, namely (i) Government schools managed by the Departments of Education, Social Welfare and local self-governments (ii) Government aided schools and (iii) Private unaided schools. There are also a few 'other' schools consisting of mixed categories. In 2015-16. There were 26118 Lower Primary, 34795 Higher Primary and 15140 High Schools in the State (Table 12.2).

In the total number of schools, the percentage of education department's schools is as high as 82.91 percent in lower primary schools and 64.51 percent in higher primary schools. However, Education Department's participation is low in secondary education as only 30.77 per cent of the high schools are managed by Government. Government schools are mainly located in rural areas, where as private schools are largely urban based.

### ELEMENTARY EDUCATION

Article 21 A of the Constitution of India and the Right of Children to Free and Compulsory

Elementary Education (RTE) Act 2009 became operative in April 2010. The State Rules under the RTE Act were notified in 2011. These developments have thrown open fresh opportunities for quality schooling for children.

**a) Access:** There has been significant progress in improving access to schools in the State. The State has the policy to start a new primary school within one kilometer in habitations where the population is more than 100 and child population is more than 10. HPS is provided within 3 Kilometer radius and High Schools in 5 Kilometer radius. Feeder schools or transportation facilities are provided in small and sparsely populated habitations. All habitations with a population of 100 and above now have access to a primary school within a distance of one kilometer. HPS are being upgraded to include class 8, wherever there are no High Schools within 3 Kilometers. A total of 7817 HPS has been upgraded so far.

**b) Number of Schools:** During 2015-16, there were 60,913 elementary schools in the State, of which 26,118 were LPS and 34,795 were HPS. In 2014-15, the State had 26,308 lower primary, and 34604 higher primary schools. The number of HPS increased by 191 between 2014-15 and 2015-16. There were 15140 high schools in the state during 2014-15 and 203 new schools were established during 2015-16 (Table 12.3).

**Table 12.2 Schools by Management in Karnataka (2015-16)**

Category		Education Department	Social Welfare + Local body	Aided	Un-Aided	Others + Central	Total
Lower Primary Schools	No.	21654	131	246	4082	5	26118
	%	82.91	0.50	0.94	15.63	0.02	100
Upper Primary Schools	No.	22447	597	2853	8809	89	34795
	%	64.51	1.72	8.20	25.32	0.26	100
Elementary Schools	No.	44101	728	3099	12891	94	60913
	%	72.40	1.20	5.09	21.16	0.15	100
Secondary Schools	No.	4659	566	3818	6013	84	15140
	%	30.77	3.74	25.22	39.72	0.55	100
Total (Elementary + Secondary)	No.	48720	1294	6917	18904	178	76013
	%	64.48	1.69	8.97	24.61	0.24	100

Source: DISE 2015-16

**Table 12.3: Schools in Karnataka (in nos.)**

Schools	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Lower Primary	26032	25951	25950	26058	26308	26118
Higher Primary	33126	33604	34086	34427	34604	34795
Total Primary	59128	59555	60036	60485	60912	60913
Secondary	12904	13862	14194	14469	14937	15140
Total	72062	73417	74230	74954	75849	76013

Source: DISE 2015-16

From the above Table it can be noted that, there is a decline in the number of lower primary schools during the period 2010-11 to 2012-13. This decrease is not a natural one but a notional decrease, as the lower primary schools get upgraded as higher primary schools every year. However, the number of HPS and high schools has increased by 1669 and 2236 respectively during this period.

**c) Enrolments:**

- i. Enrolment during 2015-16 in primary (class I to V) and in upper primary (class VI to VIII) stage was 54.06 lakh and 29.34 lakh respectively (Table 12.4). It is noted that 72.70 percent of children are studying in rural government schools.
- ii. Over the years the enrolment has decreased marginally in the primary stage due to decline in the growth rate of

population, and consequent decline in school going age group. The State is making continued efforts for successful completion of schooling at class V and increasing retention at upper primary stage.

iii. The number of SC / ST children in class I to VII in the State is 2004613.

Total enrolment in the State in 1 to 10 standards have marginally increased from 100.29 lakh in 2010-11 to 101.14 lakh in 2015-16. Both gender parity and gender equity are nearing unity in the State. Gender Parity in enrolment at primary and upper primary is 1.01 and 0.99 in Government + Aided schools. Ratio of girls to boys (**gender parity index**) in primary education is the ratio of the number of female students enrolled at primary level of education to the number of male students in this level

**Table 12.4: Schools and Enrolments in Karnataka 2010-11 to 2015-16, (in No's)**

Enrolments (All types of Schools)	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
<b>Enrolments classes I to V</b>						
Total ( in lakh)	54.15	54.14	53.78	53.51	53.73	54.06
Boys ( in lakh)	28.02	28.06	27.90	27.62	27.71	27.87
Girls (in lakh)	26.13	26.07	25.88	25.89	26.01	26.19
<b>Enrolments classes VI to VIII</b>						
Total ( in lakh)	20.11	20.75	30.17	29.70	29.72	29.34
Boys ( in lakh)	10.37	10.72	15.68	15.40	15.37	15.19
Girls (in lakh)	9.73	10.03	14.49	14.30	14.34	14.16
<b>Enrolments IX to X</b>						
Total ( in lakh)	26.04	26.07	16.67	16.85	17.67	17.74
Boys ( in lakh)	13.51	13.55	8.64	8.75	9.21	9.24
Girls (in lakh)	12.54	12.52	8.03	8.10	8.46	8.50
Enrolment Total 1 to 10	100.29	100.97	100.62	100.07	101.12	101.14
Boys (in lakh)	51.90	52.34	52.22	51.78	52.28	52.30
Girls (in lakh)	48.40	48.63	48.40	48.29	48.84	48.84
Total Schools in State [ 1 to 10]	72875	73417	74230	74954	75849	76069

Source: DISE 2015-16

**Table 12.5: GER and NER at Lower Primary, Upper Primary and Secondary Stages (in %)**

Year	Primary level		Upper primary level		Secondary Level	
	GER	NER	GER	NER	GER	NER
2005-06	121.83	97.51	103.04	98.75	-	-
2006-07	108.28	98.43	107.25	98.52	62.00	-
2007-08	110.93	96.10	107.53	95.61	65.00	-
2008-09	107.15	97.33	107.48	98.09	69.77	39.03
2009-10	106.53	95.21	103.10	95.15	75.29	45.07
2010-11	107.53	98.86	103.92	93.57	81.42	58.47
2011-12	107.46	99.21	105.16	96.95	85.65	65.76
2012-13	106.81	97.69	105.66	94.83	84.54	69.30
2013-14	102.36	93.56	90.47	81.78	75.99	55.33
2014-15	102.97	95.47	89.18	81.37	77.31	55.97
2015-16	102.98	96.40	93.36	79.16	83.22	61.75

Source: DISE 2015-16

iv. Gross Enrolment and Net Enrolment Ratios (GER & NER): During the 2015-16, GER and NER lower primary are 102.98 and 96.40 respectively. At Higher primary stage GER and NER are 93.36 and, 79.16 respectively (Table 12.5). Changes in GER and NER across the years are marginal.

#### d) Drop-out Rates:

In the Annual report 2013-14, Sarva Shiksha Abhiyan (SSA) had identified 160779 (7 to 14 years) drop-out children in state. Most of the drop-out children were in the districts namely Vijayapura, Bidar, Yadgir, Kalaburagi, Koppal, Bengaluru North and Bengaluru South Ballari Dharwad Raichur Gadag Haveri Chikkodi Chitradurga Davanagere Chikkaballapura Kolar Chamarajanagar (Source: Annual Report, SSA 2013-14). The RTE Act specifies that drop-out children should be mainstreamed in regular schools. Every drop-out-child is expected to be enrolled in a nearby school and provided Special Training. Progress of the child is periodically assessed on a learning ladder on the basis of which, the child is admitted to an age-appropriate class (Table 12.6).

**Table 12.6: Drop-out Rates in Lower Primary and Higher Primary Stages (2015-16) (in %)**

Stage	All children	All (Boys)	All (Girls)
Lower Primary	2.02	2.03	1.89
Higher Primary	5.49	5.10	5.90

Source Edu.Dept.(SSA)

#### e) Out of School Children (OOSC)- Strategies for:

As per RTE Act 2009, it is mandatory to provide free and universal education to all children aged between 6 and 14 years. In this context, the updated census was taken up in December 2014 and 12878 children between the age of 7 years and 14 years were identified as school dropout children. And also 16677 children of previous year were prevented from school dropout. Among the total 29555 children identified till December end, 26049 children are brought into mainstream through various following programmes. The number of never enrolled children is quite low as compared to Dropout children. It showed a decreasing trend over the years. The children in the age group of 6+ below 7 years are enrolled directly during the special enrollment drive (Table 12.7).

**Table 12.7: Special enrolment drive to out of school children target and achievement for the year 2015-16 (upto Dec. 2015 )**

Name of Strategies	Target (Number of children)	Achievement Number of Children (Till December 2015)
Special Training of 3 months without accommodation (Chinnara Angala)	1363	715
Special Training of 3 months with accommodation (Chinnara Angala)	287	165
Special Training of 12 months with accomodation	1091	629
School Based Special Training (With volunteers) (For 6 months period)	983	201
School Based Special Training (Without volunteers) (For 6 months period)	6350	6419
Tent Schools (For 6 months)	511	474
Tent schools continued from previous year	2360	1862
Chinnara Tangudhama (YDC) (For 12 months period)	504	474
Madarasa centers (For 10 months period)	1145	1063
Madarasas continued from previous year (For 10 months period)	6327	6304
Home Based Education	170	159
School preparatory programme	48	21
Hostel facilities	426	172
6 months seasonal special Special Training with accomodation	7990	7391
Total	29555	26049

Source Edu. Dept. (SSA)

#### **f) Steps taken to ensure continuation of mainstreamed children in regular schools**

- School dropout period of children out of school is considered to be 7 days instead of 60 days.
- To prevent absenteeism of children and to attend schools regularly Education Coordinator (ECO) is appointed as Attendance Authority. In case absenteeism of more than 7 days is found, ECO is supposed to visit the students' family to persuade the parents to bring their children to schools and this method is being implemented.
- Free uniform, text books, mid-day meals plan, Ksheerabhagya, vitamin tablets etc. are provided to encourage students to attend schools regularly.
- The girl students who are studying in 1<sup>st</sup> Std. are given Rs.2/- per day as attendance incentive.
- Scholarships and admissions in hostels are provided to coordinate different incentives

given by other departments regarding Child Education.

- Under the chairmanship of Honorable Chief Secretary, the Inter departmental Coordination Committee is formed to bring out cooperation and coordination of other departments. Similarly, the Coordination Committee at District and Taluka levels are formed and they are functioning.
- Each school is ordered to maintain the VER (Village Education Register) / WER (Ward Education Register)
- Totally 71 Kasturba Gandhi Balika Vidyalaya (KGBV) schools and 86 KKGVB Hostels are opened in educationally backward blocks so that drop out girl students are admitted to continue their education on priority basis.
- Pamphlets are printed in this regard to reach out parents who take admissions for their children and also action is taken so as to teachers visiting the parents' homes to persuade them to send their children to schools.

- Accommodation is provided to students in the hostels run by other departments.
- Action is taken to collect the data of all children who have come to mainstream in the Vidyavahini software.
- The process of bringing in the school dropout children to mainstream is a continuous and all the measures are taken in this regard.

### g) Infrastructure

#### i) Basic facility under Sarva Shikshana Abhiyan

Efforts are made by the state under universalization of Primary Education Scheme to provide building to school,

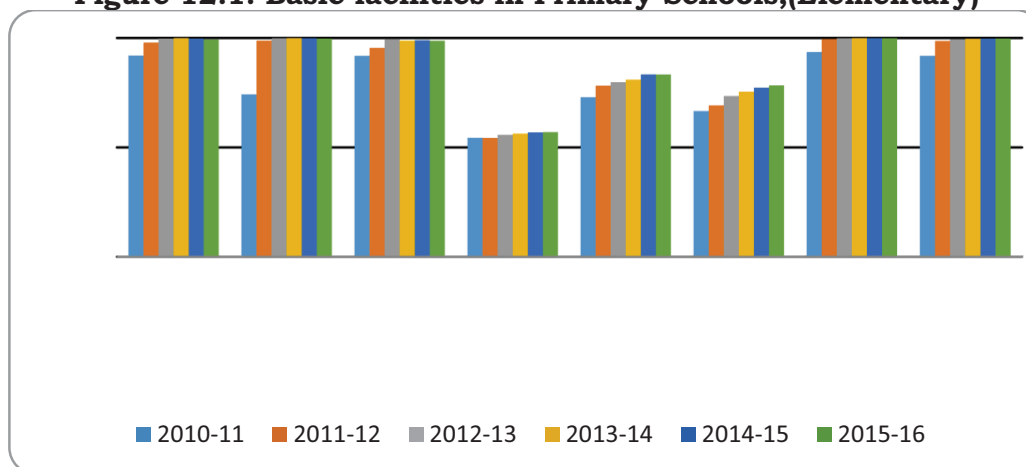
additional room, aid for repair and maintenance of schools. Under RTE Act, the state has put sufficient efforts to provide basic facilities like free admission, sufficient class rooms, separate toilets for boys and girls, playground, library, compound /fences, drinking water, toilet, kitchens and other facilities. The main five facilities (Pancha Soulabhya) are drinking water, Toilet, Play Ground, Compound Wall and School Building. Significant progress is achieved by the state in providing fundamental facilities as shown below in Table 12.8, 12.9 and Figure 12.1, 12.1. As shown below, significant achievement is observed in providing toilet to girl students.

**Table 12.8: Fundamental facilities in Primary Schools (Elementary)**

Year	Toilets for Boys	Toilets for Girls	Electricity	Play Ground	Ramps	Wall Compound	Drinking Water	Library
2010-11	91.97	74.26	91.89	54.41	72.95	66.61	93.59	91.86
2011-12	97.91	98.81	95.49	54.34	78.27	69.21	99.55	98.66
2012-13	99.72	99.9	99.56	55.74	79.83	73.48	99.92	99.35
2013-14	99.97	99.98	98.71	56.3	80.96	75.48	99.99	99.66
% More / Less	0.25	0.08	-0.85	1	1.42	2.72	0.07	0.31
2014-15	99.76	99.94	98.99	56.87	83.37	77.33	99.98	99.73
% More / Less	-0.21	-0.04	0.28	0.57	2.41	1.85	-0.01	0.07
2015-16	99.28	99.72	98.71	57.02	83.34	78.37	99.94	99.74
% More / Less	-0.48	-0.22	-0.28	0.15	-0.03	1.04	-0.04	0.01

Source: DISE 2015-16

**Figure 12.1: Basic facilities in Primary Schools,(Elementary)**

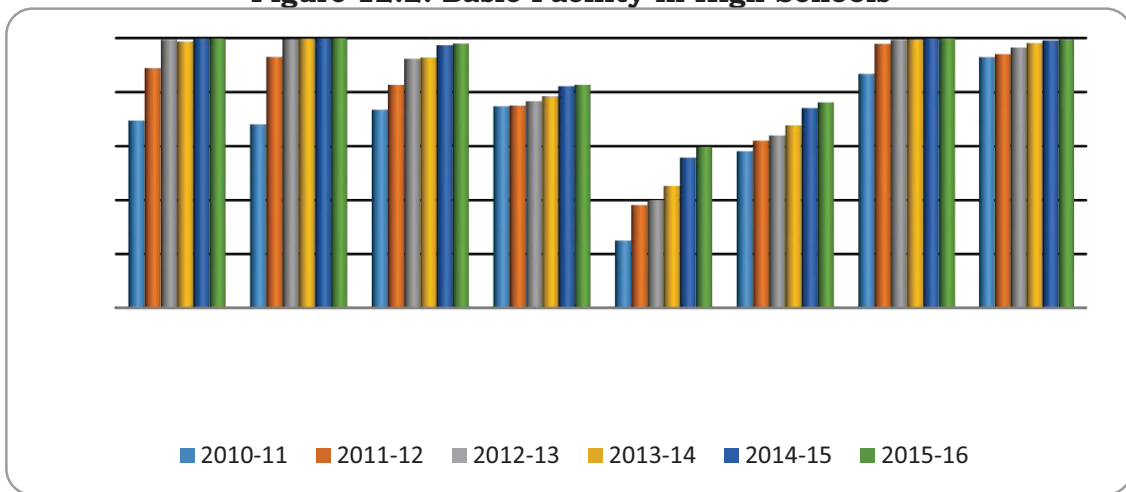


Source: DISE 2015-16

**Table 12.9: Details of Basic Facility in High School across the state**

Year	Toilets for Boys	Toilets for Girls	Electricity	Play Ground	Ramps	Wall Compound	Drinking Water	Library
2010-11	69.47	68.09	73.49	74.75	24.99	58.16	86.77	92.94
2011-12	88.87	93.01	82.69	75.01	38.18	62.02	97.86	94.05
2012-13	99.30	99.59	92.32	76.65	40.05	63.94	99.32	96.49
2013-14	98.70	99.74	92.76	78.53	45.29	67.68	99.47	98.11
%More/Less	-0.60	0.15	0.48	2.45	13.08	5.85	0.15	1.68
2014-15	99.78	99.93	97.33	82.16	55.74	74.12	99.87	99.09
%More/Less	1.08	0.19	4.57	3.63	10.45	6.44	0.40	0.98
2015-16	99.79	99.94	97.94	82.70	59.78	76.22	99.89	99.40
%More/Less	0.01	0.01	0.61	0.54	4.04	2.10	0.02	0.31

Source: DISE 2015-16

**Figure 12.2: Basic Facility in High Schools**

Source: DISE 2015-16

**ii) School Buildings and Classrooms**

Out of a total of 63068 elementary schools in the State 44047 schools belong to the DoE. About 98.50% of schools of the department possess own buildings (Table12.10). The remaining 1.50 per cent include those operating in rent free or rented building and schools without any building facility. During 2015-16, there were 207652 classrooms

(188941 in 2008-09) in elementary schools indicating an increase of 15009 classrooms in about six years. 71.11% of classrooms are in good condition. 16.39% classrooms need minor repairs, while 12.50 % of classrooms require major repairs. Out of a total of 15140 Secondary schools in the State, 4659 belong to the DoE. About 96.02% of schools of the Department possess own buildings (Table12.11)

**Table 12.10: Classification of Elementary Schools by type of ownership of buildings – Education Department Schools only**

Category	Govt. Building	Rented	Rent Free	No Building	Others	Total
Secondary Schools	43386	225	261	6	169	44047
Percentage to Total Schools	98.50	0.51	0.59	0.01	0.38	100.00

Source: DISE 2015-16

**Table 12.11: Classification of Secondary Schools by type of ownership of buildings – Education Department Schools only**

Category	Govt. Building	Rented	Rent Free	No Building	Others	Total
Secondary Schools	4465	11	144	3	27	4659
Percentage to to Total Schools	96.02	0.24	3.10	0.06	0.58	100.00

Source: DISE 2015-16

**Table 12.12: Teachers in various types of schools (2015-16)**

Teachers (Working)	Education Dept.	SW + LB	Aided	Unaided	Others	Total
Elementary level	166083	2439	17309	99008	960	285799
PTR	24.75	38.00	55.48	31.61	49.76	29.18
High Schools	38923	2648	28854	37091	679	108195

Source: DISE 2015-16

**(h) Teachers**

In 2015-16 in the state, 166083 teachers (81.54%) are working in the LPSs and HPSs against the sanctioned vacancies of 203658. Further, in aided schools at the elementary stage, 17,309 were working against the sanctioned posts of 22,607. It is observed that 77.90 % of the teachers in Government schools at the elementary stage are female teachers. Teacher-Pupil ratio is satisfactory in Government schools; the average PTR being 1: 24.75 at the elementary stage. However, variations are seen across districts, blocks and at school levels. The State has adopted a policy to rationalize teacher deployment to correct such imbalances. However, PTR in private aided and unaided schools is comparatively high at 1:55.48 and 1: 31.61 respectively (Table 12.12).

**12.1.3 Quality Improvement Initiatives**

Elementary Education: Quality Initiatives are classified based on their focus on distinct stakeholder groups: Schools, Students, Teachers, Community and Administration. Programmes under these initiatives serve more than one stakeholder groups simultaneously.

**a) Infrastructure:** Provision of infrastructure facilities and adequate classrooms is the basic strategy for quality schooling. In

addition, every school is given the following grants: School Grant and Maintenance Grant. They are directly transferred from the district educational office to individual schools and jointly operated by the President of the School Development and Monitoring Committee (SDMC) and the Head Teacher. The School Grant is used for procurement of charts, maps, specimens, newspapers, consumable chemicals, chalk and other sundry items. Maintenance Grant is used for paying electricity, water bills, white-washing, hygienic maintenance of school and similar heads. Major repairs grants are given on the basis of evidence-based demands.

**b) Residential Schools for Specific category of children:**

Five residential schools for specific category of children, one each in Bengaluru Urban, Dakshina Kannada, Dharwad, Mysuru and Shivamogga sanctioned under RTE has been established during 2011-12. The intake capacity of each school is 100 and presently 467 children are studying in these schools. In Bengaluru Urban, Mysuru and Dharwad these schools are catering to the needs of deprived children in Urban areas whereas in Shivamogga and Dakshina Kannada, children from forest and Naxal affected areas are being benefitted. The construction of full fledged building for each of these schools is in progress and has presently reached up to plinth level. The construction is expected to be completed

within 3 months. Teachers are provided to these schools both from the Department and on outsource basis. Other staff like warden, accounts assistants, D-group and watch man have also been appointed. Apart from providing good education, children are also being trained in sports, life skills and self defense. Enrolment in Residential Schools for Specific category of children during 2015-16 is as given in Table 12.13 below.

**Facilities provided in Residential Schools:**

- Four posts of teachers are sanctioned to all residential schools.
- Other supporting staff including D-Group and Watchmen have been appointed.
- Arrangements have been made to supply nutritious food to each school.
- Children are provided training in self defense and vocational skills.
- Adequate measures are taken for the safety and security of the children. Proper medical care is also provided.

**c) Nali Kali:** All Primary schools in the state have adopted the NALI KALI mode in the learn and teach method. As 2 teachers per school, totally 60614 teachers are trained in this method and assigned Nali Kali classes. Head Masters of all schools too are trained. All the schools are supplied with Nali Kali kits along with learning cards. Free Nali Kali Helpline is offered in all district offices.

**a) Kasturba Gandhi Balika Vidyalaya:**

Efforts have been put by Central and State Govt. to educate girl children. 71 KGBV residential schools in 69 educationally backward blocks for girls of 6<sup>th</sup> Std to 8<sup>th</sup> Std. have been established to continue education under SSA of Central Resource Development Department in the view of gender disparity, rural areas, weaker sections of society, SC/ST and economically backward classes. KGBV at Siddapur of Gangavati taluka, Koppal Dist and KGBV at Sindhanur of Raichur for girls of Muslim minority are imparting education in Urdu medium.

**Enrollment details of KGBV in 2015-16**

- Number of KGBV with 100 students: 47

**Table 12.13: Enrolment in Residential Schools for Specific category of children during 2015-16**

Sl. No.	District & Place	Enrolment						
		Gender wise		Social category wise				
		Boys	Girls	SC	ST	Muslims	others	Total
1	Bengaluru South – Govt. Model School Premises, Arehalli, Banashankari, Bangalore South	57	41	56	17	1	24	98
2	Dakshina Kannada – Govt. Model School Premises, Beltangadi Main Road, Beltangadi	50	50	10	8	4	78	100
3	Dharwad – Govt. HPS No.8, Opp. Nehru College, Ghantakeri, Hubli City	69	30	14	8	25	52	99
4	Mysuru Govt. HPS Premises, Nazarabad, Mysuru North Zone	53	43	81	9	2	4	96
5	Shivamogga – Govt. HPS Premises, Agumbe, Teerthahalli Taluka	42	32	23	1	1	49	74
Total		271	196	184	43	33	207	467

- Source: Edu. Dept. (SSA)



- Number of KGBV with 150 students: 24
- Total enrollment of at KGBVs: 8300
- Total number of students enrolled at KGBV: 8154

#### Facilities at KGBV schools:

- Improved school building.
- Supply of good quality nutritious food.
- Computer education and compulsory medical check-up in schools.
- Personality development education including music, yoga, karate and cultural programmes.
- Learning opportunity of vocational skills such as sewing, embroidery, doll making, and repairing electronic items.
- Parallel methods of learning for slow learning children.
- Extension of different departmental programmes, conducting guest lectures and seminars.

#### b) Children with Sepecial Needs (CWSN):

There are 111311 children in the state who are identified with special needs group among which 98658 children are enrolled into schools and 7623 children of them need most special needs care and are provided with home based education. Other children of this category are identified in medical camps, enrolled into schools equipped with educational aids. 28375 children are supplied with these educational equipments.

#### c) Training:

In the year 2015-16, an aid of Rs. 2346.81 lakhs is released by MHRD for the training

needs of teachers, Head Masters, Educational Administrators, Resource Persons and SDMC members. DSERT is the Nodal agency to impart the training which covers 30 DIETs, 204 Block Resource Centers and 4103 Cluster Resource Centers where the training programmes are ICT based. In order to train 6 SDM members from each govt. school for two days in the year 2015-16 Rs.531.85 lakhs are sanctioned. All the above training programmes are progressing in different stages and at the end of the educational year, it is committed to reach the full target of all these training programmes.

#### d) Research, Evaluation, Monitoring & Supervision (REMS):

REMS is one of the major interventions that focuses on Quality Dimension of education under Sarva Shiksha Abhiyan Mission. The approved activities under REMS focus on Research and Evaluation which helps in assessing the strengths and weaknesses of the educational practices. Monitoring and Supervision activities was conducted as per RTE compliance. The activities conducted under REMS are means to achieve quality in education. REMS activity is managed in 2 stages namely; State Stage and District Stage

#### Learning Ability of students in 2<sup>nd</sup>, 4<sup>th</sup>, and 8<sup>th</sup> Std.

In order to ensure the learning ability of students, study of the same is embarked upon through Karnataka State Quality Assessment Accreditation Council (KQAAC). Achievement of learning ability is given below;

**Table 12.14: Achievement of Learning Ability**

Sl. No	Std.	Subject				
		Kannada	Maths	EVS	Science	S.St
1	2 <sup>nd</sup>	73.43%	72.56%	78.31%	---	---
2	4 <sup>th</sup>	64.87%	65.53%	68/90 %	---	---
3	8 <sup>th</sup>	56.76%	45.98%	---	55.43%	65.58%

Source: Edu. Dept. (SSA)

### 12.1.4 SECONDARY EDUCATION

With significant gains in primary education, the State has set in motion the planning process for universalization of secondary education to achieve the target of 65% enrolment in 14-18 age group in classes 9 to 12. The State is also committed to strengthening the knowledge base of the society to sustain higher rate of economic growth.

#### a) Institutions / Enrolment / Teachers

The State has a total of 15140 secondary schools of which 4659 schools are run by the DoE, 566 SW and LB schools, 3818 by aided managements, 6013 by private unaided managements and 84 by others. The concentration of the secondary schools in the private unaided sector may be one of the reasons for the low access of children from marginalized groups to higher education 37.31 percent of girls are enrolled in Govt. schools, and only 27.43 percent of them study in private unaided schools.

According to the available data, in the state, total of 108195 teachers were working out of 37091 teachers are working in unaided secondary schools (Table 12.15). The State has set the goal of making secondary education of good quality available, accessible and affordable to all children in the age group of 14 to 16 years.

#### b) Rashtriya Madhyamik Shiksha Abhiyan (RMSA):

Since universalisation of elementary education has become a Constitutional mandate, it is absolutely essential to push

this vision forward to move towards Universalisation of secondary education, In this connection both central and state governments have initiated different programmes to universalise elementary and secondary education. Rashtriya madhyamik shiksha abhiyan is one of such programme implementing jointly by central and state governments on the sharing basis.

#### Objectives:

- To provide a secondary school within a reasonable distance of any habitation.
- To ensure that, no child is deprived from secondary education.
- To provide necessary infrastructure to impart effective education in all the government high schools .
- To plan the programmes to ensure quality education to all the children .

#### Schemes subsumed Under RMSA:

- 62 Girls Hostels for 9<sup>th</sup> and 10<sup>th</sup> standard students in educationally backward blocks one in each block.
- Integrated education for disabled children of secondary schools
- Vocation education

#### Grant and Activities Approved from MHRD for the year 2015-16:

The Planning Accreditation Board (PAB) - 2015-16 has approved 25742.91 lakhs for the year 2015-16 Out of this, the Central share is Rs.19307.18 lakhs (75%) and Rs.6435.72 lakhs (25%) is State share. The following activities are implemented as per guidelines are

**Table 12.15: Schools, Teachers & Enrolment in High Schools (2015-16)**

Particulars	Govt.	SW+LB	Aided	Unaided	Others	Total
No. of Schools	4659	566	3818	6013	84	15140
Enrollment of Boys (VIII to X)	318763	21791	286442	289128	8161	924285
Enrollment of Girls (VIII to X)	317097	26226	267510	233138	6008	849979
Total Enrollment	635860	48017	553952	522266	14169	1774264
No. of Teachers Working	38923	2648	28854	37091	679	108195

Source: DISE 2015-16

1. School Grants
2. Headmasters Salary
3. Teachers Salary
4. In service Teacher training to all Government and Aided School Teachers and Head Teachers
5. Self-defence skills for girl children
6. Science And Mathamatics Mela
7. Kala Utsav
8. MMER (Monthly Monitoring Evaluation Report)
9. Girls Hostel
10. SwachaBharath – SwachaVidyalaya
11. Inclusive Education of the Disabled at Secondary Schools (IEDSS) CWSN children
12. Purchase of Aids and Appliances
13. Books and Stationary
14. Transport allowance
15. Escort allowance
16. Braille Books
17. Stipend for CWSN girl child
18. Reader Allowance
19. Salary of the special resource teachers
20. Special pay for the resource teachers
21. Orientation of Educational Administrators, Principals, Head teachers of Institutions, general teachers/parents

### **C) National Skills Qualification Framework (NSQF)**

1. Ministry of Human Resource Development, GOI has introduced the new scheme of National Skills Qualification Framework (NSQF) to be implemented under Rashtriya Madhyamika Shiksha Abhiyan (RMSA) as per the guidelines. The main objective of this programme is to introduce vocational courses along with the regular courses and thus enable the students to gain skills and competencies essential to get employed. This is a

Pre University education is mainly regarded as preparation for university

- continuing programme implemented in 10 different levels starting from classes 9<sup>th</sup> to 12<sup>th</sup> and thereafter up to graduation, post-graduation and Ph.D levels.
2. MHRD GOI has approved to introduce NSQF Scheme in 250 Govt Composite Schools, out of this the State Government decided to implement in 100 schools from 9<sup>th</sup> standard during 2014-15. During 2015-16 the scheme implemented both in 9<sup>th</sup> & 10<sup>th</sup> std under IT / ITEs, Automobile, Health Care, Retail, Beauty & Wellness sectors.
  3. Each school is allotted 02 sectors. 200 vocational trainers to 100 Government High schools.
  4. Students work book, Teachers hand book & Curriculum for level-1 & level-2 were Printed & supplied to 100 Govt. composite schools in 05 sectors. The PAB approval and expenditure up to the December-2015 is of Rs.2406.25 Lakhs and 310.61 lakhs respectively.

### **12.1.5 Pre-University Education:**

#### **Establishment of the Department of Pre University Education:**

In order to administer the +2 stage of education, the 'Karnataka Pre University Board' was established in 1971. The Board was abolished in 1988 and it was converted into the 'Directorate of Pre-university Education' in 1992. All colleges imparting PU education come under the purview of the Directorate. The Directorate looks after the administration, examination and academic matters of the PU stage.

Since, the government created a separate department to manage pre university education and created a separate cadre of lecturers and principals to staff the government PU colleges, PU stage has come to be treated as a separate stage as well as a separate sub sector of education in Karnataka. However for budgetary purposes, PU education gets its funds from secondary education budget-head only.

courses. The course provides for two languages and 4 electives, which are to be

selected from a wide range of subjects. These electives are classified under three different subject combinations: Arts, Science and Commerce. Pre-University education is an important milestone between school education and higher education. A separate Pre-University education department has been established in the state to design, plan and implement the whole Pre-University education programme. The Government participation is more in pre-university education (Table 12.16). It is observed that the number of girl students is more in Government Pre-University Colleges. This indicates the need for expansion of these colleges in future to promote girls education. Financial assistance is provided under NABARD-RIDF and special Development plan to meet the infrastructure requirements of PU Colleges. Orientation programmes are organized by the department for lecturers to upgrade their knowledge and improve the results. The focus is on those districts where the pass percentage is low. Henceforth, as per National policy, pre-university stage of education will be a part of secondary education. It will not be tailored to University needs and, it will not be pre-university stage but senior secondary stage.

#### a) Enrolments:

The year 2007-08 has been significant with regard to enrolments in the pre-university stage (Table 12.17). There is a direct relation between percentage of passes at X standard

public examination (SSLC) and demand for pre-university education. Results at X standard were between 50% to 60 % till 2007. X standard results suddenly jumped from 2007 onwards and is currently around 60% to 75%.

Still, it is observed that there is an attrition of around 17% to 20% between I and II years of pre-university education. This attrition has implications for expenditure levels across two years. Career guidance and counseling, if conducted immediately after the announcement of the X standard examination results, may help in reduction of drop outs.

The Education Commission of 1966 had suggested an enrolment limit of 30% to 35% for Arts courses. However, even by 2008-09, nearly 50% of enrolments are in Arts courses (Table 12.18). Relative proportions at II PUC stage do not change substantially. The low enrolments in science courses are a cause for concern. There is a rush for professional courses from science stream. This is not the case with respect to Arts and Commerce Courses. Low proportion of science enrolments and the attraction of professional courses lead to low enrolments in graduate science courses. Graduate science courses serve as nurseries for preparation and supply of science teachers for secondary schools, as well as for creation of pool of scientists in the Country after post-graduate and research courses. Both school science education and scientific pursuits suffer because of this trend. Initiatives by the Indian Institute of Science (Bangalore) to attract science talent for integrated 5-years, post-graduate courses after the pre-university stage by offering a variety of incentives need to be emulated and expanded.

**Table 12.16: Institutions at Pre-University Level (Nos.)**

Institutions	Govt.	Aided	Unaided	Corporation	Total
2009-10	1188	640	1533	13	3536
2010-11	1191	640	1737	13	3743
2011-12	1200	675	1874	13	3924
2012-13	1201	775	1995	13	4127
2013-14	1203	795	2145	13	4318
2014-15	1203	795	2346	13	4519
2015-16	1203	795	2778	13	4789

Source: Dept. of PUE

**Table 12.17: Students Strength In Pre-University Courses**

Year	Ist PUC	IInd PUC	Attrition	%age
2005-06	412240	340296	-	-
2006-07	427988	361807	50433	12.23
2007-08	528879	433183	-5195	-1.21
2008-09	534430	434425	94454	17.86
2009-10	555977	428580	105850	19.81
2010-11	518179	450700	105277	18.94
2011-12	575673	430625	87554	16.90
2012-13	6,25,542	4,80,268	95405	16.57
2013-14	5,62,449	4,67,985	157557	25.19
2014-15	6,11,570	4,96,255	66194	11.77
2015-16	6,43,508	5,16,508	95062	15.54

Source: Dept. of PUE

**Table 12.18: Enrolments Across Courses In Pre-University (2015-16)**

Stage	Arts	Commerce	Science	Total
I year (No.s)	2,04,770	2,37,784	2,00,978	6,43,532
II year (No.s)	1,61,453	1,91,494	1,63,561	5,16,508
Proportions (%)				
I year	31.82	36.95	31.23	100
II year	31.26	37.07	31.67	100

Source: Dept. of PUE

**Table 12.19: Pass Percentage at Pre-University Level across Courses (2014-15)**

Performance	Arts	Commerce	Science	Total
Appeared (No's)	2,29,633	2,08,651	1,72,039	6,10,323
Passed (No's)	1,17,394	1,39,932	1,12,148	3,69,474
Percentage	51.12	67.06	65.19	60.54

Source: Dept. of PUE

**b) Completion Rates:**

In 2015-16 Pass percentage at pre-university is about 65.19% in science courses (Table 12.18). This will normally be around 25% to 50% of previous year's enrolments. It is also seen that girls fare better than boys in II PUC examination. Girls who reach II PUC are from among those who are left out after being subjected to higher degree of screening at various levels. This is not the case of boys. It is also noted that English medium results are always better than Kannada medium results.

**c) Training:**

It is generally acknowledged that promoting Lecturer quality is a key element in improving higher secondary education in any country. It is a proven fact, now, that systematic in-service lecturer training improves the quality of PU education programs and promotes

students development. So systematic in-service training, over and above lecturer's formal education and experience, is a predictor of educational program quality. Without a doubt, one of the primary goals of the training policy of the PU education is to have a "highly qualified and trained lecturers in every classroom". The PU Education has been engaged in in-service training of lecturers and Principals as a part of its mandate for the last decade. These are conducted throughout the state to support continuous professional development of the lecturers and the Principals.

The Department introduced new curriculum/syllabus for all 34 subjects as per NCF-2005 (National Curriculum Framework, 2005). Training programmes were conducted at Divisional/ District/Cluster level for all Govt. PU college lecturers.

**d) Sports/Games/NSS/NCC at PU Level:**

In the Academic year 2014-15 has successfully completed Taluk Level, to National Level Sports Competitions. Students also get groomed for National competitions. In the National Level Games, our students participated in 30 events from the state, the pre-university students bagged 8 gold, 18 silver & 19 bronze medals in various sports/games events at the national level during the year.

Dept. of PUE also facilitate NCC and NSS activities at various PU colleges. In the Academic year 2014-15, 780 Govt. & Private colleges have NSS units with 78000 student volunteers, 400 special camps were conducted and 39000 student volunteers participated during the year. Out off, 780 NSS Programme officers, 505 completed T.O.C training.

**12.1.6 Collegiate Education**

The Department of Collegiate Education was set up in the year 1960, and has since been striving to make quality higher education affordable and accessible to all sections of students. The Department of Collegiate Education oversees the administration of 411

Government First Grade Colleges and 321 Private aided colleges affiliated to 14 state universities, through its 6 regional offices located at Bengaluru, Mysuru, Mangaluru, Shivamogga, Dharwad and Kalaburagi.

**a) Institutions:** The details of spread of government colleges and the average strength in government and aided degree colleges are in Table 12.20 and 12.21. The average strength in government and aided degree colleges is 738.59 and 700.42 respectively.

**b) Enrolments:**

Enrolments for degree courses have not registered a steady increasing trend in the State (Tables 12.22, 12.23 and 12.24). In fact, negative growth has been observed in the growth of overall enrolments during 2015-16. Further, in case of boys, during the same period there is negative growth rate of (-)6.54. The male-female ratio which was in favour of boys during 2007-08 to 2009-10 has got reversed during 2010-11. This same trend has continued and according to 2015-16 enrolments the ratio is 44:56 and this is not a case of improvement in gender parity.

**Table 12.20: Institutions for graduate education. 2015-16**

Managements	Govt.	Pvt. Aided	Total
Institutions	411	321	732
Students	3,03,559	2,24,835	5,28,394
Av. Per college (Nos.)	738.59	700.42	721.85

Source: Dept. of Collegiate Edu.

**Table 12.21 Spread of Govt. sector Degree Colleges**

Region	Bengaluru	Mysuru	Shivamogga	Mangaluru	Dharwad	Kalaburagi	Total
Number	140	106	89	71	204	122	732
Proportion	19.13	14.48	12.16	9.70	27.87	16.67	100
Revenue Blocks	32	26	27	11	49	31	176

Source: Dept. of Collegiate Edu.

**Table 12.22: Growth of Enrolments in Degree colleges**

Year	Boys	% growth	Girls	% growth	Total	% growth	M:F Ratio
2007-08	174729	-	154584	-	329313	-	53:47
2008-09	179380	2.66	163731	5.92	343111	4.19	52:48
2009-10	181779	1.34	176226	7.63	357975	4.33	51:49
2010-11	181018	-0.42	186790	3.28	367605	2.69	49:51
2011-12	226785	25.28	235313	25.98	457097	24.34	49:51
2012-13	229681	1.28	235471	0.06	465152	1.76	49:51
2013-14	247140	7.60	282867	20.14	530007	13.94	47:53
2014-15	251078	1.56	283986	1.21	535064	0.89	47:53
2015-16	234655	-6.54	293739	3.43	528394	-1.24	44:56

Source: Dept. of Collegiate Edu.

**Table 12.23: Enrolments across courses (2015-16)**

Courses	BA (BA & BSW)	B.Sc (B.Sc & BCA)	B.Com (B.com & BBM)	Total
Number of students	231854	64354	232186	528394
%	43.88	12.18	43.94	100%

Source: Dept. of Collegiate Edu.

**Table 12.24: SC /ST Students Enrolment for Academic year (2015-16)**

	No of SC Students			No of ST Students		
	Male	Female	Total	Male	Female	Total
Govt Colleges	30699	31904	62603	11700	11134	22834
Pvt. Aided Colleges	16340	16890	33230	7413	7114	14527

Source: Dept. of Collegiate Edu.

Enrolment in science courses is very poor as a proportion of total enrolments in general higher education. This is a serious concern with long-term implications. Improving the overall enrolment in general and science enrolment in particular is a serious challenge.

There has been a significant increase in the funds released to the Department of Collegiate Education by the Government. Investment under plan increased from Rs. 90.87 crores in 2007-08 to Rs.2460.00 crores in 2015-16. Total budget under plan and non-plan increased from Rs. 487.50 crores in 2007 to Rs.5283.00 crores in 2015-16. The major share in the plan budget was for the additional infrastructure and facilities required for newly established colleges.

### c) Fresh Incentives:

- i. Encouragement:** In the Government Order No:ED/252/Mahithi/2014 Dated 22.11.2015 the Government First Grade Colleges which have achieved good results in final year and also the same who has National Assessment And Accreditation Council (NAAC) grade of 'A+' or 'A' will be encouraged in the year 2015-16 to increase the Admission of ongoing Courses. The Government has given permission for the above said purpose.
- ii. New Courses/Combination:** In the Academic year 2015-16, permission has been given to start new UG courses in 114 Government First Grade Colleges and new

PG courses in 49 Government First Grade Colleges.

- iii. Science Course Upgradation:** In order to upgrade the Science courses in Colleges which have Science, Arts and Commerce combinations for both UG & PG grants will be released to provide facilities such as lab equipment's, chemicals/ consumables, Text books/Manuals and Furnishing.

### iv.

For attracting science course (UG/PG) students, scholarship will be given to those who belong to SC/ST for purchasing Text books/Manuals, Note books, Calculators, Practical record, smart device etc.

- v. NAAC:** As of now 98 Government First Grade Colleges have been Accredited with irrespective of grades. In Accrediting Colleges Department of collegiate Education stands in 1<sup>st</sup> place in Karnataka and occupies 2<sup>nd</sup> place in India.

- vi. Autonomous:** 11 Government First Grade Colleges have Acquired Autonomous status from UGC.

- vii. Raastriya Ucchathar Shiksha Abhiyan (RUSA):** The Ministry of Human Resource Development (MHRD), Government of India has included 60 Government First Grade Colleges under RUSA and also the Department of Collegiate Education is striving hard to include the remaining colleges under RUSA to get maximum benefits from the Abhiyan.

1. Under Naipunya Nidhi programme, Government intends to provide communication skill to first year degree students, social skills to second year degree students and job skills to the third year degree students, pursuing undergraduate courses in 411 Government First Grade Degree Colleges. Further, Department of Collegiate Education has entered into MoU with National Skill Development Corporation(NSDC) to provide job skill training to the final year UG & PG students under Naipunya Nidhi programme. The Department has also entered into MoU with FKCCI (Federation of Karnataka Chambers of Commerce and Industry) and EEmpQ (Enhancing Employability Quotient)
2. To create awareness among students and increase their employability. These organizations are providing training and have aimed at enabling 1 lakh students to become employable.

#### **d. Capacity Building Programme For Women Faculty**

Capacity building programme was conducted for 30 women faculty engaged in teaching social science subjects in Government First Grade Colleges of the state by Centre for Women and Gender Studies Institute for Social and Economic Change (ISEC) Bangalore.

#### **e. Placement Cell**

Placement cell has been created in 411 Government First Grade Colleges of the state through which activities like mock interview,

Resume wiring, preparation of student database, providing information about various competitive exams and employment opportunities in industries will be carried out.

#### **f. Sahabhagitva**

This scheme has been designed to improve the infrastructure in colleges through Corporate Social Responsibility (CSR) and other funds by establishing linkages between Educational Institutions, Industries and IT/BT Companies.

#### **g. Swavalambane**

This scheme has been mooted for encouraging student entrepreneurs. Under this scheme, entrepreneurial aptitude and skill development will receive a boost. To encourage students to commence new start-ups, the Government has decided to pay the interest part on a sum of Rs.10 lakhs loaned by student entrepreneurs for a period of 3 years.

#### **12.1.7 Technical Education**

Technical Education all over the world is gaining importance day by day because of rapid advancements in science, technology and innovations. With this background, to compete with the developed countries in the world and to keep Karnataka ahead in Industrial growth and in the field of Information Technology, the Directorate of Technical Education is playing a vital role.

#### **a) Institution:**

There were only 57 technical institutes, under Department of Technical Education initially but now there are a staggering 589 institutes across the state ranging from Degree to Diploma, Junior Technical Schools and Fine Arts Schools/Colleges (Table 12.25).



**Table 12.25: Classification of Technical Institutes in the State during 2014-15**

Technical Institutes	Classification				
	Govt.	University	Pvt. Aided	Pvt.	Total
<b>Engineering Degree</b>					
Engineering Colleges	10	2	9	177	198
Women's Engineering Colleges	-	-	-	3	3
Evening Engineering Colleges	1	1	2	1	5
Total	11	3	11	181	206
<b>Diploma</b>					
Co-Education Polytechnics	69	-	42	161	272
Women's Polytechnics	9	-	1	5	15
Evening Polytechnics	1	-	1	4	6
Non- Engineering Polytechnics	2	-	-	-	2
Total	81	-	44	170	295
<b>Others</b>					
Junior Technical Schools	6	-	-	6	12
Fine Arts Colleges	-	-	3	-	3
Fine Arts Schools	2	-	23	49	74
Total	8	-	26	55	89
Total No. of Technical Institutions					589

Source: Dept. of Technical Edu.

Note: There are 14 institutes conducting Engineering courses and 12 Institutes conducting Diploma courses on 2<sup>nd</sup> shift basis.

### b) Budget Provision:

The Budget provided for government polytechnics and engineering colleges under plan & non-plan for previous 5 years is given in Table 12.26.

**Table 12.26: Budget Provision for Technical Education (Plan & Non-Plan), (Rs. in Lakhs)**

Year	Plan		Non-plan	
	Allocation	Expenditure	Allocation	Expenditure
2010-11	26934.00	27064.11	14740.82	15129.57
2011-12	23557.51	23497.22	26117.39	23460.66
2012-13	33609.92	29219.11	26175.06	23972.80
2013-14	53919.72	49754.74	26734.11	27840.18
2014-15	55730.30	44797.23	30066.93	31633.37

Source: Dept. of Technical Edu.

### c) Staff Training and Apprenticeship Training Programme:

To provide the Human Resources and enhance the teaching efficiency of the staff, the teaching faculties have been deputed to higher education and also improve their skills through short term training programmes. The details are given in Tables 12.27 and 12.28.

As per the Govt. Apprenticeship Act 1973 (amended) and 1986 the State Govt./Central Govt./Private Companies will impart training to specific number of students for duration of one year under this scheme. The objective of the scheme is to provide a connection between the technical institutes and industries, to improve the technical-know-how and to introduce the students to all fields of the industry. The number of beneficiaries of the training during 2014-15 is given in Table 12.29.

**Table 12.27: No. of Teaching Staff deputed for Higher Education**

Subject	2010-11	2011-12	2012-13	2013-14	2014-15
M.E /M.Tech.	24	33	40	51	27
PhD	1	1	9	26	40

Source: Dept. of Technical Edu.

**Table 12.28: No. of Teaching/Non-teaching staff deputed for short term training**

Subject	2010-11	2011-12	2012-13	2013-14	2014-15
Programs conducted at the NITTR, Chennai	105	108	102	167	115
Staff deputed (No.)	1500	1793	1440	1924	1205

Source: Dept. of Technical Edu.

**Table 12.29: No. of beneficiary students who got benefitted from the ATS during 2014-15**

Subject	Others		SC		ST		Differently-abled		Minority				Total	
	Eng	Dip	Eng	Dip	Eng	Dip	Eng	Dip	Christians		Muslims		Eng	Dip
									Eng	Dip	Eng	Dip		
Civil	72	41	17	11	9	5	8	4	11	7	9	5	126	73
Electrical	485	150	67	15	29	11	28	12	26	16	20	9	655	213
Mechanical	301	196	225	56	33	12	24	9	27	11	29	14	639	298
Computer Science	347	189	83	45	22	16	25	7	32	23	21	8	530	288
Automobile	109	48	37	15	26	13	16	14	17	9	19	7	224	106
Others	554	296	115	59	38	24	43	19	58	16	35	10	843	424
Total	1868	920	544	201	157	81	144	65	171	82	133	53	3017	1402

Source: Dept. of Technical Edu.

**d) Scholarship/Merit awards:** The number of SC/ST students getting scholarship/ Merit awards is given in Table 12.30.

**Table 12.30: Details of the Scholarship/Merit awards during last four years (Rs. in lakhs)**

Year	SC Students		ST Students	
	No. of Students	Amount in Rs.	No. of Students	Amount in Rs.
2011-12	2184	586.79	671	191.37
2012-13	2666	793.82	865	275.40
2013-14	2664	851.58	78	14.49
2014-15	3248	1079.77	2056	716.20

Source: Dept. of Technical Edu.

### Technical Education Quality Improvement Programme (TEQIP):

In order to strengthen Technical Education, the Government of India with the assistance of World Bank has introduced Technical Education Quality Improvement Programme (TEQIP) in three phases. The first phase was started during the year 2003 and was

completed on March 2009. An amount of Rs. 139.50 crores budget provision has been made for the financial year 2014-15 for this project. As of today Government of India and State Government has released a total amount of Rs.86.40 crores to the colleges. The Project is deemed to be completed by October 2016.

The Objectives of the Project:

1. Strengthening institutions to improve learning outcomes and employability of graduates.
2. Scaling-up PG education and demand driven R & D and innovations.
3. Establishing centre of excellence.
4. Faculty development for effective teaching.
5. Capacity building to strengthen the management.
6. Project Management, Monitoring and evaluation.

### **Introduction of Outcome based Curriculum:**

The Department of Technical Education has initiated revision of Polytechnic diploma curriculum and the same is implemented from the academic year 2015-16. First time in India “Outcome based Education curriculum” is being introduced in all its 35 Diploma programmes affiliated to Board of Technical Examinations, Karnataka in our state. National Board Of Accreditation has made accreditation mandatory for all technical education in the country. One of the main elements of accreditation process is formation of curricula on the basis of “Outcome Based Education”-OBE. Outcome based education when implemented enhances skill development amongst technologists. This improves employability and supports entrepreneurship (Self Employment) amongst diploma students.

An OBE curriculum means clearly focusing and organizing everything in an educational system about what is essential for all students to be able to do successfully at the end of their learning experiences. It also goes on to define and propose the best methodology to help students to learn most effectively within their educational environment. The successful implementation of a curriculum depends on the successful interaction of lecturers, students and the knowledge they share. Curriculum is therefore what is actually happening in the lecture room, in addition it is a set of documents for implementation by lecturers.

OBE is based on Bloom’s taxonomy which emphasizes on six levels of learning such as Knowledge, Understanding, Application, Analysis, Synthesis and Evaluation along with the outcomes related to Graduate attributes. It is mandatory to have curriculum based on OBE to get accreditation by National Board of Accreditation.

- Industry Institute Interaction programmes like collaboration with companies.
- Continuous revision of diploma curriculum to make liaison between industry and institute.

Career guidance program was conducted for final year diploma students to explore the various possible career options.

### **Information and Communication Technology Initiatives (ICT’s):**

ICTs can contribute to universal access to education, equity in education, the delivery of quality learning and teaching, teachers’ professional development and more efficient education management, governance and administration. Department takes a holistic and comprehensive approach to promoting ICT in education in order to address the challenges in realising the vision of higher education.

ICTs can help strengthen democratic and transparent education planning and management. Communications technologies can expand access to learning, improve quality and ensure inclusion. Where resources are scarce, judicious use of open-source materials through technologies can provide the means to bypass the bottleneck of textbook production, distribution and updating. Use of ICT can improve student achievement, extend access to technical education, increase efficiencies and reduce costs, prepare students for lifelong learning, and train them for a globally competitive workforce. Further, this is also involved in the following;

- To assist to host the websites in all the Institutes and connecting dynamic link with the Directorate's website to be made use by the public.
- Conducting Video Conference with all the Technical Institutes.
- Monitoring the disbursement of Salary through the HRMS Software.
- The online Monthly Programme Implementation Calendar (MPIC) is established.

### **Other Programmes:**

#### **1) Innovation Clubs:**

Aim at finding innovative solutions for the problems of micro, small and medium enterprises (MSME's), informal sector and other social sectors by bringing them on the agenda of the students of Technical and General Universities across the state to harness the innovative potential of youth for inclusive socioeconomic development. In the last six decades, India has not utilized much of the technological outputs of millions of students. Also, without engaging the young students of Technical, Medical and General Universities, one can neither solve the persistent problems of MSMEs, Social Sector or Public Delivery Systems, nor one can reorient the Higher Education to make it more productive and purposeful. In view of this, Department of Technical Education has started Innovation clubs in all Polytechnics and Govt. Engineering colleges with an aim to harness collaborative potential of students across disciplines and colleges to solve persistent problems of our state in formal and informal sectors, apart from addressing unsolved problems of our society, which have remained unsolved for long.

#### **2) Service Advisor – Toyota Technical Education Program (SAT-TEP)**

Department of Technical Education, Govt of Karnataka, in association with Toyota Kirloskar Motor (TKM), Bengaluru has implemented a unique program called Service Advisor – Toyota Technical Education Program (SAT-TEP) at Govt. CPC Polytechnic, Mysuru. The program, which has been introduced by Toyota in Service Advisor Category, is the first of its kind in the world & is being implemented in India from this year itself.

Through this program, Toyota Kirloskar Motor Company intends to enhance the technical abilities and soft skills, and thereby employability of Polytechnic/Diploma students in the age group of 16 to 18 years. The program will benefit Polytechnic students especially from Mechanical and Automobile stream in building their skills & knowledge for the Indian Automotive Service Industry. The current Automobile Service Industry is characterized by inadequately skilled manpower and lack of professional training for repair and diagnostics, especially for vehicle models, introduced recently, in the market. The SAT-TEP is a unique initiative undertaken by Toyota Kirloskar Motors, in partnership with Government Polytechnics coming under the purview of Department of Technical Education and Toyota dealers across India, through professional training from the company. To begin with, the course will provide training to 40 students (minimum) from Mechanical and Automobile stream every year at free of cost by the Toyota Company. All the trained students will be offered employment in Toyota Dealerships across the State/Country after the completion of the training.

#### **3) All India Survey on Higher Education (AISHE)**

From the year 2010-11 to build a database and to assess the correct picture of higher Education in the country. Department of Technical Education is participating in this survey since 2010-11 and providing the necessary information (through online) to MHRD. Department of Technical Education was the first department in the country to complete the 100% survey work in the inaugural AISHE (2010-11) program. Apart from participating in the national survey the department is conducting similar type of survey to build a robust data base pertaining to State Technical Education with the intention of helping the Governments in framing proper policies both at national and state levels.

#### **4) Rashtriya Uchchar Shiksha Abhiyan (RUSA)**

This program aims for the development of higher education in the country by ensuring

access, equity and quality. It also aims attain higher levels of access, equity and excellence in the State higher education system with greater efficiency, transparency, accountability and responsiveness.

**Programs in Polytechnics:** (1) Infrastructure (2) Research, innovation & quality improvement (3) Equity initiatives (4) Leadership developments of Education administrators (5) Support to Polytechnics – Strengthening of existing Polytechnics; Construction of women hostel; Community Development Through Polytechnics; Starting of new Polytechnics

**Programs in Engineering Colleges:** (1) Creation of University (2) Upgradation of Colleges to Model Colleges (3) Starting of new colleges (4) Infrastructure (5) Research, innovation and quality improvement (6) Equity initiatives (7) Faculty recruitment (8) Leadership developments of Education administrators. 80 Govt. and 43 Aided Polytechnics, 10 Govt. and 4 Aided Engineering Colleges totaling 137, have participated in this program.

#### 5) EduSAT Programme:

Knowing the usage of Satellites in Education, the Ministry of Human Resource and Development, Govt of India, has initiated a unique teaching method through the Satellites from October 2002 across the country. Accordingly, the Directorate of Technical Education, Govt of Karnataka has also initiated the teaching programs through satellites since 2008-09. Recently the Government has set up “Jnana Tarang” Studio in the premises of the Printing Technology Building, Bengaluru to broadcast the programmes. Till now about 1 lakh students from both Govt and Private Polytechnics have benefited by these programmes.

“Sakala” program is implemented from August 16, 2013 in the Department of Technical Education. The following services are rendered for the public from the Directorate of Technical Education. The list, time-schedule and address to approach for

the services are displayed in the notice boards of the Directorate.

- 1) Diploma Certificate
- 2) Diploma Marks card
- 3) Diploma marks card Correction/Consolidated Certificate
- 4) Diploma Eligibility Certificate
- 5) Migration Certificate
- 6) Diploma Subject Dictionary Attestation
- 7) Diploma marks card/Diploma certificate Genie Verification Certificate
- 8) Xerox copy of Answer book
- 9) Answer book Revaluation
- 10) Duplicate Marks Card Issuing

#### 6) Upgradation and modernisation of Polytechnics:

Under the Govt. of India assistance, 36 polytechnics are being upgraded and modernized with Rs.2.00 crores each to purchase machineries, furniture and books.

#### 7) National Board of Accreditation:

To facilitate continuous Quality Improvement and Enhancement of student skills, the Department of Technical Education has successfully Implemented outcome based Education in all Technical Programme science 2014-15. Further to stimulate the quality of teaching and facilitate the institution to realize their academic objectives, many initiatives have been started to get the accreditation from National Board of Accreditation for all technical programmes.

#### 12.1.8 Medical Education

There are 50 Medical Colleges (MBBS degree) in the State which have a summated intake capacity of 6245 students (Tables 12.31 and 12.32).15 colleges are run by the Government along with 7 other Super Speciality Institutions. The Government's presence is visible in nominal strength in other system. Relatively, the turnout of Ayurvedic doctors (GCIM) is quite significant. 2843 Doctors graduate from 56 Ayurvedic Colleges. Ayurvedic, Homoeopathic and Unani Doctors serve rural India in larger proportions. the 287 Nursing Colleges recognized by Indian Nursing Council turn out 12725 Nurses (B.Sc.graduates) every year. Kanataka functions as a nursery for nursing services not only for the State but also for other regions of India, Gulf countries and Europe.

**Table 12.31: Medical Education Institutions and Enrolments for the year 2015-16**

Type of Institution	No.	Enrolments
Medical Colleges (MBBS)	50	6245
Ayurvedic Colleges (GCIM)	56	2843
Homoeopathic Colleges (BHMS)	11	856
Unani Colleges	05	201
Naturopathy & Yogic Sciences (BNYS)	04	172
Dental Colleges (BDS)	38	2700
Pharmacy Colleges (B.Pharm)	61	4784
Nursing Colleges (B.Sc.)	287	12725

Source: Dept. of Medical Edu.

**Table 12.32: Medical Education Institutions by Managements for the year 2015-16**

Type of Institution	Govt.	Aided	Unaided
Allopathy: Colleges	15	-	35
Super Specialty Institutions	08	-	-
Ayurveda	03	05	48
Homoeopathy	01	-	10
Unani	01	-	03
Naturopathy & Yoga	01	-	03
Dental	02	-	36
Pharmacy Colleges (B.Pharm)	01	-	60

Source: Dept. of Medical Edu.

Availability of dependable and internally consistent data across various sources needs serious attention. There is considerable clarity with regard to under graduate and post graduate medical education. However, there are a large number of institutions which offer para medical certificate and diploma courses about which there is hardly any reliable date. Various autonomous councils, boards of examinations, universities regulate medical education.

#### **Post Graduate Institutions & Enrolments in the State:**

Medical Colleges are permitted to provide Post Graduate Courses in the State. They offer Degree and Diploma Courses in various specialties. There are several Super Specialties of which training is imparted in subjects like Cardiology, Cardio Thoracic Surgery, Cardiac Anesthesia, Neurology, Nephrology, Urology, Surgical Gastro Enterology, Plastic Surgery, Medical Oncology and Surgical Oncology. The enrolment details for different courses are furnished in Table No.12.33, 12.34 & 12.35.

**Table 12.33: Enrollment Capacity across Medical Course – Post Graduate Degree**

PG Degree	No.of seats	PG Diploma	No.of seats	Super Specialities	No.of seats
M.D.(General Medicine)	65	DMRD	5	M.Ch (Urology)	12
M.D.(R.D)	17	DMRT	3	M.Ch (Plastic Surgery)	4
M.D. Paediatrics	35	D.Ortho.	15	M.Ch (Surgical Oncology)	8
M.D.(R.T)	6	D.G.O.	23	D.M.(Oncology)	6
M.D.(Anesthesia)	59	D.L.O.	17	D.M. (Cardiology)	21
M.D.(Psychiatry)	12	D.A.	26	M.Ch (Cardio Thoracic Surgery)	12
M.D. (Pathalogy)	43	D.Bacteriology	0	M.Ch. (Paediatric Surgery)	5
M.S. (Anatomy)	34	D.V.D.	8	D.M. (Neurology)	3
M.D.(Community Medicine)	28	D.P.M.	3	D.M. Cardiac	8
M.D.(Forensic Medicine)	20	D.F.M.	2	M.Ch (Neuro Surgery)	2
M.D.(Pharmacology)	36	D.T.C.D.	2	M.Ch.Surgical Gastro Enterology)	2
M.D.(Physiology)	31	D.O.M.S.	20	D.M. Nephrology	2
M.D.(Bio Chemistry)	33	D.C.H.	15	Gynic Oncology	1
M.D.(Micro Biology)	38	D.C.P.	26		
M.D.(Skin & VD)	13	D.P.H	1		
M.D.(T.B)	5			-	-
M.D.(Emergency Medicine)	5				
M.S. (General Surgery)	68				
M.S.(Ophthalmology)	29				
M.S.(ENT)	26				
M.S.(Orthopaedics)	24				
M.S.(OBG)	31				
M.D (Hospital Admn.)	4				
Total:	659	Total:	166	Total:	86

Source: Dept. of Medical Edu.

**Table 12.34: Total P.G.Degree seats for 2015-16**

Subject	Govt/COMEDK/ KRLMPCA	Deemed Universities	Total Seats
<b>Pre-Clinical:</b>			
M.D. (Anatomy)	29	5	34
M.D.(Physiology)	30	1	31
M.D.(Bio Chemistry)	27	6	33
<b>Para Clinical:</b>			
M.D.(Pharmacology)	31	5	36
M.D.(Pathology)	39	4	43
M.D.(Micro)	33	5	38
M.D.(Com.Med.)	27	1	28
M.D.(F.M.)	19	1	20
<b>Clinical:</b>			
M.S.(Ophthalmology)	27	2	29
M.S.(ENT)	26	0	26
M.S.(Orthopaedics)	22	2	24
M.D.(Skin & D)	13	0	13
M.D.(RT)	6	0	6
M.D.(Anesthesia)	52	4	56
M.D. Paediatrics	34	1	35
M.D.(General Medicine)	61	4	65
M.S. (General Surgery)	66	2	68
M.S.(OBG)	30	1	31
M.D.(R.D)	16	1	17
M.D.(Psychiatry)	12	0	12
M.D.(T.B)	5	0	5
M.D.(Hospital Admn.)	2	2	4
M.D.(Emergency Medicine)	5	0	5
Total:	612	47	659

Source: Dept. of Medical Edu.

**Table 12.35: Total P.G. Diploma seats for 2015-16**

Subject	Govt.& Private Medical Colleges	Deemed Universities	Total Seats
<b>Para Clinical:</b>			
D.C.P.	19	7	26
D.Bact	0	0	0
D.P.H.	0	-	0
D.F.M.	2	-	2
<b>Clinical:</b>			
D.O.M.S.	19	1	20
D.L.O.	15	2	17
D.Ortho.	15	-	15
D.V.D.	7	1	8
D.M.R.T.	3	-	3
D.A.	25	1	26
D.C.H.	15	-	15
D.G.O.	22	1	23
D.M.R.D.	5	-	5
D.P.M.	3	-	3
D.T.C.D.	2	-	2
Total:	152	13	165

Source: Dept. of Medical Edu.



### 12.1.9 Mass Education

In the 12<sup>th</sup> plan period, the Directorate of Mass Education will focus mainly on four objectives namely:

- (i) Basic literacy for non-literates.
- (ii) Equivalency for those who wants to continue their education
- (iii) Vocational training to improve standard of life.
- (iv) Continuing education for Life Long Learning.

Saakshar Bharath Programme which commenced in 2010-11 is continued with Central and State grants in 20 districts of the State, where female literacy is less than 50% as per 2001 census to provide literacy to rural non-literates of 15+ age group, with priority to women, SC, ST, Minority and General Categories. Karnataka State Literacy Mission Authority, 20 District Lok Shikshana Samithis, 117 Taluk Loka Shikshana Samithis and 3788 Gram Panchayat Lok Shikshana Samithis are implementing this programme. Total physical target fixed by NLMA was 51.80 lakhs. The target for the amount released is 34.68 lakhs. Out of this 3378744 have registered, 2939054 have completed learning remaining non literates have been learning. Further in the year 2015-16, 831 Master trainers (Mts), 836 Preraks & 22690 Voluntary trainers (Vts) have been trained. Assessment of Basic literacy has been conducted by National Institute of Open School (NIOS) & National Literacy Mission Authority (NLMA) in 17 districts. Upto August 2015, 2602715 members have completed the exam and are certified. During August 2015, 549656 got registered and 413657 neo-literates have appeared for examination and result is awaited. 3.66 lakhs neo-literates is the target for 2016 march examination.

During 2015-16, vocational training is being given to the educated rural youths in vidyapeethas coming under Dissolved Karnataka State Adult Education Council. Utilizing Rs. 27.50 lakhs in the Ist Phase 445 youths have been trained and another 483 students are under training. In addition to this, 3333 SC neo-literates and 1333 ST neo-

literates are availing the training facility under SCP and TSP grants respectively. As per Dr. Nanjundappa Committee Report, in the very backward GPs of 6 districts namely Davanagere, Dharwad, Uttar Kannada, Shivamogga, Chikkamagaluru and Hassan the programme is in progress. With a grant of Rs. 150 lakhs, 74,153 non-literates have enrolled against the target of 76,923.

### 12.1.10 Karnataka State Higher Education Council (KSHEC)

Karnataka State Higher Education Council was established in 2010 with the objective of framing policies for higher education and to give suggestions to State Government, Universities and other higher educational institutions regarding issues related to higher education. The Council holds the responsibility relating to introduction of new courses, development of higher education, propaganda of research activities and developing syllabus etc. in order to achieve progress in the above said subjects, the Council has framed many programmes last year and is trying to continue the activities in this direction.

For the year 2015-16 vide G.O No. ED 55 HPU 2015, Bangalore Dated: 09/04/2015 towards Higher Education Council Accounts titled 2202-03-800-09-02-05 (Planning), of the allotted Rs.250.00 lakhs, vide G.O No. ED 394 URC 2015, Dated: 29/07/2015, Rs.62.50 lakhs was released for the months of April, May and June and another Rs.62.50 lakhs has been released vide G.O No. ED 394 URC 2015, Dated: 24/09/2015 as the third installment for the months of October, November and December have been released.

The 14<sup>th</sup> General Council Meeting of Karnataka State Higher Education Council was held on 13/05/2015. The following subjects were approved unanimously in the meeting and forwarded to the Government for further implementation and action.

1. The General Council ratified the report of Prof.S.K.Saidapur Committee, and the Hon'ble Minister for Higher Education suggested that the report should be

- forwarded to the Government for further action.
2. All the Conventional Universities of the State should compulsorily teach Kannada in the first four semesters in their degree courses. Since there is a necessity for a detailed study regarding introduction of Kannada language in Professional Courses (Engineering, Medical, Law and Agriculture), a committee has been constituted under the chairmanship of Prof.H.C.Borelingaiah, Vice-Chancellor, Hampi University for a detailed study. Decisions shall be taken based on the reports submitted by the committee.
  3. The General Council unanimously decided to establish a Facilitation Centre for Recruitment of Faculty in Universities (FCR) in Karnataka State Higher Education Council.
  4. The General Council unanimously approved the decision regarding the exchange of available basic facilities between all the Universities.
  5. The congregation also decided that from the next academic year the internal assessment marks / attendance of university / college students should be entered online.
  6. The meeting decided that from the next academic year onwards University examinations / NAAC preparations in Composite colleges to be done on the model of cluster colleges.
  7. The meeting also decided that it is necessary to take strict action against officers and staff facing charges regarding indiscipline, absenteeism, corruption, illegal examination activities, sexual harassment, misbehavior etc.
  8. To redeploy the teaching and non-teaching staff of the departments in the University facing workload problems, it has been decided in the meeting to form a committee of the present and former Vice-Chancellors to suggest guidelines in the issue.
  9. The Council members also decided that qualified teachers can be deputed from One University / College to another University / College for a short duration.
  10. The meeting also decided that people who show outstanding performance in examinations / cultural activities / sports etc should be recognised by respective universities / colleges and rewarded with an Appreciation Certificate.
  11. It was also decided to establish NET / SLET Training Centres in all the State Universities.
  12. It was also decided to discontinue the appointment of Professors of a university as Vice-Chancellors in the same university.
  13. Regarding enforcement of Awarding Grace Marks in University examinations, it was decided to form a Committee under the Chairmanship of Vice-Chancellor, Bangalore University with Vice-Chancellor of Karnataka State Women's University and Vice-Chancellor of Tumkur University as members and the decisions to be taken based on the report submitted by the committee.
  14. It was also decided to recognise people in university / college who have excelled themselves in Academic and Sports spheres and have contributed vividly to the field, to be honoured on the occasion of Teacher's Day.
  15. It was also decided to re-constitute a committee to critically examine the awarding of the degree in Geography subject under the Faculty of Arts or Science.
  16. It was also decided to extend a Special Appreciation Certificate to Student's / NGO's who bring PUC dropouts to pursue higher education.
  17. For co-ordinating the activities of all Universities / Colleges, it was decided to add necessary changes in the existing format and adopt them with suitable improvements.
  18. It was also decided to celebrate the 125<sup>th</sup> Birth Anniversary of Pandit Jawahar Lal Nehru by all the Universities.
  19. It was decided that the consent of the Higher Education Council must be obtained before starting any new course by any University / College.
  20. It was also decided that persons who have rendered any special service within the jurisdiction of any University should be recognised and the details and particulars of such persons should be

included in the website with the details of the concerned university.

21. It was unanimously decided that National Service Scheme (NSS) should be brought within the purview of Examination Valuation System by all the universities.
22. It was also decided in the meeting that the Annual Performance Report of all the Teaching and Non-teaching staff of University and Colleges must be obtained and should be preserved.
23. It was decided that "Human Rights and Responsibilities" should be included and taught as a subject in all the Degree and Technical courses.
24. It was also decided that Fairs and Exhibitions should be arranged at proper intervals by universities and colleges and also June 21<sup>st</sup> must be compulsorily observed as International Yoga Day by all the universities and colleges.
25. It was also decided in the meeting that more attention must be paid to adopt Massive Open Online Courses (MOOC's) and also to adopt Cloud Technology by all the Universities.
26. It was also decided that all universities must strictly observe uniform rules and procedure and follow UGC Guidelines while awarding PhD / M.Phil degrees.
27. It was also decided that 'Innovative Clubs' must be compulsorily established in all universities / colleges.
28. It was decided to start 'Finishing School Concept' in all universities / colleges.
29. It was decided that all old records must be digitalised in all the universities and colleges.
30. It was decided that 'ICT Initiative' must be implemented in all the universities / colleges and in order to increase admission in the colleges, the admission limit to be increased by 15 %.
31. It was decided to provide 'Institutional Repository Services' compulsorily in all the universities / colleges.
32. It was also decided that Employment Centres should be started and managed in all the universities and colleges.
33. It was decided that the Vice-Chancellors of all the Universities should establish an 'Advanced Education Centre' in their respective universities. In this direction they are supposed to inform the Higher Education Council about the procedures undertaken by them within 15 days. Furthermore it was decided that all the Universities in order to increase the quality of education are supposed to utilise the guidance / consultation of scientists, educationists, national and international scholars.
34. It was decided that the children of service personnel serving in Army, Navy and Air force must be given preference in all the universities / colleges.
35. The meeting also decided that there should not be any fixed time while awarding permanent affiliation to colleges.
36. It was also decided that all universities, except private universities, should be brought under the purview of University Review Committee.
37. It was decided that from the Academic year 2015-16 onwards B.Voc courses to be started in all composite colleges as per UGC guidelines, and General Knowledge and Interview Skills should be introduced as subjects to be taught in degree courses.
38. It was also decided to re-represent to the Ministry of Human Resource Department for the re-perusal of the proposal of converting Maharani's Science College as 'Cluster College' under RUSA Scheme.
39. It was also decided to fill up the vacancies that are vacant in the state universities as early as possible and it was also decided that it should be ensured that no two study centres should be established for common targets.

The 15<sup>th</sup> General Council meeting of Karnataka State Higher Education Council was held on 28.12.2015 and unanimous decisions were taken regarding the following subjects, which have been forwarded to the Government for implementation.

1. Universities while taking action for the appointment of faculties shall proceed only after the procedure proposed is scrutinized by the Facilitation Centre for Recruitment of Faculty – FCR. Also, in this regard, Universities should strictly observe the guidelines issued by UGC /

- AICTE / Government of Karnataka and other autonomous institutions. In addition, they should also take one member from Universities located in Hyderabad-Karnataka area as member either on OOD basis or on outsource basis.
2. It was also decided to frame a uniform policy regarding the admission and other related issues of International students.
  3. Except in respect of courses mentioned in Sl.No.7 i.e, Post graduate Diploma in Buddha, Basava, Ambedkar Studies, Universities to start action in respect of implementing the other courses.
  4. It was also decided in the meeting that there is no need to give fee exemption to scrutinize the marks cards / degree certificates of the candidates who have been temporarily selected for the posts of PSI / RSI during the year 2014-15.
  5. While appointing Assistant Professors in the subject Geography, it was decided to accept the report submitted by the committee that MA (Geography) and MSc (Geography) as equivalent. Further, to bring uniformity in degree and post graduate courses, it was decided that in respect of subjects like Geography, Psychology, Statistics, Mathematics, Anthropology and Criminology, the degree shall be awarded only as BSc or MSc. It was also decided to inform the same to all the universities.
  6. It was decided that for the all round development of the physically challenged students pursuing PhD, all universities should ensure that they are provided with all basic facilities including providing of the Three Wheel Cycle. It was also decided to constitute a committee to scrutinize and study the report regarding the Research Centres submitted by Tumkur University.
  7. To ensure that the above instances are not repeated, it was unanimously resolved that when such reports are published in the newspapers, the concerned universities are required to submit their statements through the newspapers and they should not only take immediate action after scrutiny of the report but also publish in the newspapers the programmes and plans implemented by them so that their activities get due publicity.
  8. All universities have already started study chairs under different names. Universities should ensure that in their academic councils they should look into the position of candidates belonging to the neglected communities and take suitable decisions. They should also ensure that negligence is not repeated. It was also decided to conduct a seminar to research and find out the cases of candidates belonging to the neglected community.
  9. As there is no provision in the rules framed by the UGC, the proposal was dropped. It was also decided to strictly follow the rules framed by the UGC.
  10. The report submitted should be discussed at length in the respective syndicate and academic council meetings of all the universities and they should adopt the guidelines prescribed by the UGC.
  11. The draft rules, framed by the council, regarding Karnataka State Rural Development and Panchayat Raj was accepted and it was decided to name the university as "Karnataka State University for Rural Development".
  12. It was decided that it was not proper to appoint candidates who have done MA (Social Work) as MA (Sociology) lecturers. It was also decided to follow UGC guidelines in this regard.
  13. It was resolved that all universities should discuss the report presented by the council in their academic councils and syndicates and strictly adopt them.
  14. It was also resolved that as decided by the Ministry of Human Resource Development, the issue of the adaptation of the subject NSS as optional subject may be discussed in their respective academic councils and syndicates and adopt them.
  15. It was also resolved that as per UGC rules, no university can conduct distant education courses, or open distant education centres or distant education research centres beyond the geographic limits of the concerned university. In the same way, no outside state university can either open distant education centre or

research centre in the state of Karnataka. However to ensure that students who have got admission and are pursuing their studies should not be inconvenienced. So it was resolved to request Higher Education department to take suitable action in the matter. Further, to enable all Government and Aided colleges to make use of these programmes in all districts under the jurisdiction of respective universities, it was informed to all the Vice-Chancellors that they should conduct distance education courses in the colleges and should also provide sufficient space for functioning of Karnataka State Open University.

16. It was also decided that in all universities to help students who could not complete their degree or post graduation within the Double of the Duration, to get admission in KSOU. An equivalent committee to be formed in all universities to help students to complete their degrees from KSOU. This to be implemented in all universities, except Vishweshwariah Technological University.
17. The meeting unanimously agreed to accept the report prepared on the re-appointment of teaching faculty and non-teaching staff in the university departments where there is shortage of workload.
18. In all the Government Polytechnics / Colleges / Universities and Higher Education institutions, instead of 'Human Rights', it was resolved that suitable special lectures, workshops, conferences and other such activities to be organized.
19. The report submitted by the committee regarding Development of Infrastructure Quality Index for Higher Education institutions in Karnataka was accepted and it was resolved that all universities and colleges should adopt the points mentioned the report.
20. The report prepared by the committee on the formulation of a Policy Document on Research in the higher education sector of Karnataka was accepted and it was resolved that all universities and colleges to adopt the points mentioned in the report.
21. It was resolved that in all universities the activities of Bharat Scouts and Guides Organization should be implemented. In this regard it was decided to appoint one Nodal Officer in all the universities and the details of the activities conducted should be reported regularly to Bharat Scouts and Guides Organization.
22. The directive issued by the Additional Chief Secretary to all the Vice-Chancellors of the universities, which has been submitted for the approval of the Chancellor on the subject of extending to two years instead of the present one year course of B.Ed study from the academic year 2015-16, was accepted.
23. It was resolved that the co-ordination activities of all universities / colleges must be in the mode of on-line from the academic year 2015-16.
24. It was decided that in respect of giving admission to foreign students, instead of considering the limit fixed at present, increased number of candidates may be considered. It was also decided that through the Government of Karnataka, UGC, AICTE and Ministry of Foreign Affairs also be appraised of the consideration.
25. It was also decided to appoint Mentors to supervise and to execute the programmes of RUSA successfully. Further the appointment of Mentors in universities / colleges / government aided colleges who are not in receipt of grants under RUSA programme was also discussed and agreed.
26. It was also decided that the admission limit of Karnataka State students in Private universities should be brought at par with that of other universities and there should be 40 % reservation to Karnataka State students. It was further decided to bring amendments in the Private university rules in this regard.
27. To rectify the short comings in the rules framed in KSHEC Act of 2010, it was decided to bring out the necessary amendments. Further, with a view to bring out uniform rules as applicable to all universities and to examine the issues thoroughly, it was decided to submit a report to Prof.N.R.Shetty, Chairman, University Review Commission to

- examine thoroughly and submit a report on the subject.
28. It was decided in the meeting that the policy prescribed by the UGC regarding the procedures to be followed in the promotions to the post of Associate Professors and Professors from that of Assistant Professors should strictly be observed.
  29. To appraise the problems of Rural areas and urban areas to students studying for BA, BSc, B.Com, BBA, BCA and Engineering, the issues must be discussed in the Academic Council and Syndicate of the concerned college / university and be given due importance and action to be taken on priority basis.
  30. The report submitted by the committee for the preparation of draft rules regarding the proposal for conversion of Government College, Mandya (Autonomous) as a University was accepted.
  31. The proposal to constitute a committee for the preparation of draft rules regarding the establishment of a Cluster University under the leadership of Maharani's Science College for Women, Bangalore was accepted.
  32. As there is a judgement of the Supreme Court of India in this regard, it is decided that all private universities should compulsorily observe this procedure.
  33. The proposal for the establishment of various advisory committees under the patronage of the council was accepted in the general council meeting.
  34. It was decided to constitute 'Institute Industry Interaction Cell' to study the training, research, employment and establishment of appointment centres in all the universities and colleges. It was also decided to appoint a Placement Officer to look into the matter. The Vice-Chancellors of the universities should review the matter frequently.
  35. It was also decided to send a proposal from Karnataka State Higher Education Council to the Government of Karnataka for getting an exemption from Income Tax regarding the establishment of the corporate fund from CSR by all the universities of the state.
  36. All universities were informed to submit the report to the government regarding the preparation of E-Content. Also it was informed to all universities that the expenditure incurred in this regard should be met out of the respective grants of the university. It was also decided in the meeting that the Vice-Chancellors should review the progress of the submission of the report on priority basis.
  37. It was also decided that all universities should implement the recommendations of the Knowledge Commission and submit a report on the same.
  38. Regarding the B.Ed curriculum and syllabus the report recommended by the committee framed for this purpose has been forwarded to all the universities and have been suggested to take necessary action regarding the remaining issues after discussions in their jurisdiction.
  39. It was decided to implement the recommendations of the Knowledge Commission in all colleges and universities in the state. Further it was decided to establish the ICT Software in all the Universities / Government Colleges / Aided colleges. They should also review the progress in this regard frequently and should submit periodical report to the universities.
  40. It was also decided to adopt the contents of the Commercial Department of Ministry of Finance, notification dated 27-12-2013 by all the universities.
  41. The decision of the compulsory submission of all proposals to Central Government and Autonomous organizations was accepted.
  42. As all the procedures for commencing the different courses of studies for the year 2016-17 would begin after obtaining the acceptance of academic council and syndicate, and universities would take suitable action in this regard, they would also ensure that they should organise Workshops, Seminars, organise Symposium etc to make people know more regarding these courses.
  43. It was accepted that all universities should make a Memorandum with National and International private and public companies and social

- organizations regarding research and development.
44. It was also decided that all universities should compulsorily procure the 'Mobile Science Exhibition Van' within the grants available with them and make the best use of this facility.
  45. It was resolved that as this proposal is concerned with the policy of the government, the decision of this issue is to be taken at the government level.
  46. It was decided that MSc (Zoology) and MSc (Marine Science) are not equivalent.
  47. It was decided that all universities to take necessary action regarding obtaining of funds from Ministry of Human Resource Development, Government of India in connection with meeting travel expenditure, allowances and other expenditures that are incurred for arranging lecture programmes by inviting International Resource persons.
  48. It was decided that 'Scientific Mentality', the Scientific and practical programme presented by Sri.Hulikal Nataraj must be conducted in all universities and colleges free of cost. Lecturers from districts and taluks who attend this programme must be provided OOD facility.
  49. The General committee scrutinized the decisions taken by the KSHEC in its 12<sup>th</sup> Executive committee meeting and accepted the same.

Regarding Serial No.18(3) – Rating of all the Universities, Dr.Kartik Shridhar explained to all the members regarding options 1 and 2 concerning to ICARE. Thereafter, from the background of the reporting of the critical analysis and finding out the strength in respective divisions all universities felt there would not be either extra labour or additional expenditure. The committee also felt that this proposal is not an extra burden on the university. In this organization, in total there are 50 Government and Private Universities and on an average it is expected that for each university the expenditure would be around Rs.1.30 lakhs. With this background, the proposal submitted by the ICARE in their proposal (Option 2) at Rs.65,00,000/-, has been accepted by the committee.

50. All Vice-Chancellors were informed and suggested that all universities, colleges and Pre-University colleges to celebrate Swami Vivekananda Jayanti from 12 January 2016 to 19 January 2016 as Rashtriya Yuva Saptaha. It was further informed that in future, every year 29 December, the birthday of Rashtrakavi Kuvempu should be observed as 'Vishwa Manava Day', as also the Centenary celebrations of Former Chief Minister Sri.Devaraj Urs should be celebrated in all colleges / universities.

Further, in respect to issues in Sl.No.1 to 7 it was decided to take up the issues for discussion in the next meeting as the President had to leave the place to attend a urgent Cabinet meeting.

A proposal has been received by the council regarding the establishment of a Private University in the state of Karnataka. An expert committee has been constituted for the examination of the proposal.

Under Government of India's programme Rashtriya Uchchatar Shiksha Abhiyan, with 65 % of Central Government contribution and 35 % of State contribution, 05 State Universities and 60 Government First Grade Colleges have received funds to the tune of Rs.2,413.12 lakhs vide G.O No. ED 86 HPU 2015 and vide Order No. ED 86 HPU 2015, dated 05/08/2015, an amount of Rs.3,36,88,000/- and Order No.ED 42 EGOV 2015, dated 30/11/2015, an amount of Rs36.00 Crores have been released as Additional Grants.

## **12.2 HEALTH AND FAMILY WELFARE:**

Health is an important human development indicator and has a great significance for the overall development of the State. Achieving and maintaining health is an important ongoing process. The Government of Karnataka has given significant importance to the health sector during the last few years. Provision of good health care to the people is

an essential component of the health strategy adopted by the State.

The focus of possible health intervention is to prevent and manage diseases, injuries and other health conditions through surveillance of cases and the promotion of healthy behaviors, communities and environments. Provision of good health care to the people is an essential component of the development strategy adopted by the State to achieve overall socio-economic development.

Karnataka has made significant progress in improving the health status of its people in the last few decades. However, despite the progress, the State has a long way to go in achieving the desired health goals. The State has made substantial progress in building credible health infrastructure at different levels. The public expenditure on Health is about 0.9% of GSDP during the 11<sup>th</sup> plan period.

### 12.2.1 Health Indicators:

The State has a wide institutional network providing health services both in urban and rural areas. Table 12.36 presents information on health infrastructure in the State. There are 20 District Hospitals, 11 Other Hospitals and 32 Autonomous & Teaching Hospitals in

the State. The primary health infrastructure in rural areas has fulfilled the norms required under the “minimum needs programme” at the aggregate level. District wise distribution of health facilities is given in Appendix 12.9.

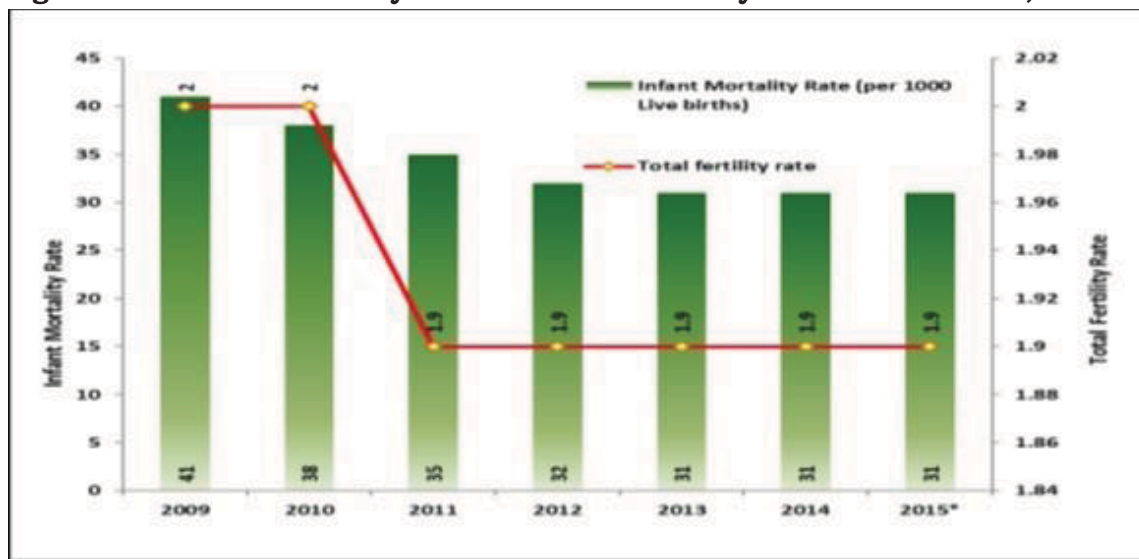
The 12<sup>th</sup> Five year Plan (2012-17), in respect of the health sector, has aimed at controlling population and reducing infant and maternal mortality through strengthening health services and quality health care services. In addition, attempts have been made to remove intra-regional and regional disparities by improving health services. The progress of the health indicators has been encouraging in the State during the last few years.

Karnataka has performed relatively better in population control with total fertility rate is reaching the 12<sup>th</sup> five year plan target of 1.9 children per woman in the year 2013. The infant mortality has declined faster during the last five years to the tune of around 10 per 1000 live births from about 41 in 2009 to 31 in 2013 (Fig. 13.2) and it is 28 per 1000 live births as per NFHS-4. However, the infant mortality rate (IMR) of about 31 in 2013 (SRS data) is far higher than the eleventh five year plan target of 24 set for the year 2012 (Table 12.37). Considering this imminent challenge, the state has been at the forefront of introducing several programmes.

**Table 12.36: Infrastructure of Public Health Services of the State Govt.**

Type of Institution	No.
District Hospitals	20
Other Hospitals under Health & FW	11
Autonomous & Teaching Hospitals	32
Taluk / General Hospitals	146
Community Health Centres	206
Primary Health Centres	2353
Urban PHCs	27
Health Centres under IPP	108
Mobile Health Clinics (Tribal – Health and Family Welfare Services)	19
Sub-Centres	8871



**Figure 12.3 Infant Mortality Rate and Total Fertility Rate in Karnataka, 2008-15****Table 12.37: Achievement of the Family Welfare Programme in Karnataka**

Indicator	2009	2010	2011	2012	2013	2014	2015*
Birth Rate (for 1000 Population)	19.5	19.2	18.8	18.5	18.3	18.3	18.3
Death Rate (for 1000 Population)	7.2	7.1	7.1	7.1	7.0	7.0	7.0
Total fertility rate	2.0	2.0	1.9	1.9	1.9	1.9	1.9
Maternal Mortality Rate (for every 1,00,000 live births)	178	-	178	144	144	144	133
Infant Mortality Rate (per 1000 Live births)	41	38	35	32	31	31	31
Under-Five Mortality Rate (per 1000 children)	50	45	40	37	37	37	35
Eligible Couples protected (%)	54.9	-	72.00	66.42	66.89	63.00	63.00
Average life expectancy (years)	Male	63.6	-	63.6	63.6	63.6	63.6
	Female	67.1	-	67.1	67.1	67.1	67.1

\* Data from SRS 2013

### 12.2.2 Family Welfare:

The State offers an excellent family welfare programme operating through the existing health infrastructure. The main objective of the programme is to provide better health services in general and family planning services in particular to check the rapid

growth of population. Table 12.38 provides details of the State's achievements in sterilization and IUD during the last three years. Though sterilization continues to be the main method of family planning, the spacing between the births of two children is also equally emphasized.

**Table 12.38: Performance of Family Welfare Sterilization Programme**

Year	Sterilization				IUD		Couples Protected (%)
	Target	Achievement			Target	Achievement	
		Vasectomy	Tubectomy	Total			
2011-12	503047	3894	308876	312770	277404	195487	72.00
2012-13	484980	2857	330445	333302	311822	189981	66.42
2013-14	407102	1390	310025	311415	311883	159540	66.89
2014-15	449495	1006	321007	322013	303924	188756	63.00
2015-16 (April to Dec)	*450997	943	234024	234967	*308356	134076	63.00

\* Target for 2015-16

**12.2.3 National Health Mission:**

National Rural Health Mission (NRHM) was launched on 12th April, 2005 by the Government of India to improve medical facilities in the rural areas of the country. It is modified as National Health Mission by combining the primary health care services to the urban and rural population. The NHM seeks to provide Accessible, Affordable and Quality Health Care to the rural population, especially the vulnerable sections.

**The following programmes are implemented under National Health Mission:**

- RMNCH+A including immunization
- National Vector Borne Disease Control programme(NVBDCP)
- Revised National Tuberculosis Control Programme (RNTCP)
- National Leprosy Eradication Programme (NLEP)
- National Programme for Control of Blindness (NPCB)
- Integrated Disease Surveillance Project (IDSP)
- Additional Services to Under National Rural Health Mission

- Programme of Pulse Polio
- Mission Indradhanush
- Health Education, Training, Preventive of Deafness and other Programmes.
- Strengthening of public health facilities by providing new constructions, additional alternation and renovation.

**1 National Vector Borne Disease Control programme (NVBDCP):**

In each of the Districts, Program implementation is being done through its districts health officer, Taluka Health Officers and through Administrative Medical Officers CHC and PHC. Certain activities are managed at the State level such as drug procurement, information education and communication (IEC), civil works and training

The State is implementing the activities for prevention and control of Vector Borne Diseases like Malaria, Filariasis, Dengue, Chikungunya and Japanese Encephalitis as per the guidelines of GOI, Directorate of NVBDCP Delhi.

**Table 12.39: Details of NVBDCP**

Year	Malaria cases/ deaths	Dengue cases/ deaths	Chikungunya cases	AES/JE cases	AES/JE deaths
2012	16466/ 0	3924/ 21	205	370/ 20	0
2013	13302/ 0	6408/ 12	864	300/ 9	0
2014	14794/ 2	3358/ 2	942	127/ 27	0/ 1
2015 (Upto Dec)	11825/ 0	5077/ 9	2099	373/40	0/1

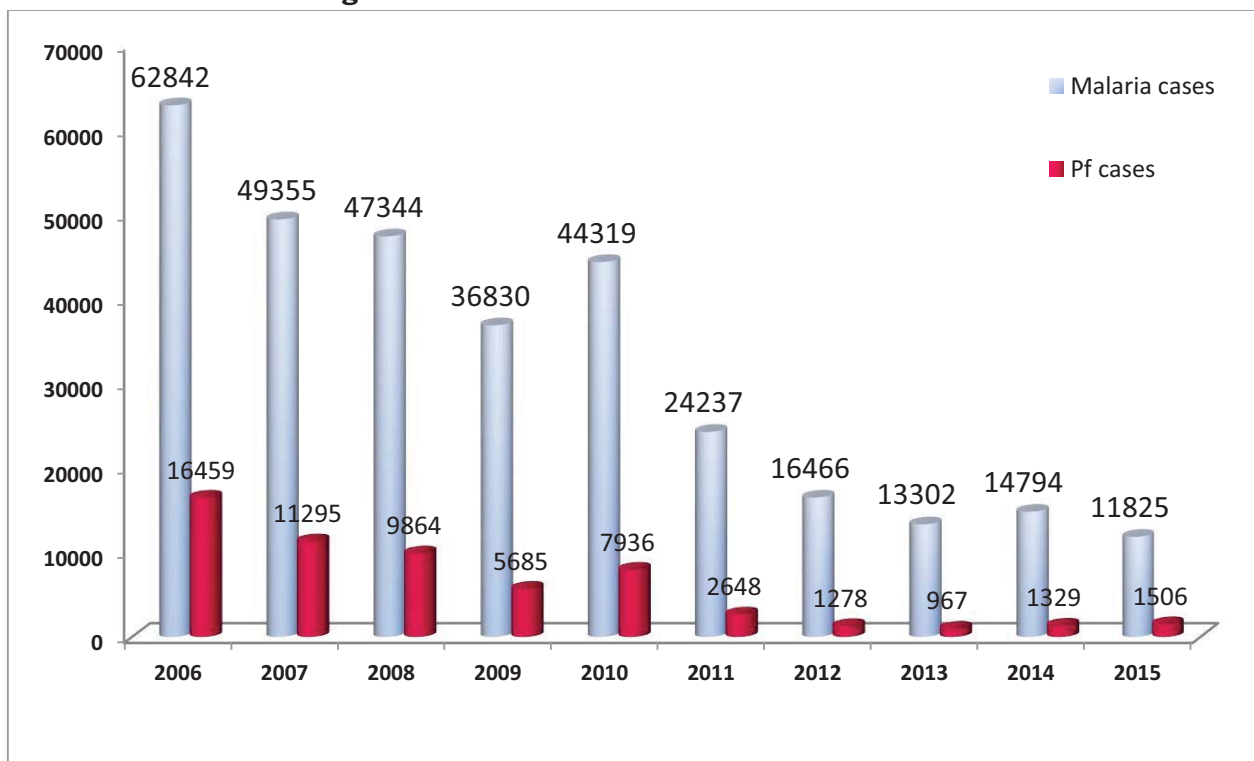
**Malaria:**

The State is experiencing a downward trend of Malaria incidence. The State is included under Category-2 i.e under Pre-elimination Phase of Malaria. For the current year till December 2015, 11825 No. of Malaria cases have been reported in the State. Out of which, urban areas of Mangalore and Udupi are contributing a total of 67 % (Mangalore- 55 % & Udupi- 12 %) malaria cases to the State total. Other districts such as Bagalkot, Koppal, Raichur, Ballari, Vijayapura, Gadag, Kalaburagi, Yadgir and project area of UKP are also contributing significantly to the total burden. However, additional inputs have been provided to these two cities to tackle the problem as a result of which malaria incidence is showing a reduction of 19.7 % in these two districts during 2015 (till

December) as compared to the same period of 2014. The State has shown 18.7 % reduction in malaria incidence till December 2015 as compared to the same period during 2014.

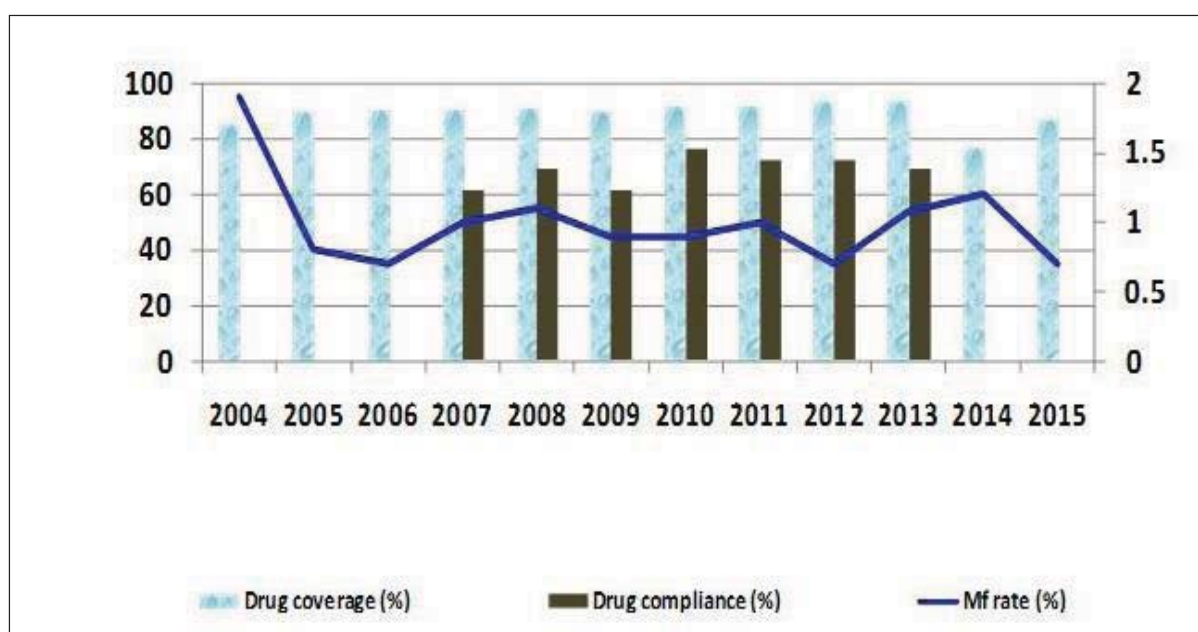
**Lymphatic Filariasis:**

Twelve rounds of Mass Drug Administration (MDA) have been completed in the State. Out of nine endemic districts in the State, three districts, namely Dakshina Kannada, Uttara Kannada and Udupi have already passed Transmission Assessment Survey (TAS) and MDA is withdrawn in these districts. Two districts namely, Raichur and Bagalkot are proposed for TAS during 2016, whereas it is proposed for continuation of MDA in rest 4 districts, namely, Bidar, Kalaburagi, Yadgir and Vijayapura.

**Figure 12.4: Malaria Incidence 2006 to 2015**

**Table 12.40: District Wise MDA Coverage during 2014 round**

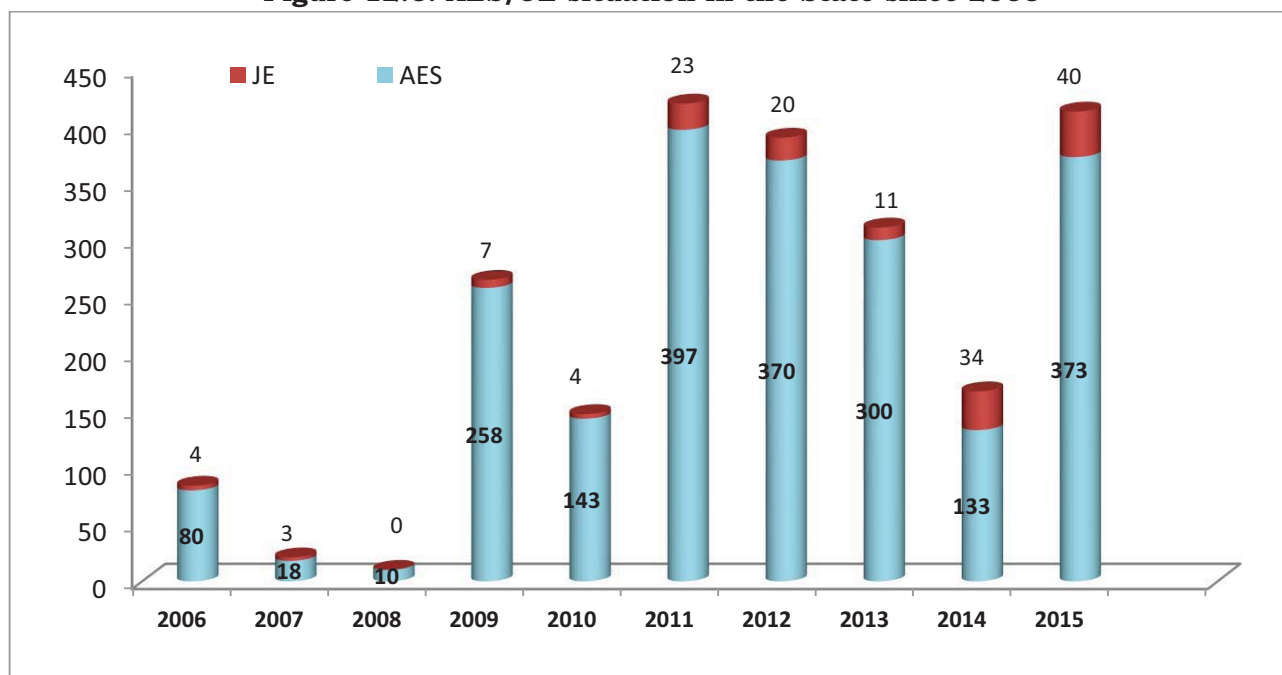
District	Eligible population	Persons covered under MDA	% of coverage
Bagalkot	1086131	1013196	93.3
Bidar	1590318	1412293	88.8
Kalaburagi	2566990	2197443	85.6
Raichur	1908155	1655832	86.8
Yadgir	1178060	930662	79.0
Vijapura	1448252	1303427	90.0
Total	9777906	8512853	87.1

**Figure 12.5: Trend of Microfilaria Rate in the State**

### **Acute Encephalitis syndrome/ Japanese Encephalitis (AES/ JE):**

Only sporadic cases of Japanese encephalitis are being reported from district of Bangalore Urban, Ramanagar, Udupi, Chikballapur, Chikmagalur, Kolar, Haveri, Ballari, Raichur,

Mandya, Dakshina Kannada and Bangalore City. Till December 2015, State has reported a total of 373 AES and 40 JE cases along with one death in Mandya district. AES/ JE cases showing an increasing trend during 2015 due to better diagnostic facility.

**Figure 12.6: AES/JE situation in the State since 2006****Table 12.41: District wise JE vaccination coverage**

District	Year of vaccination	Target (1 to 15 years)	Achievements	Percentage
Bellary	2006	720517	535613	74.33
Raichur	2007	595975	493884	82.87
Kolar	2007	798392	626268	78.44
Koppal	2008	425241	296730	69.78
Mandya	2008	495000	412501	83.33
Vijayapura	2009	651610	464147	71.23
Dharwad	2009	546352	474521	86.85
Chitradurga	2013	560290	329625	58.83
Davanagere	2013	560725	379072	74.81

**Dengue & Chikungunya:**

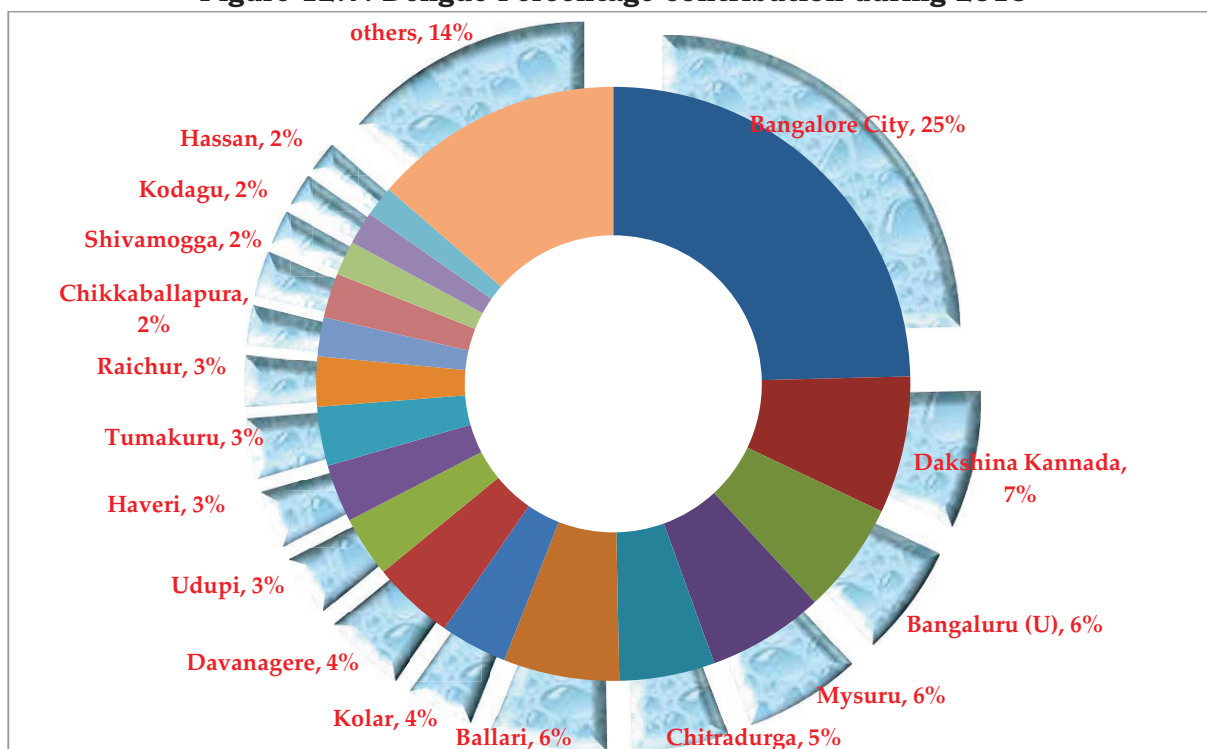
During 2015, a total of 38196 suspected dengue cases are reported as on 31-12-2015 out of which 5077 are confirmed and 9 deaths are reported so far. Further, a total of 20763 Chikungunya suspected cases have also been reported out of which 2099 are confirmed till the same date.

About 84.38% of the total Dengue cases reported in the State are contributed by BBMP area and 15 districts such as: BBMP, Dakshina Kananda, Bengaluru Urban,

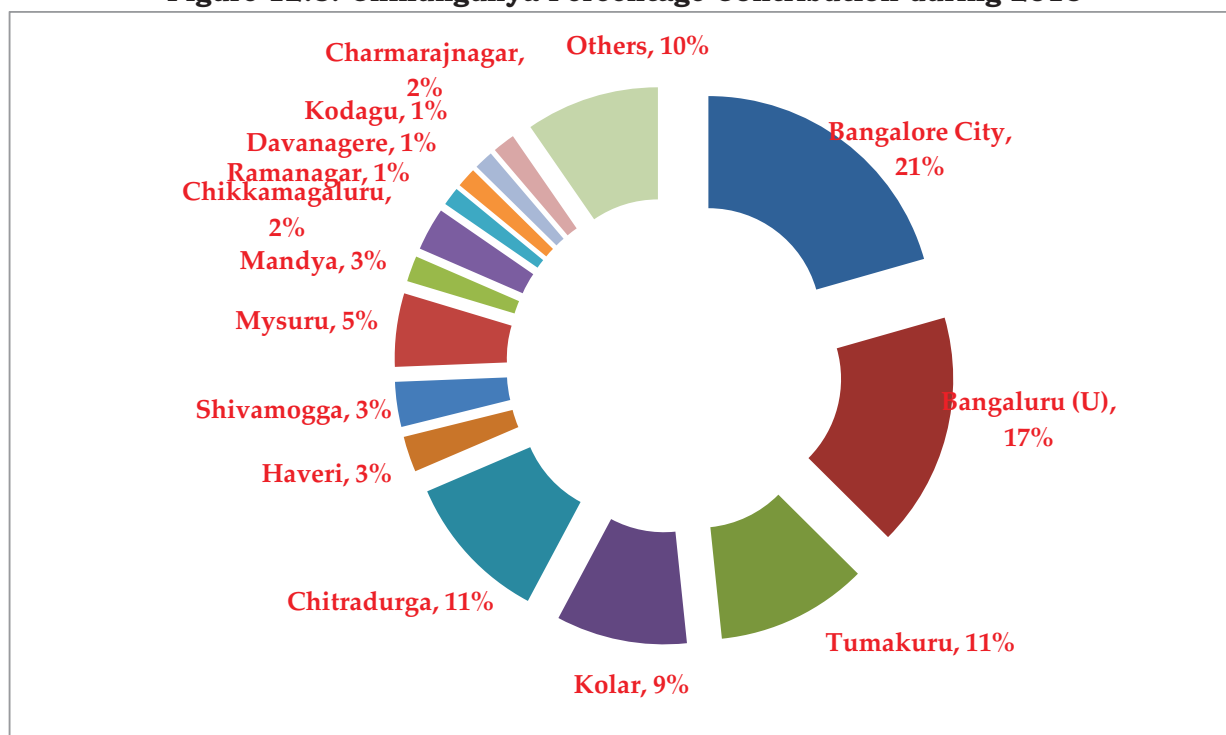
Mysuru, Kolar, Ballari, Udupi, Chitradurga, Davangere, Tumkur, Raichur, Haveri, Chikballapura, Shivamogga, Kodagu and Ramanagar.

In case of Chikungunya about 94.2% of the total cases are contributed by BBMP area and 15 districts, such as BBMP, Bengaluru Urban, Tumkur, Kolar, Chitradurga, Haveri, Shivamogga, Mysuru, Chikkamagaluru, Mandya, Ramanagar, Davangere, Kodagu, Chamrajnagar, Bangalore Rural, Chikkaballapura.

**Figure 12.7: Dengue Percentage contribution during 2015**



**Figure 12.8: Chikungunya Percentage Contribution during 2015**



**Table 12.42: Month wise incidence of Dengue/ Chikungunya fever reported in the State during 2015 is as follows**

Month	Dengue		Chikungunya
	Confirmed Cases	Confirmed Deaths	Confirmed Cases
Jan	65	0	26
Feb	71	0	52
Mar	116	0	50
Apr	63	0	6
May	188	1	41
Jun	551	2	251
July	1341	4	448
Aug	934	2	423
Dec	560	0	273
Oct	418	0	204
Nov	384	0	131
Dec	386	0	194
Total	5077	9	2099

- Total suspected deaths audited at District & State level till Dec-2015, 42 No's
- Confirmed death till Dec - 2015, 9 No's

Following activities have been implemented for prevention & control of Vector Borne Diseases in the State:

1. Month-wise activity plan for all the districts for carrying out the activities in a timely manner.
2. Continuous and mass Aedes surveillance and source reduction activities in 2570 identified problematic sub centres and 25 urban towns and cities.
3. Action has been taken for mosquito proofing of wards in Taluk level hospitals and CHCs. Further, arrangements have also been made to provide bed nets to inpatients.
4. As a part of Health education, Month of July is considered as Anti Dengue Month to create awareness among the community with special reference to the problematic sub centres and villages.
5. Training of Medical Officers, Laboratory technicians, Health Assistants (M), Health Assistant (F) and Block Health Educators have been conducted at State, District and Zonal level, in order to detect and manage Dengue fever cases including diagnosis and treatment as well as referral cases.
6. Necessary inputs like, ELISA based NS-1 antigen kits, larvicides, adulticides have been provided to the districts in sufficient quantity.
7. Thirty two Sentinel Surveillance Laboratories are functioning throughout the State and Samples from both Government & Private health facilities are being examined in these laboratories free of cost.

8. Rapid Response Teams have been formed at both State and district level for containment of outbreaks. IDSP Network is well established at all levels for day to day reporting and monitoring of situation.
9. 1340 Sub centres have been identified as high risk and problematic with respect to Dengue fever where in special Aedes surveillance and elimination measures have been taken up. The community is also imparted with advocacy sessions. Funds has been released to make the wards of Taluk Hospitals and District Hospitals mosquito proof and also to provide mosquito nets to the patients.
10. Antilarval chemical (Temephos) for larvicidal application and Pyrethrum extract for emergency intervention measures like fogging operations has been supplied to the Districts and sufficient quantities of these chemicals are also stocked at State headquarters for exigency measures.
11. Programme is being monitored at State level under the Chairmanship of Hon'ble Health Minister, Principal Secretary to HFW, Commissioner of Health and FW and AYUSH Services and Project Director-IDSP.
12. The Hon'ble Minister for Health & FW has also called for a meeting of all the Private Hospital chief to address the situation.
13. In case BPL Dengue cases are admitted in private Hospitals, the Department has also made arrangements for supply of platelets to such patients against specific requests from the private hospitals to the Drug Controller.
14. Inter-sectoral coordination meetings have been conducted both at state and district level involving other departments to make them aware of their roles and responsibilities in controlling VBDs. At state level the meeting was conducted under the Chairmanship of Hon'ble Health Minister on 7.4.2015.
15. IEC and social mobilization activities are being taken up at all levels through print and electronic media, focused group discussions and interpersonal communication to generate awareness among the community regarding prevention & control of Dengue and Chikungunya.
- Bus branding all over the State- July to Dec 2015
  - 18,000 posters, 1545 banners displayed.
  - 1.55 lakhs pamphlets distributed
  - Debate/ Quiz Competitions on Awareness on Dengue/ Chikungunya held in 2145 Schools.
  - Jathas Rallis conducted- 2626 No.
  - Advocacy Sessions conducted-1820 No.
  - Awareness through print media in 400 news papers.
  - Awareness in electronic media TV spots- 13
  - Wall Writings on Prevention & control aspect of Dengue/ Chikungunya done in selected 765 villages
  - Media Sessions- 30 No.
  - Private Practitioners Sessions-30 No.
  - Inter personal communication is done during house to house visit by Health Assistants, ASHA etc.

## **2 National Tuberculosis Control Programme:**

Revised national tuberculosis control programme assisted by World Bank is a centrally sponsored programme, which is implemented in the state in phased manner since 1998. The main objective of programme Universal Access to TB care. In Karnataka state all the 30 Districts and Bruhat Bangalore MahanagaraPalike covering 645 lakh population are covered under RNTCP from July 2004 onwards.



**Organizational Structure In RNTCP Is As Follows:**

1. Total 188 TB Units are created; one TB Unit (Sub Districts) for every 5 lakh population (and 2.5 lakh population in hilly, forest & difficult areas).
2. Total 681 DMCs are created as the Designated Microscopic Center 1 lakh population (and 0.5-lakh population in hilly, forest & difficult areas).
3. Appointing Senior Treatment Supervisor & Senior TB Laboratory Supervisor one each for TB Unit and provided with one 2 wheeler. Apart from one TB- HV for one lakh population (urban areas), 30% of Lab. Technicians at designated Microscopic Centers level and one Data Entry Operator for all Dist. & DOTs Plus Supervisors and other posts for State head quarters more than 865 contractual staff recruited in the state.
4. Tuberculosis Control Societies at State level and Dist. level are formed.

5. All 46 Medical College, 29 MO, 43 TB HV and 32 LT are appointed for RNTCP work.

Direct Observation Treatment - The Main Strategy In Programme:

Direct Observation Treatment Short Course- (DOTs) is adopted to reduce the patient defaulter rate and increase the cure rate. The patient visiting a nearby DOT center and consumes the medicine in presence of Health Worker or DOT provider. Treatment is being provided at all General Hospitals, Primary Health Centers, Sub-Centers, NGOs, Medical College Hospitals and Community DOT Centers. Patients are provided treatment within 1 K.M. radius of their residence. Quality Drugs are supplied directly from Government of India to state drug stores situated in State TB Center premises. The stock of drugs is adequate. Government of India (75%) and Govt. of Karnataka (25%) provide funds for the programme. Funds released to Dist. TB Societies from State TB Society.

**Table 12.43: The State Non-plan fund for RNTCP**

Year	Plan		Non - Plan 2015-16 April To December (2015)	
	Fund Released	Expenditure	Fund Released	Expenditure
2015-16	--	-	1,97,55,000	1,91,83,095

**Performance:**

**Table 12.44: Overall performance of the State for RNTCP in the financial year 2014-15**

Indicator	Annual	Achievement	%	Target for the year 2015-16
	Target		Percentage	
Sputum Examination	376800	5,57,584	148	375800
Total Tb Cases Notified	89176	59,190	66.4	89176
New Sputum Positive Cases Notified	33284	25,370	76.3	33284
Sputum Conversion	90	-	89	90
Cure Rate	85	-	83.4	85

**Plan of Action for 2015-16:**

- To achieve target for case detection, conversion and cure through intensive supervision and monitoring at all levels.
- Culture & sensitivity Test lab has been started at Rajeev Gandhi Chest Disease Hospital and KIMS Hubli premises.
- Link DR-TB to be established in Medical Colleges in TB Centres.
- Active Involvement of NGOs, Private Practitioners and Other Sectors.
- Establishing C/DST lab at Raichur Institute of Medical Sciences.
- As per the 55<sup>th</sup> EC to have MOU with their medical colleges, Mandya, Shimoga and Bellary for C/DST after they pass their proficiency test.
- Fill up of vacant posts in the STC.
- To hence focused intervention in here poor performing Districts with supportive supervisor and hand holding involving all case provides to improve patient care.

**3 National Leprosy Eradication Programme:**

**Introduction:** National Leprosy Programme is one of the oldest and the most successful National Health Programme.

National Leprosy Control Programme was started in 1955. Karnataka has achieved the Goal of elimination in the year 2005. Tremendous achievement was made in the Programme with regard to accessibility and service delivery with the successful implementation of the Programme. The prevalence rate of leprosy dropped from 40/10000 population in the year 1986 to 0.40/10000 population in 2015.

As on today, the goal of elimination i.e., prevalence rate less than 1/10000 population has been achieved in 29 Districts (Chitradurga, Shimoga, Tumkur, Chikmagalur, Dakshina Kannada, Hassan, Kodagu, Bangalore (U), Bangalore ®, Belgaum, , Bagalkot, Haveri, Gulbarga, Uttar Kannada, Gadag, Bidar, Udupi, Mandya, Racihur, Bijapur, Dharwad, Kolar, Mysore, Koppal, Chikkaballapur, Yadagir, Davanagere, Chamarajanagar & Ramanagar ) and 1 District Bellary has prevalence rate less than 1.06/10000 population. Karnataka is considered as a low endemic state up to end of 31/12/2015. At Present there are 2441 on hand. So far 564694 cases have been cured with MDT since 1986.

**Table 12.45: Infrastructure facilities available for Eradication of Leprosy in Karnataka is as follows**

Infrastructure	Nos.
Joint Director (Leprosy)	1
State Survey& Assessment Unit (SSAU)	1
Districts Leprosy Officers (DLOs)	30
National Leprosy Control Centres (NLCCs)	20
Modified Leprosy Control Units (MLCUs)	09
Urban Leprosy Centres (ULCs)	48
Twenty Bedded Hospital Wards	22
Leprosy Training Centres	02
Leprosy Rehabilitation & Physiotherapy Unit	01
Non Governmental Organizations (NGOs under new NGOs Scheme)	24

**Table 12.46: Physical Target and Achievements for Eradication of Leprosy from 1999-2000 to 2015-2016**

New Cases Detected			Cases Cured			PR	Deformity Rate
Year	Target	Ach	%	Target	Ach		
1999-00	10000	23095	230.95	14000	21154	151.10	3.10
2000-01	8000	17882	223.52	14000	19986	142.75	2.18
2001-02	8000	21307	266.34	14000	19584	139.84	2.45
2002-03	13890	13070	94.09	19720	15340	78.00	1.90
2003-04	-	10598	-	-	12522	-	1.40
2004-05	-	6133	-	-	7486	-	1.08
2005-06	-	5253	-	-	6705	-	0.56
2006-07	-	4299	-	-	4455	-	0.50
2007-08	-	4522	-	-	4225	-	0.52
2008-09	-	4411	-	-	4277	-	0.50
2009-10	-	4299	-	-	4236	-	0.49
2010-11	-	3071	-	-	3011	-	0.48
2011-12	-	3718	-	-	3491	-	0.46
2012-13	-	3436	-	-	3355	-	0.45
2013-14	-	3461	-	-	3295	-	0.45
2014-15	-	3314	-	-	3260	-	0.44
2015-16*	-	2295	-	-	2264	-	0.40

\*(Up to Dec 2015)

**Table 12.47: Budget Allocation and Expenditures for NLEP From 1999-2015**

Year	Govt. of India Cash Assistance 100% CSS (Plan)			State Plan	
	Budget Allocation (in lakhs)	Actual Release from Govt. of India	Expenditure (in lakhs)	Budget Allocation (in lakhs)	Expenditure (in lakhs)
1999-00	71.00	64.54	44.71	70.66	113.51
2000-01	62.00	55.18	8.50	105.07	125.55
2001-02	62.00	30.00	28.74	155.09	133.32
2002-03	50.00	30.00	14.18	50.00	39.54
2003-04	50.00	22.17	15.11	50.07	41.35
2004-05	50.00	12.50	12.50	42.15	33.70
2005-06	63.25 (ZP)	14.00	14.00	3.50	-
2006-07	56.25	14.29	13.35	3.59	-
2007-08	70.89	-	-	5.59	1.18
2008-09	67.20	13.00	13.00	3.25	-
2009-10	-	-	-	4.00	-
2010-11	-	-	-	4.00	-
2011-12	-	-	-	-	-
2012-13	-	-	-	-	-
2013-14	-	-	-	-	-
2014-15	-	-	-	-	-
2015-16*	-	-	-	-	-

\*Upto Dec 2015

**Integration:**

As per Government of India guidelines, during 2002-03 Integration of Leprosy Programme into General Health Care Services has been implemented. All the Leprosy Staff along with Other General Health Care Staff, are involved in the Leprosy Control Work, as part of their duty. With the decreasing case load, running a vertical programme was considered not cost effective. There was restructuring of leprosy control activities, so that they would be offered through the General Health care. For the process of integration to go smoothly, General health care staff were involved by including them in four modified leprosy elimination campaigns (MLECs) between 1997 & 2003 and detected 18911 New cases.

1. The Annual New Case detection Rate was more than 10/100000 population in 31 Blocks as on 31st March 2014. The Special Activity is done in all these blocks during this year 2014-15.

**Welfare measures for the Persons Affected by Leprosy:**

1. 69 Reconstructive Surgery Operations done as on 31<sup>st</sup> Dec 2015 Rs.8000/- paid (As per Guidelines) incentive for RCS undergone Persons Affected by Leprosy.
2. Micro Cellular Rubber Footwear provided to 2735 Persons Affected by Leprosy ( PALs).
3. 1273 Self care kits provided to foot ulcer cases.
4. 197 Lepra reaction cases treated with supportive drugs.
5. Splints crutches and other needed appliances provided.
6. 5% of Group 'D' Jobs reserved for the Persons affected by Leprosy during recruitment.
7. Prevention of Deformity (POD) camps conducted regularly in all the Taluk level hospital.
8. Civic amenities and Medical facilities provided to the Persons Affected by Leprosy

family member residing in 20 Leprosy colonies in the State.

9. Grant-in Aid is provided by State Govt. for the NGO, hospitals providing treatment to the Persons Affected by Leprosy at the rate Rs.500/bed for adults and Rs,275/bed for children per month.

**The main objectives under NLEP:**

1. Elimination of leprosy i.e prevalence of less than 1 case per 10000 population in all the Districts of the State.
2. Strengthening Disability Prevention & Medical Rehabilitation of persons affected by leprosy.
3. Reduction in the level of stigma associated with leprosy.

**NLEP Results proposed to be achieved at the end of the 12th Five Year Plan period:**

1. Improved early case detection
2. Improved case management
3. Stigma reduced
4. Development of leprosy expertise sustained
5. Monitoring supervision and evaluation system improved
6. Increased participation of persons affected by leprosy in society
7. Programme management ensured.

**Plan of Action for Expected outcomes by 2015-16:**

1. IEC activity to be improved.
2. General Health staff to be trained for leprosy and public awareness for the disease is arranged.
3. The Rehabilitation for leprosy disabled persons is arranged in Districts
4. PR rate less than 1/10000 population to be achieved by 2016 in all the Districts State.
5. The detected Leprosy patients are monitored to get early, regular and quality treatment. Cases to get treatment in the nearest hospital and referred to higher hospital for further specialized treatment.

It is expected a world with a reduced burden of leprosy, reduced stigma and discrimination, activities based on the principles of equity and social justice, and strong partnerships based on equality and mutual respect at all levels.

#### **4 National Programme for Control of Blindness:**

The National Programme for Control of Blindness was started in 1976 as a Centrally Sponsored Scheme to counter the problems of Blindness due to various factors and also to reduce the prevalence of Blindness to 0.3% by 2020. The present prevalence rate of blindness is 1.9% as per National Survey 2001-02.

1. The Karnataka State Health and Family Welfare Society (Blindness Control Division) is working under National Health Mission (NHM) headed by Mission Director. The State Programme Officer will implement and monitor the programme through a network of Districts Programme Managers (Blindness Control Division) at Districts level as per the Guidelines of NPCB. Government of India releases the funds to the State Society for onward distribution of funds to all Districts Health & Family Welfare Society (Blindness Control Division) based on the Target assigned to each Districts.

2. Cataract is the major cause of Blindness. 99% of the Cataract surgeries are IOL inserted surgeries. The patient affected with cataract are treated free of cost in Govt. hospitals and NGO hospitals who have MoU with NPCB. Cataract camps are being conducted on regular basis throughout the state in

both the government and voluntary sector.

3. Diabetic Retinopathy, Glaucoma management, Laser Technique, Corneal Transplantation, Vitreo Retinal Surgery, Treatment of Childhood Blindness etc., are also treated under NPCB in order to provide improved eye care services and control the incidence of blindness. The patient affected with any of the above eye diseases will also be treated free of cost in Govt. hospitals and NGO hospitals who have MoU with NPCB.

4. In order to detect refractive errors in school going children, the school teacher having their proximity to the children are trained in primary eye screening. The identified children experiencing difficulties in reading are immediately referred to the Para medical Ophthalmic Officers (PMOOs) for eye screening. The children detected with refractive error are provided free spectacles.

5. 37 Eye Banks registered under Human Organs Transplantation Act are functioning in Karnataka including 3 Government Eye Banks at Minto Hospital Bangalore, K.R.Hospital Mysore and Districts Hospital Belgaum. As per the policy of Govt. of India under NPCB eye bank infrastructure is also improved to increase cornea collection and Keratoplasty. Accordingly 9 Eye Banks have been strengthened under NPCB so far. Incentives are also given to all the eye banks registered under HOTA for collecting eye balls in order to increase the cornea collection. Rs.35.49 lakhs as Incentives for eye ball collection has been provided during the year.

**Table 12.48: Physical Target & Achievements – Cataract Surgeries**

Year	Target	Achievement	%
2011-12	4,10,000	4,51,566	110.14
2012-13	3,54,650	3,74,605	105.65
2013-14	3,54,560	3,62,481	102.23
2014-15	4,04,563	3,63,661	89.89
2015-16 (upto Dec-2015)	4,04,563	2,69,562	66.63

**Table 12.49: Achievement of School Eye Screening Programme**

Year	No. of Children Screened	No. of Children detected with Refractive Error	No. Spectacles given to Children
2011-12	13,00,865	20,451	16,840
2012-13	40,72,358	23,597	21,879
2013-14	32,47,402	32,487	30,161
2014-15	29,05,004	47,003	37,786
2015-16 (upto Dec-2015)	19,75,557	49,937	20,904

**Table 12.50: Target & Achievement of Eye Balls Collection**

Year	Target	Achievement	%
2011-12	5,500	3,061	55.65%
2012-13	5,600	3,492	62.36%
2013-14	5,600	3,499	62.48%
2014-15	5,600	3,938	70.32%
2015-16 (upto Dec-2015)	5,600	2,935	52.41%

**Table 12.51: Allocation Of Funds & Expenditure Of State Plan & C.S.S. Scheme, Rs.in lakhs)**

State Plan – 2210-06-101-8-02		
Year	Released	Expenditure
2011-12	135.00	129.53
2012-13	135.00	130.66
2013-14	183.25	171.23
2014-15	330.00	195.34
2015-16	260.00	160.85

**Table 12.52: Grant in Aid released to Karnataka State Health & Family Welfare Society (Rs.) (Blindness Control Division) from Govt. of India, (Rs. in lakhs)**

Year	Released	Expenditure
2011-12	1114.82	1278.13
2012-13	1689.53	1236.00
2013-14	935.00 (Including State Share)	1250.61 (Including Opening Balance)
2014-15	1890.73 (Including State Share)	1276.47
2015-16 (Upto Dec-2015)	954.00	581.34

## 5 The Integrated Disease Surveillance Project (IDSP):

The Integrated Disease Surveillance Project was launched in 2005. The Objective is to establish a decentralized state based system of surveillance for communicable and non-communicable diseases, so that timely and effective public health actions can be initiated in response to health challenges in the country at the state and national level.

To improve the efficiency of the existing surveillance activities of disease control programs and facilitate sharing or relevant information with health administration community and other stakeholders so as to detect disease trends over time and evaluate control strategies. The Specific Objectives of Integrated Disease Surveillance Project are:

1. To integrate and decentralize surveillance activities.

2. To establish systems for data collection, reporting, analysis and feedback using Information Technology.
3. To improve laboratory support for disease surveillance.
4. To develop human resources for disease surveillance and action;
5. To involve all stakeholders including private sector and communities in surveillance.

#### **Existing System (IDSP):**

1. Reporting: Surveillance of communicable diseases involving Public and Private health care facilities throughout the state. Weekly reporting followed unlike the old monthly reporting system. Involvement of Private institutions which cater for 60%- 80% population.
2. Data Analysis and Feedback: Ongoing weekly reporting through SPL formats by peripheral institutes and analysis at State and Districts Surveillance unit as vigilance against identifying impending outbreaks . Weekly feed back by higher institutions to the peripheral reporting units/health staff.
3. Network of Laboratories: Including Referral labs (Involving of 8 Medical Colleges), Priority labs and Districts Public Health labs supported financially to confirm outbreaks.
4. Human Resource & Training: Recruitment of epidemiologists, Microbiologists, Entomologist, Data Managers and Data Entry operators on contractual basis to support surveillance. Peripheral/Districts. Health staff trained to identify and reporting of various diseases under IDSP Committed State & Districts authorities with capable and trained support staff.
5. Initiation of media scanning: To identify outbreaks reported by media and follow-up with Districts on the genuineness and actions initiated against them.
6. IT Strengthening: Online reporting capacities at PHCs/CHCs/Taluks/Districts and State level Hospitals. Communication has been

made faster to report of surveillance data on weekly basis on web portal. Conducting Video conference in outbreak management.

7. Outbreak Management: Designating Districts Rapid Response teams involving Physician, Pediatrician, Epidemiologist Microbiologist, Entomologist headed by Districts Surveillance Officer to investigate cause and contain the outbreaks. outbreak reporting with in 48 hrs of occurrence.

#### **Financial Line Items of IDSP:**

##### **I. Operational Cost:**

1. Field visit
2. Office expenses: Printing of Reports, Formats, Maintenance & monitoring reports of ICT equipment.
3. Board band expenses : Payment of Telephone bills etc.,
4. Outbreak investigation : Transpiration of samples including collection during outbreak
5. Review meetings

##### **II. Human Resources:**

1. Remuneration of Epidemiologists, Microbiologists, Entomologist, Veterinary Consultant, Consultant Finance/procurement, Consultant Training & Technical, Data Managers, Data Entry Operators .

##### **III. Laboratory Support:**

1. Districts Priority Labs: - Purchases of Lab equipments, Digenetic Kits, Glassware, culture Media and reagents required for up gradation of testing facility for Dengue, Malaria, Chikungunya, Cholera&Leptospirosis.
2. Referral Network Lab: - for specimen test of Elisa/ repaid test for Leptospirosis, Dengue, Viral Hepatitis , Measles, Meningococci, Blood culture for Typhoid, Diphtheria, Cholera& others.

**Table 12.53: Physical & Financial progress from inception**

Year	Physical progress reporting under S.P.L. Formats	Total Budget allocated	Expenditure
2004-05	Not reporting	421.11	---
2005-06	15%	---	70.11
2006-07	25%	353.00	206.00
2007-08	52%	306.79	104.97
2008-09	78%	207.64	146.71
2009-10	83%	180.61	163.42
2010-11	80%	269.90	146.01
2011-12	85%	211.53	178.50
2012-13	89.3%	373.56	214.65
2013-14	92%	444.02	308.53
2014-15	92%	300.00	375.65
2015-16 (upto Dec-2015)	94%	240.00	175.35 (prov)

**Table 12.54: Progress of Various Health Programmes (Unit in Numbers)**

Programmes	2011-12	2012-13	2013-14	2014-15	2014-15 (up to Dec-2015)
Prasuti Aaraike	6,82,402	5,14,327	4,85,795	2,23,648	35,136
Madilu	3,46,177	3,13,332	3,23,155	2,39,202	2,64,260
Tayi Bhagya	42,582	38,832	42,471	28,726	14,740
Janani SurakshaYojane	4,54,794	2,85,500	3,83,251	3,05,775	3,11,810
Suvarna Arogya Chaitanya	1,241	1,219	1,744	559	389
Arogya Kavacha	5,91,439	5,09,440	6,03,762	5,02,456	6,86,128
Dialysis	32,124	19,239	46,315	36,528	42959
Telemedicine	13,944	18,603	34,624	28,923	39717
Vajpayee Arogyashree	7,565	12,842	32,212	27,859	29,335
Geriatric	7,872	11,549	58,650	72,542	61,798
Burns Care Wards	1,275	926	1,076	732	800

#### 12.2.4 Other Major Health Programme Initiatives:

The Department of health and family welfare services implements various National and State health programs of public health importance and also provides comprehensive health care services to the people of the State through various types of health and medical institutions. The progress of the health programmes are presented in Table 13.44.

##### 1 JANANI SURAKSHA YOJANE (JSY):

The goals of JSY are reduction in maternal and infant mortality rate as well as to increase the institutional deliveries of BPL and SC/ST families. Under this scheme besides ensuring

maternity services like 3 antenatal checkups and referral transport cash assistance is provided for deliveries taking place both in health institutions and home. In rural areas cash assistance to the mother for institutional delivery is Rs. 700 per case whereas in urban areas cash assistance to the mother is Rs. 600 for institutional delivery. The cash assistance is also available for women delivering at home with an amount of Rs. 500 being given per case. If specialists are not available in Government-run health centers or hospitals, the institution can hire such specialists to manage complications or for caesarean section. Assistance up to Rs.1500



per delivery could be utilized by the health institution for hiring services of specialists.

## 2 THAYI BHAGYA:

In order to reduce IMR and Maternal Mortality Rate (MMR) in the backward Districts of Bijapur, Bidar, Gulbarga, Yadgir, Raichur, Koppal, Bagalkot and Chamarajanagar, empanelled private hospitals are given an incentive of Rs. 3 Lakhs for every 100 deliveries conducted including surgeries with treatment being free to the patients.

## 3 AROGYA KAVACHA 108:

“ArogyaKavacha” 108 Emergency service was started in the state of Karnataka on November 1, 2008, by the Karnataka Health and Family

Welfare Department under a Private Public Partnership through an MOU signed with GVK EMRI.

The Role and Mission of ‘108’ is to save lives by providing a comprehensive ‘Emergency Response Service’ to those in Medical, Police or Fire emergencies, through a single integrated number - 108. We operate 24 x 7 and 365 days of the year with a fleet of 711 well equipped ambulances. The ambulances are manned by a trained Emergency Medical Technician (EMT) and a trained driver (Pilot). This service is available across the length and breadth of Karnataka i.e., all the 30 Districts.



The Ambulances are stationed strategically in all Districts and taluks across Karnataka so they can reach the incident location within the shortest possible time anywhere in the state. The services are operated through a centralized Emergency Response Center located at Bangalore. At present there is one ambulance for every 85000 populations with a total of 711 Ambulances throughout the state.

This service can be utilized by any individual who requires emergency help (Medical, Police, or Fire) irrespective of his economic status, caste, creed, color, ethnicity, gender, and/or literacy levels. The process of calling for an ambulance is simplified to such an extent that a call to the toll-free number '108' with details of emergency, the number of people involved and the incident location supported with a landmark; would trigger an ambulance dispatch . This is an absolutely FREE SERVICE starting from the phone call till the point of reaching the hospital.

The medical emergencies can be availed for Accident and Trauma (Vehicular and non vehicular), complaints related to Cardiac, Respiration, Diabetes, pregnancy,

Stroke/Convulsions, Suicide attempts, Poisoning cases, Assault/Violence, Animal Attacks, Neonatal, Building Collapse, Fire, Burns, hazardous material ingestion etc.,

From the date of inception till December 2015, 499.62 lakh calls are attended, 52.58 lakh emergencies are attended and out of this 16,43,306 pregnant women have utilized the services and 1,44,700 lives are saved.

#### 4 Janani SurakshaVahini:

Janani Suraksha Vahini Programme was initiated under NHM in 2009-10 to ensure 24/7 round the clock, free referral transport between the facilities for pregnant women and sick neonates/ infants. Out of the existing ambulances of the CHCs/ THs/ DHs one ambulance of each facility was designated as JSV Ambulance. At present there are 180 JSV Ambulances. Drivers are outsourced by District Health Societies from Manpower Agencies by calling tenders as per KTPP Act. 3 drivers (1 Regular and 2 Out sourced) are given to each vehicle to work in 8<sup>th</sup> hourly shifts. Total number of beneficiaries under JSV from April 2015 to December 2015 is 25515.



### 5 Nagu-Magu:



To provide Drop Back facility for post natal mothers and new born from Government Health Facilities to their residence, 200 drop back vehicles called as “Nagu-Magu” were inaugurated on 5<sup>th</sup> February 2014. The Nagu-Magu vehicles are deployed one each at the District Hospital and Taluka Level Hospitals. Drivers for Nagu-Magu Vehicle are outsourced by District Health Societies from Manpower Agencies by calling tenders as per KTPP Act. Total number of beneficiaries under Nagu-Magu from April 2015 to December 2015 is 58362.

### 6 Bike Ambulances:(First Response Unit):

The Bike Ambulances/ First Response unit (FRU) is inaugurated on 15<sup>th</sup> of April 2015 by Government of Karnataka. It is the “Platinum Ten Minutes” trauma care initiative aimed at reducing deaths due to road accidents. It is an unique initiative and is the first of its kind to be taken up by the State Government in our Country. The first aid and medical care during the “Platinum Ten Minutes” is paramount to save the life of an accident victim, hence the pioneering attempt to start motorbike ambulance service. The motorbike ambulance service is another pilot and pioneering initiative to ensure first aid to the victims during the Golden Hour.



They are useful for negotiating the small streets and heavy traffic in the large urban areas where it would be difficult to move ambulances through crowds. The fleet of high-powered touring motorcycles are available when required to respond to various trauma/medical incidents. The Bike ambulances will be currently deployed in Bangalore (19 Nos), Mangalore (2 Nos), and one each to the corporation areas of Mysore, Kalburgi, Belagavi, Hubli-Dharwad, Davanagere, Tumkur, Vijayapura, Shimoga and Kolar Districts where heavy traffic congestion and narrow streets would be easily overcome by the agile nature of the bikes. The programme will be implemented through GVK-EMRI who are already experience in providing such services through Arogya Kavacha-108. Riders are paramedics or EMTs who are recruited and trained on managing emergencies. Motorbike ambulance drivers would be fully trained in rendering first aid and would start resuscitation measures to save the victim.

Two-wheelers by virtue of their size could manoeuvre through narrow and busy roads and reach accident spots with ease while they would be followed by a fully equipped four-wheel ambulance for shifting the victim to a nearest hospital for further treatment if necessary.

Bike ambulance is able to respond to a medical emergency much faster than an ambulance or a car in heavy traffic which can increase survival rates for patients suffering cardiac arrest/ accident/ other emergencies.

Totally 2220 emergencies (minor trauma and accidents) are attended by the bike ambulances from the date of inception out of which 81 are critical cases and 1637 cases are referred to 4 wheeler ambulance.

#### **7 RASHTRIYA BAL SWASTHYA KARYAKRAM (RBSK):**

This is a unique programme being implemented for the first time in the Country. In this programme, about one crore school children (both private and Govt. sector) are medically screened and, children needing surgeries are provided surgical treatment at free-of-cost in empanelled hospitals. Till now 2008-09 to 31-12-2015, Total: 11679 surgeries have been done.

#### **8 MADILU:**

It is one of the schemes started by the State Government to provide post natal care for the mother and the child. The objective of the scheme is to encourage poor pregnant women to deliver in health centres and hospitals in order to considerably reduce maternal and infant mortality in the state. Under this programme, a kit is provided to women belonging to below poverty line families delivering in Government hospitals. The benefit is limited to two live deliveries.

As per Government Order No. HFW 52 FPR 2014, dated: 15.10.2014 the parity and age limit is removed for 10 High Priority Dist.s of Karnataka (i.e. Bagalkote, Bijapur, Gulbarga, Yadgiri, Koppal, Raichur, Bellary, Bidar, Gadag and Chamarajanagar).



**9 Prasooti Aaraike:**

Under This scheme, BPL pregnant women (including SC/ST) who undergo deliveries in Government Hospitals are given an incentive of Rs.2000(Including JananisurakshaYojane) for getting their nutritional requirement.

As per Government Order No. HFW 52 FPR 2014, dated: 15.10.2014 the parity and age limit is removed for 10 High Priority Districts of Karnataka (i.e. Bagalkote, Bijapur, Gulbarga, Yadgiri, Koppal, Raichur, Bellary, Bidar, Gadag and Chamarajanagar).



**10 Arogya Vani-104:**



The Government of Karnataka has started the Arogya Sahayavani-104 service with the motto of reaching the unreached, to provide all the health care services available in the public sector.

Those patients residing in the remote rural villages, who cannot access the medical doctors in the hospitals, can now contact with the doctors through Arogya Sahayavani-104. "104" is a toll free number through which people can avail consultation for minor ailments, counseling services, information on services available in public Health facilities, directory services (Eye bank, Blood Bank) and grievance redressal (Services, Epidemics, Corruption, Hygiene, Drugs and Diagnostics, ASHA grievances, etc., )

Arogya Sahayavani-104 call center is situated at IT ParkHubli with 100 seater capacity. People (Citizens) from any part of the state can avail their service by calling 104 should the clock throughout the year. From the date of inspection till December 2015, 67,04,425 calls are received at the call center. Around 75 deaths are averted from inspection. At present around 20000 calls per day on an average is being received at the call center.

#### **11 Vatsalya Vani:**

For the first time in India, A Three way call conferencing structure for Mother Child

tracking system called "VatsalyaVani" is launched in Karnataka by Hon'ble Chief Minister Shri. Siddaramaiah on 21<sup>st</sup> December 2015. This programme is implemented through Arogya Sahayavani-104.

Karnataka has achieved the Millennium Development Goals. Maternal Mortality Rate of Karnataka is 133/lakh live births & Infant Mortality Rate is 31/1000 live births. Our State under the leadership of Hon'ble Chief Minister Sri Siddaramaiah & Health Minister Sri U T Khader is a step ahead of all the other states in the MCTS Programme by bringing in the unique three way call conferencing structure for Mother Child tracking system called "VatsalyaVani".

To reduce Maternal Mortality Rate (MMR) and Infant Mortality Rate (IMR), "VatsalyaVani" would monitor and offer medical advice/counseling to the pregnant women throughout the pregnancy period at appropriate times. Likewise every child will be monitored at specified intervals to ensure it receives complete immunization. As a result complement other efforts to increase institutional deliveries, Prevent drop outs, improve delivery services etc., in the direction of reducing MMR and IMR.



**VatsalyaVani call center will offer the below services throughout the state:**

1. Monitor all pregnant woman and child through ANC/PNC advice.
2. Promote, protect and maintain the health of the mother and child through advice e.g. nutrition, health & wellbeing.
3. Providing information of various government health programs and schemes and their entitlements
4. Identify and track High Risk Pregnancies and low weight birth babies.
5. Motivate mothers for Institutional Delivery and family planning methods.
6. Arrange and monitor transfer to nearest delivery point through state ambulances.
7. Eliminate home deliveries.
8. Track Immunization status.
9. Prevent dropouts.
10. Ensure complete service delivery.

**12 Vajpayee Arogyashree:**

GOK sponsored Vajpayee Arogyashree Health Assurance Scheme for BPL families is implemented by Suvarna Arogya Suraksha Trust since 2010 onwards. The scheme provides for cashless treatment facility in any network of super specialty hospitals for any of the identified seven tertiary ailments like Cardiology, Cancer, Neurology, Genito Urinary, Burns, Polytrauma and Neonatal with paediatric surgery.

As tertiary treatment is very expensive and beyond the means of BPL families, the scheme has been beneficial in protecting them from incurring out of pocket expenditure as well as ensuring that qualitative health care treatment is accessible to them in super specialty hospitals.

From 2010 till 2014-15, the scheme has benefitted 94937 BPL persons and the project has reimbursed Rs. 545.76 crores to the

hospitals. During the current financial year from April 2015 till December 2015, a total of 29335 BPL persons have availed treatment and an amount of Rs. 163.37 crores have been paid to the network hospitals for treating these beneficiaries.

Since inception till December 2015, a total of 124272 BPL beneficiaries have availed treatment and the project total scheme expenditure is Rs. 701.13 crores.

**13 Initiatives Taken to Reduce MMR (From Conception to Delivery):**

1. On confirmation that the woman is pregnant, ANC card/Thayi card is given through Auxiliary Nurse Midwife of the said locality and registered in MCTs.
2. 4ANC Checkup is a must. Focus is on early registration.
3. Supply of 100 IFA Tablets is compulsory.
4. Two TT injections are given compulsorily during pregnancy.
5. If the pregnant woman is found to be anemic (<7gm) an addition 100 IFA Tablets are given.
6. If the pregnant woman is suffering from severe anemic (<7gm), then she is referred to the upgraded hospital for injection iron sucrose.
7. A cash benefit of Rs 1000 is given under PrasuthiAraikeprogramme for supplementing nutrition.
8. The pregnant woman is advised to have food with more iron content and nutrition and is advised to have institutional delivery.
9. After delivery 100 IFA Tablets are given to the mother to prevent anemia both in mother and the new born.
10. In order to give 24 hours health services, 24x7 facilities are given in selected Primary Health Centres.
11. As soon it is found that it is a complicated pregnancy and to give additional facilities 192 upgraded hospitals have been identified in the State.

12. Advised to stay compulsorily in the health Institution for 48 hours after delivery.
13. From the stage of pregnancy till the delivery, free delivery, drugs, diet, blood and transport arrangements are made free of cost under JananiShishuSurakshaKaryakrama(from center)
14. Before the mother leaves from hospital to home Government facilities like Madilu, PrasutiAraike, JananiSurakshayojane are given to BPL/SC/ ST beneficiaries.
15. The mother is advised on family planning and immunization to child before leaving the hospital for home.
16. "Nagu-mogu" ambulance services are provided free of cost for drop-back to home
17. 104 Vatsalyavani helpline has been launched in 3 Districts of Karnataka for further Maternal and Child health services.

#### **14 Initiatives Taken to Reduce IMR:**

1. Integrated Management of Neonatal and Childhood Illnesses (IMNCI) is implemented in all Districts. The supervision of the activity is being under taken in 10 Districts where Government Medical Colleges are functioning.
2. 972 Newborn Care Corners (NBCC) have been established in 24X7 PHCs.
3. 166 New Born Stabilization Units (NBSUs) have been established in Taluka Hospitals and Community Health Centers.
4. 36 Special Newborn Care Units (SNCUs) have been established in Medical College Hospitals, Districts&District Level Hospitals.
5. 10 Bedded, 30 Nutritional Rehabilitation Centers (NRCs) and 27 Modified Nutritional Rehabilitation Centers (MNRCs) are functioning in the state.
6. Screening and Treatment of Retinopathy of Prematurity (ROP) in Premature and Low-birth weight babies is taken up in the 23 Districts of Karnataka (Raichur, Gulbarga, Yadgir, Koppal, Bijapur,

Bagalkot, Bidar, Davanagere, Haveri, Gadag, Chitradurga, Bellary, Dharwad, Bangalore(urban & rural), Ramanagar, Mandya, Mysore, Chamarajanagar, Kodagu, Chikballapur, Kolar&Tumkur).

7. JananiShishuSurakshaKaryakram (JSSK) is implemented in all Government hospitals. Screening, Investigations and Treatment are free of cost for the infants up to 1 year.
8. Home Based Neonatal Care (HBNC) - Health Workers and ASHA Workers visit at least for a minimum of six times, identify the danger signs among the new borns and guide them to the hospitals in time and in advise the mother about the importance of Breast feeding and age appropriate infant feeding.
9. ASHAs are paid an incentive for further follow up of low birth weight and SNCU discharged babies till their 1st birthday.
10. Infant Death Audit (IDA) review meeting has been extended to include all deaths of children less than five years of age. The audit process and the reporting have become more stringent with orders issued for compulsory reporting of deaths from private health facilities also. The audit is conducted every month in the presence of DC to discuss about the medical & social factors leading to death, and corrective measures are taken to reduce child death.
11. The state has initiated mapping of health facilities catering to mother and/child with classification of level of care provided. Guidelines have been issued for maintaining the expected standards at each level. Special emphasis is being laid to reduce the perinatal mortality through these measures as this is a matter of great concern for the state.

#### **Achievements of the Department of Health and Family Welfare Services:**

1. IMR has been brought down from 47 to 31 per 1000 live births during 2007-2015
2. MMR has been reduced from 178 to 133 for 100000 live births between 2007-09 to 2010-15
3. Total fertility rate has been reduced to replacement level (2 children per couple).



The Govt. of India had set a target of total fertility rate of 1.9 to be achieved by 2015. This has already been achieved.

4. Institutional delivery for 2014-15 is 99.08%.
5. Fully immunized children from 80% to 100%. From 2009-10 to 2014-15

### **12.2.5 National Urban Health Mission:**

#### **Introduction:**

National Urban Health Mission (NUHM) aims to improve the health status of the urban poor particularly the slum dwellers and other disadvantaged sections, by facilitating equitable access to quality health care through a revamped public health system, partnerships and with the active involvement of the urban local bodies.

The main focus of the NUHM will be urban poor population living in listed and unlisted slums, all other vulnerable populations such as homeless, rag-pickers, street children, rickshaw pullers, construction, brick, lime kiln workers, commercial sex workers and other temporary migrants.

NUHM will cover all the District headquarters and other cities/towns with a population of 50,000 and above (as per census 2011) in a phased manner. Cities and towns with population below 50,000 will be covered under NRHM.

As per 2011 census, 236.25 lakh people reside in urban areas, and the urban slum population is 36.31 lakhs in Karnataka state. The challenge is that the state has 31.57% of population living in urban areas as against the National Average of 31.8%.

Under NUHM the emphasis will be to improve existing public health delivery system with a thrust on making available adequate health human resources, upgrading the existing health facilities in terms of infrastructure and equipment and also establishing new health facilities wherever necessary by providing specialist care as well as strengthening emergency response systems. This will enable the Health and Family Welfare Department or City Municipalities/Corporations to

effectively provide adequate primary health care to the urban poor, focus on promotive, preventive, and curative aspects of both communicable and non-communicable diseases, domestic violence on women, and strengthen trauma care and emergency care to the urban poor.

The strategy will comprise of strengthening the existing primary health care centers, establishing new primary health care centers wherever appropriately needed. Further, special outreach camps will be conducted by ANMs and ASHAs to ensure health care delivery at the door-step. Community participation will be facilitated by the Mahila Arogya Samithis (MAS) which will act as a bridge between the communities and the nearest health facility. The ASHAs will play the role of provider of first contact care and also generate community awareness with regard to various health issues, sanitation and nutrition.

It is generally felt that there is non-availability of reliable data on health status of people living in urban areas. A comprehensive baseline survey and mapping is being undertaken to gain insight into the dynamics of health needs of existing listed and unlisted slum pockets, urban poor concentration areas and other vulnerable population. This will help in assessing their health seeking behavior, health indicators such as morbidity and mortality patterns, ongoing health needs, and existing provisions for health care and out of pocket expenses etc.

An amount of Rs 5081.05 Lakhs is provided during 2013-14, of which State share is Rs 1270.00 Lakhs and Central share is 3811.00 Lakhs. Sanction has been accorded by the Government for implementation Of National Urban Health Mission in 135 wards of BBMP, 63 wards of Bangalore Urban, Mysore, Bagalkote, Mangalore and Ullal of Dakshina Kannada. In 2014-15, total number of cities taken up for implementation of NUHM in 2014-15 were 25 of which 5 are part of 2013-14 and 18 are new cities. The amount

approved was Rs. 86.24 Crores, of which GOI share was Rs. 64.68 Crores and GOK share was Rs. 21.56 Crores. The 18 new cities are Belagavi, Bellary, Bidar, Vijayapura, Chikkaballapur, Davangere, Hubli-Dharwad,

Gadag, Kolar, Kalaburagi, Sedum, Gangavathi, Raichur, Udipi, Yadgir, Dandeli, Puttur and Bantwal. In 2015-16, total budget approved is Rs. 104.21 Crores.

**Table 12.55: Demographic Profile (based on 2011 census)**

1	Total Population (In lakhs)	6,10,95,297
2	Urban Population (In lakhs)	2,36,25,962
3	Urban Population as percentage of total population	38.67
4	Urban slum population (in lakhs)	32,91,434
5	Slum population as percentage of urban population	13.95
6	Number of Metro cities	1
7	Number of Million + cities (> 10 lakh population)	0
8	Number of cities with 1 to 10 lakh population	25
9	Number of towns with less than 1 lakh but more than 50 thousand population	39
10	Number of State HQs/Dist. HQs which have less than 50 thousand population but are covered under NUHM	Nil

**Table 12.56: Details of cities/towns taken up for NUHM implementation**

Sl. No.	Name of City/Town	Type (state capital/Dist. headq uarters/other)	Population	Slum population	Implementing Authority (City/ Dist. Health Society)
1	Bangalore	Capital city	9482749	729765	Dist. Health Society
2	Mangalore	Dist. headquarter	145853	7726	Dist. Health Society
3	Mysore	Dist. headquarter	990900	39029	Dist. Health Society
4	Bagalkot	Dist. headquarter	111933	17447	Dist. Health Society
5	Ullal	Town	53773	2642	Dist. Health Society
6	Belgaum	Dist. headquarter	610350	52514	Dist. Health Society
7	Bellary	Dist. headquarter	410445	90404	Dist. Health Society
8	Bijapur	Dist. headquarter	327427	29765	Dist. Health Society
9	Bidar	Dist. headquarter	216020	62458	Dist. Health Society
10	Chikballapur	Dist. headquarter	63652	18320	Dist. Health Society
11	Davanagere	Dist. headquarter	434971	59990	Dist. Health Society
12	Hubli-Dharwad	Dist. headquarter	943788	184745	Dist. Health Society
13	Gulbarga	Dist. headquarter	543147	44867	Dist. Health Society
14	Gadag	Dist. headquarter	172612	36762	Dist. Health Society
15	Koppal-Gangavathi	Dist. headquarter	185340	73758	Dist. Health Society
16	Kolar	Dist. headquarter	138462	30045	Dist. Health Society
17	karwar-Dandeli	Town	52069	8397	Dist. Health Society
18	puttur	Town	53,061	8456	Dist. Health Society
19	Sedum	Town	52,500	7212	Dist. Health Society
20	Raichur	Dist. headquarter	234073	58988	Dist. Health Society
21	Udipi	Dist. headquarter	144960	8665	Dist. Health Society
22	Yadgir	Dist. headquarter	74294	30766	Dist. Health Society
23	Tumkur	Dist. headquarter	302134	52429	Dist. Health Society
		Total	15744513	1655150	

### Infrastructure:

One urban primary health centre (UPHC) may be planned for every 50-60 thousand

population under NUHM. In case there is an existing Urban Family Welfare Centre, Urban RCH Centre, Urban Health Centre, Urban Health Post, etc., the same may be upgraded and strengthened as UPHC. Where none exists, new UPHCs will have to be planned and the Dist. Health Society will initiate the process of identification of location/ land. NUHM will provide both capital and recurrent cost for up gradation and maintenance of the UPHCs, as per the norms. The Dist. Health Society can also hire premises for new UPHCs where land is not available.

### **Renovation/ Up gradation of existing Urban Health Centre:**

The existing health facilities to be up-graded into urban-Primary health centres. Though an amount of Rs. 10 lakhs will be given per health facility the amount will be utilized based on the requirement such as, the condition of the health facility, utilization of health services and number of OPD cases per month and deliveries conducted.

**Table 12.57: Financial Progress from 1st April 2015 to 31st December 2015**

	Physical Number	Total Budget allocated in Rs. lakh	Expenditure in Rs. lakh
1. Renovation @ Rs. 10.00 lakh/UPHC	177	1770.00	97.07
2. Construction of New UPHCs (Bangalore-10, Mangalore-7 and Bagalkot-1)	18	502.5	7.40
3. Medical Officers	206	243.18	103.95
4. Paramedics: (ANM, SN, LT, Pharmacists )	594	248.7	191.91
5. Support Staff	194	83.58	69.41
6. Furniture & Equipment	197	492.5	5.73
7. Urban ASHAs	1681	110.00	71.41
8. MAS	2548	156.4	0.73
9. Untied Grants to UPHCs	177	358.25	353.94
10. Untied Grants to UCHC	6	30.00	17.64

#### **12.2.6 HMIS & MCTS in Karnataka:**

HMIS (Health Management Information System) is an initiative undertaken under the National Health Mission (NHM) launched by Government of India. To collect the information uniformly timely from all the states, Government of India has prescribed HMIS formats throughout the country. The System of collecting information uploading online at the primary level & to get various reports by compiling the information for effective implementation of Health Schemes is Health Management Information System.

In Karnataka uploading of Information on HMIS portal from facility level is existing since Aug 2010 by which it is easier to get timely information. As there is provision of various reports at all levels it is possible to make use of these reports for various schemes & their implementation.

In Karnataka soon after a few years after the implementation of their scheme in every facility of the state 98% of the information is collected online data is being uploaded before 5th of every month & more emphasis is given to improve the quality of the data. District Level Action Plans / PIP formulation and monitoring the progress through Star rating of facilities using HR, Infrastructure data, equipment availability and service utilization are being done based on HMIS data.

#### **MCTS:**

In order to bring down Maternal Mortality Rate (MMR) & Infant Mortality Rate (IMR), it is essential to provide services to pregnant women & child. As a result of this MCTS (Mother & Child Tracking System) was introduced to keep track of services provided. Karnataka State is implementing MCTS Technology in co-ordination with NIC,

Bangalore & looking into state needs since Jan 2011.

Distributing Thyacards to each & every pregnant women & uploading the information of the Thyai card in MCTS Portal. Providing information to ANM regarding the services to be given to Pregnant Women in the prescribed time & sending SMS to the beneficiary as to which service she has to avail & uploading the services provided to Pregnant Women & Child by sending SMS to the MCTS Portal. Apart from this MCTS allows to creating work plan to ANM regarding services to be given to PW & Child so that the activities of the ANM can be monitored by any officer at all levels.

MCTS data is being used in the State for issuance of Birth Certificate at public health facilities; follow up of HIV positive pregnant women, outbound calls to beneficiaries from 104 health Helpline using three way conference call to

concerned Jr. Health Assistant and ASHA worker, performance monitoring and incentives to ASHAs.

#### **12.2.7 Rashtriya Bal Swasthya Karyakram (RBSK):**

The Rashtriya Bal Swasthya Karyakram is a major initiative specifically focusing on '4Ds' from 0-18 years children. Its aim is to holistically address the health and nutrition needs of children in a manner which fulfils the needs of today's lifestyle. RBSK program is envisaged as an important tool for the provision of preventive, promotive and curative health services to the population. The programme at the national level has been developed to provide guidance to States which are already implementing or plan to implement their own versions of the programme and to give guidance. The progress achieved under the RBSK program of the State is presented in Table 12.58.

**Table 12.58: Achievement under Rashtriya Bal Swasthya Karyakram**

Year	No. of Students Examined (Lakhs)		No. of Students Treated for Minor ailment (Lakhs)	No. of Major operations performed (Nos.)
	Target	Achievement		
2011-12	89.91	86.06	7.88	1241
2012-13	92.82	84.85	9.74	1219
2013-14	91.92	22.74	0.18	1744
2014-15	152.07	92.09	4.86	939
2015-16 (Upto Dec - 2015)	152.07	49.17	0.18	389

### Weekly Iron & Folic Acid Supplementation for Adolescents:

Adolescence is a period transition from childhood to adulthood characterized by rapid physical, biological and hormonal changes resulting in psycho-social, behavioral & sexual maturation in an individual. It is the second growth spurt of life and both boys & girls undergo different experiences in this phase. During this period of life there is a significant increase in nutritional requirements, especially for iron.

Anemia, a manifestation of under-nutrition and poor dietary intake of iron is a public health problem, not only among pregnant women, infants & young children but also among adolescents. Anemia in India primary occurs due to iron deficiency & is the most wide spread nutrition deficiency disorders in the country today. The prevalence of Anemia in girls (Hb<12%) and in boys (Hb<13%) is alarmingly high as per the reports, over 55% of both adolescent boys & girls are anemic. Adolescent girls are more vulnerable to anemia due to rapid growth of the body and loss of blood during menstruation. Highest prevalence of anemia is reported between the ages 12-13 years, which also coincides with the average age of menarche with increase in age, the prevalence of anemia among girls remains almost stagnant.

Iron Deficiency Anemia adversely affects the transportation of oxygen to the tissues and accounts for the diminished work capacity & physical performance. During Adolescence it causes impaired growth, weakened cognitive development, reduced physical fitness, work performance, capacity and diminished concentration in daily tasks and school performance, loss of appetite resulting in reduced food intake as well as menstrual problems, risk of pre-term labour and low birth weight babies.

Regular consumption of IFA supplement is therefore considered essential for prevention of

IDA. Hence as per the Govt. of India's suggestion, during the year 2012-13 all 30 Districts are selected for implementing the weekly Iron & Folic Acid supplementation for adolescents. To reduce the prevalence and severity of anemia amongst adolescents (10-19 years) the following intervention is recommended:

- ❖ Weekly once IFA Tablets (WIFS) :
  - Each IFA – Pink Tablet contains 45 mg of Iron with 400 mcg Folic Acid, it is given to children of 5 to 10 years age group weekly once for 52 weeks.
  - Each IFA – Blue Tablet contains 100 mg of Iron with 500 mcg Folic Acid, it is given to children of 11 to 19 years age group weekly once for 52 weeks.
- ❖ Biannual de-worming (Albendazole 400 mg), six months apart, for control of helminthes infestation.
- ❖ Information and counseling for improving dietary intake and for taking actions for prevention of intestinal worm infestation.

IFA & Albendazole Tablets given to Adolescents under Weekly Iron & Folic Acid Supplementation Programme:

#### 12.2.8 Universal Immunization:

The universal immunization programme was started to achieve 100 % immunization and to reduce the mortality and morbidity among infants and young children due to vaccine-preventable diseases such as tuberculosis (T.B.), Diphtheria, Whooping Cough, Tetanus, Polio and Measles. It is clear that coverage of different vaccination is increasing. Table 12.59 presents information on the achievement of different vaccinations in the State. The full immunization rate is 72% currently till December 2015.

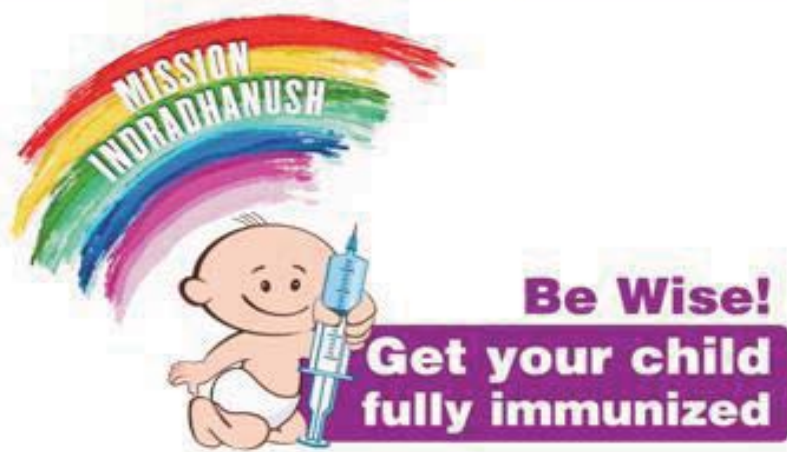
**Table 12.58A: Details of Adolescents under Weekly Iron & Folic Acid Supplementation Programme**

Year	Target	Achievement
2013-14 (July-13 to Mar-14)	49,44,839	0
2014-15	49,44,839	25,65,022
2015-16 (Upto Dec – 2015)	41,44,207	19,95,491

**Table 12.59: Performance of Universal Immunization Programme:**

Vaccine Name	No. of Beneficiaries				
	2011-12	2012-13	2013-14	2014-15	2015-16 (April to Dec)
BCG	1178976	1159252	1131948	1127020	823693
Pentavelent*	-	-	853719	1086558	823386
OPV	1115886	1127987	1057854	863393	821868
Measles	1062082	1085495	1030082	1044281	809559
DPT (Booster)	1130349	860455	894994	933998	752060
Polio (Booster)	1115886	850957	893404	930911	750847
TT (10Years)	777183	735010	703318	714250	587520
TT (16Years)	663688	677897	639792	670732	522159
TT (Mothers)	1259156	1245414	1195491	1208346	880242
Fully Immunized Children (%)	95	100	93	>100	72

**Mission Indradhanush:  
A new beginning for RI in 2015!!**



**Mission Indradhanush was launched by Hon'ble Health Minister and Medical Education Minister on April 7<sup>th</sup> the World Health Day at the historic Vidhan Soudha Banquet hall - Karnataka**

**Table 12.60: Mission Indradhanush 2015 Programme Phase - I**

District	Target		Achievement- 1 <sup>st</sup> PHASE									
	PW	Children	PW	%	Children	%	%	Full Immunization		Total Full Immunization	Complete Immunization	
								9-11 Months	12-23 Months			
Kalburgi	7033	40556	9126	129.76	34669	85.48	6995	340	7335	7581		
Yadgiri	2701	19525	4401	162.94	18867	96.63	3311	1639	4950	4517		
Raichur	1240	11178	2399	193.47	15279	136.69	3472	2244	5716	3282		
Koppal	1519	12639	2732	179.86	17341	137.2	4092	1418	5510	4403		
Ballari	2014	17359	3486	173.09	22194	127.85	4980	2922	7902	6104		
Bengaluru	3613	13025	4171	115.44	13315	102.23	2990	518	3508	3451		
BBMP	2033	16549	2208	108.61	13057	78.9	2382	957	3339	3849		
Total	20153	130831	28523	141.5	134722	103	28222	10038	38260	33187		

**Table 12.61: Consolidated report for Mission Indradhanush Phase – II 1st round – October 2015**

Name of the District	Target		Consolidated report for Mission Indradhanush Phase – II 1st round – October 2015					
	PW	Children	PW	%	< 2 years Children	%	Total 9-11 + 12-23 (FIC)	Complete Immunization Achieved
Bidar	4073	20900	2255	55.36	10445	49.98	3012	2601
Yadgiri	1606	8883	1439	89.6	6870	77.34	1515	1124
Vijayapura (Bijapura)	2729	16227	2126	77.9	10963	67.56	4272	2468
Bagalkot	3122	11369	1943	62.24	10084	88.7	3877	2558
Belagavi	7065	35630	3315	46.92	17931	50.33	5852	4447
Dharwad	3053	19246	1011	33.11	5385	27.98	1344	1553
Haveri	1469	7075	1155	78.62	5127	72.47	1190	1235
Gadaga	536	4469	427	79.66	2776	62.12	683	757
Uttara Kannada	521	2428	286	54.89	1218	50.16	318	463
Chitradurga	2497	11072	1521	60.91	6003	54.22	1453	1788
Davanagere	2221	10197	1614	72.67	7280	71.39	1681	1906
Tumkuru	1580	6054	1253	79.3	4731	78.15	1352	1436
Kolar	1156	5602	922	79.76	4152	74.12	1167	1557
Chikballapura	1626	7446	1112	68.39	5273	70.82	1412	1666
Ramnagar	965	4672	709	73.47	3243	69.41	830	894
Dakshina Kannada	1324	4647	606	45.77	2582	55.56	675	978
Udupi	775	2967	260	33.55	1377	46.41	340	601
Mysore	2100	7213	1432	68.19	6245	86.58	1340	1554
Total	38418	186097	23386	60.87	111685	60.01	32313	29586



**Table 12.62: Mission Indradhanush-2015 2nd Phase 2nd Round Consolidated report (November)**

Name of the District	Target		Mission Indradhanush-2015 2nd Phase 2nd Round Consolidated report (November)									
	PW	Children	PW	%	< 2 years Children	%	Total 9-11 + 12 23 (FIC - BCG+ Penta+ OPV -3 doses + Measles 1st doses)	% of FIC	Complete Immunization Achieved	% of CI		
Bidar	1903	11286	1655	86.97	8100	71.77	1603	14.2	1207	10.69		
Yadgiri	886	5554	853	96.28	4158	74.86	670	12.06	531	9.56		
Vijayapura (Bijapura)	2342	14164	1875	80.06	8795	62.09	1474	10.41	1446	10.21		
Bagalkot	960	6046	920	95.83	5050	83.53	1209	20	948	15.68		
Belagavi	2390	13381	1946	81.42	10573	79.02	2710	20.25	2010	15.02		
Dharwad	490	3023	451	92.04	2110	69.8	448	14.82	459	15.18		
Haveri	1448	6467	1397	96.48	5779	89.36	1072	16.58	1106	17.1		
Gadaga	393	3085	340	86.51	1981	64.21	371	12.03	398	12.9		
Uttara Kannada	503	2192	399	79.32	1587	72.4	317	14.46	476	21.72		
Chitradurga	2172	8576	1761	81.08	6310	73.58	1082	12.62	1301	15.17		
Davanagere	1967	7073	2152	109.41	8001	113.12	1481	20.94	1521	21.5		
Tumkuru	1551	6627	1549	99.87	5499	82.98	1205	18.18	1301	19.63		
Kolar	1068	4541	888	83.15	3338	73.51	715	15.75	1015	22.35		
Chikballapura	1286	5992	1228	95.49	5152	85.98	1272	21.23	1265	21.11		
Ramnagar	601	3200	478	79.53	2130	66.56	408	12.75	506	15.81		
Dakshina Kannada	1292	4703	511	39.55	2027	43.1	400	8.51	626	13.31		
Udupi	808	3261	347	42.95	1447	44.37	306	9.38	470	14.41		
Mysore	3287	10381	2349	71.46	8310	80.05	1571	15.13	1706	16.43		
Total	25347	119552	21099	60.87	90347	75.57	18314	15.32	18292	15.3		

**Table 12.62A: Mission Indradhanush-2015 2nd Phase 3rd Round Consolidated report (December)**

Name of the District	Target		Mission Indradhanush-2015 2nd Phase 3rd Round Consolidated report (December)							
	PW	Children	PW	%	< 2 years Children	%	Total 9-11 + 12 23 (FIC - BCG+ Penta+ OPV -3 doses + Measles 1st doses)	% of FIC	Complete Immunization Achieved	% of CI
Bidar	1338	8175	1282	95.81	6678	81.69	1393	17.04	805	9.85
Yadgiri	406	3988	369	90.89	2725	68.33	375	9.4	234	5.87
Vijayapura	1485	9802	1446	97.37	7199	73.44	1223	12.48	1087	11.09
Bagalkot	765	4822	820	107.19	4462	92.53	1075	22.29	813	16.86
Belagavi	2034	11369	1842	90.56	8646	76.05	2360	20.76	1595	14.03
Dharwad	398	1972	333	83.67	1469	74.49	310	15.72	336	17.04
Haveri	1494	6598	1286	86.08	5397	81.8	884	13.4	959	14.53
Gadaga	261	2047	249	95.4	1404	68.59	231	11.28	205	10.01
Uttara Kannada	367	2361	349	95.1	1456	61.67	310	13.13	369	15.63
Chitradurga	2084	8916	1710	82.05	6305	70.72	1054	11.82	1259	14.12
Davanagere	1669	6564	1657	99.28	6782	103.32	1203	18.33	1189	18.11
Tumkuru	1372	6427	1416	103.21	5383	83.76	1058	16.46	1115	17.35
Kolara	737	3577	730	99.05	3053	85.35	617	17.25	860	24.04
Chikballapura	1002	5046	1097	109.48	4527	89.71	1122	22.24	1053	20.87
Ramnagar	464	1974	471	101.51	1923	97.42	345	17.48	398	20.16
Dakshina Kannada	1239	5457	503	40.6	2405	44.07	503	9.22	728	13.34
Udupi	641	3063	282	43.99	1327	43.32	276	9.01	344	11.23
Mysore	2287	7170	1927	84.26	6476	90.32	1263	17.62	1381	19.26
Total	20043	99328	17769	88.65	77617	78.14	15602	15.71	14730	14.83

**12.2.9 Causes Of Death:**

For the effective control of maternal and infant mortality, it is important to understand the causes of such mortality. Table 12.63 present information on top five causes of mortality for infants and females in the age group 15-49 respectively. The major causes of infant deaths are due to prematurity or low birth weight. Pneumonia, Heart Disease and birth asphyxia also account for a major proportion of deaths. Among females in the age group of 15-49, Hypertensive disorders in pregnancy (14 %) (Includes eclampsia, pre-eclampsia, hypertension) is the leading causes of death- it may be attributed to rise in diagnosis and reporting of new cases. This is followed by Post-Partum Hemorrhage (13 %).

**12.2.10. Karnataka Health System Development & Reform Project (KHSDRP):**

The Karnataka Health System Development & Reform Project (KHSDRP) is a World Bank-assisted project aims to increase utilization of curative preventive and Public health services particularly in underserved areas and among vulnerable groups to accelerate achievement of the health related Millennium Development Goals. Keeping in view the positive contributions of the project in enhancing health outcomes (reducing maternal & child mortality and communicable diseases) and understanding the need to sustain/continue the innovative programs an extension of the project is given till March 2016 (original closing date 31.03.2012), with additional financing of US\$ 70.00 million (Rs 374.50 Crores). Additional financing effected from 22.01.2013. KHSDRP is a part of the overall system improvement programme integrated with NHM activities. KHSDRP is being used as an instrument to undertake reforms within the Health sector and to finance.

**Table 12.63: Details of Incidence of preventable Causes of Infant Mortality based on reports from Districts for the period April to December 2015**

Cause of Death	Infant (0-365 days)
low birth weight & Pre maturity	21
Pneumonia	6
Diarrhea	4
Neonatal infections	6
Birth asphyxia and birth trauma	18
Other	55

**Table 12.64: Top five Causes of Maternal Death for women in the age group 15-49**

Cause of Death	Death during 2015-16 (upto Dec-2015)
Hypertensive disorders in pregnancy	84
Post-Partum Hemorrhage	61
Obstructed labour	42
Abortion	5
Sepsis	21
Others (including high fever)	262
Total	475

- (i) Activities that cannot be easily done through other mechanisms,
- (ii) Activities that benefit from technical engagement with the Bank,
- (iii) Evaluations to validate such activities, and
- (iv) To facilitate pilot programs which if successful, could be scaled-up using Government funds.

**The project has two windows of financing viz. Project finance & program finance:**

**Program Finance:**

Program Finance is an incentive funding to the Government of Karnataka for increased spending on health & family welfare programs and thereby, promotes the cause of universal health & improved availability of health care to all, particularly to the weaker & deprived sections of society. The IDA share of credit is to be availed on the basis of the incremental expenditure by the Government of Karnataka on the ongoing State sector schemes related to primary health care subject to achievement of the agreed reform milestones. Credit under this scheme is fully used up.

**Project Finance:**

Project Finance involves implementation of agreed components and State Project Monitoring Unit (SPMU) is directly responsible for implementation of the Project Finance components and achieving the physical and financial goals/targets. Successful initiatives started under the Project includes running of Mobile Health Clinics, Citizen Help Desks, Sourcing-in-specialists, Health Care Waste Management of health facilities, Quality Assurance Program including accreditation of Pilot Hospitals, training and Capacity Building of Health Personnel, support to Vajpayee Arogya Shree Programme to benefit poor households requiring tertiary care intervention etc., New activities planned to support Road Safety and Emergency Health Services, and Prevention & Control of Non-Communicable Diseases etc. Project has two lines of Credit Original financing and Additional financing. Outlays, expenditure and disbursement in each of these credits are presented in Table.

**Table: 12.65. KHS DR Project Outlay, Expenditure and Disbursement**

Credit	Project Cost			IDA Share			Exp. till
	SDR (millions)	US \$ (millions)	INR (Crores)	SDR (millions)	US \$ (millions)	INR (Crores)	31.12.2015 INR (Crores)
4229-IN							
Original	140.46	206.48	897.77	96.50	141.83	616.67	
Revised*	140.46	216.78	1040.03	96.50	148.70	714.38	1039.8
Disbursed				92.79	143.30	678.38	
5161-IN (Addl. Finance)	69.75	105.00	561.75	46.50	70.00	374.50	115.81
Disbursed				6.76	10.36	63.38	
Total Outlay	210.21	321.78	1601.78	143.00	218.70	1088.88	1155.61
Total Disbursed				99.5	153.66	741.76	

\*Revised Cost is due to additional funds available on account of appreciation of SDR vis-à-vis US\$ and INR

**Achievements under Karnataka Health System Development and Reform Project (Till Dec-2015)**

**Organizational development:**

1. 385 Doctors trained in embedding leadership excellence for Doctors. In-service personnel deputed for various workshops conducted by reputed institutions & sponsored for IGNOU correspondence courses to acquire higher qualifications & knowledge. 89 officers exposed to better international practices by sponsoring them to attend a hospital management course at Asian institute of technology, Bangkok.
2. 20875 personnel of the DoH& FW at all levels covered under “attitudinal change and managerial capacity building workshops”, aimed at better service delivery.
3. Medical manual for medical officers developed and disseminated.
4. In-service personnel have been deputed for various trainings & workshops conducted by institutions as ASCI, ESCI, IIMR, AIIMS etc
5. 30 in service officers of the department have attended the International Executive Courses in Health conducted by Harvard School of Public Health, BOSTON, USA.
6. About 10,000 in-service personnel of the Department of Health & Family Welfare are undergoing the training on ‘Career Oriented Multi-Skill Based Training Program’.
7. Draft Model public health Act is submitted to the Department for consideration.
8. Standard Treatment Guidelines developed and disseminated.
9. Fostering knowledge implementation links in the health field taken up in collaboration with IIM-B.
10. Dr. Halagi Committee Report on the ‘Reorganization of the department by developing a public health cadre/wing

is submitted to the Department of H&FW.

11. Health accounts, IEC, PPP, Quality Assurance, and Health Care Waste Management cells set up for capacity augmentation of the personnel.
12. Major Hospitals viz., K.C.General Hospital, Bangalore and Jayanagara General Hospital, Bangalore along with District Hospital Gadag, Bijapur, Chamarajanagar&Chitradurga have been taken up for NABH accreditation.
13. State and Dist. Quality Assurance Cells established
14. Quality Management System (QMS) Manuals prepared for District Hospitals, Taluk Hospitals, CHCs and PHCs and training being imparted.

**Public Health Competitive Fund (PHCF):**

1. Training & capacity building for about 4.50 lakh members in 8463 VHSCs and ArogyaRakshaSamithis (ARS) has been completed.
2. Services of 44 NGOs across the State engaged for creating health awareness & social mobilization in non-curative services like immunization, TB, public health, maternal health etc.
3. Districts Nodal Environment Officers appointed for the entire 30 District to monitor Liquid & Solid Waste Management in the health facilities and thereby contribute to improved public health.
4. 345 Health care facilities have established Liquid Waste Management system disinfection units and 91 Health care facilities have established Solid Waste Management system under KHSDRP

**Non Communicable Disease Programme:**

1. Formulated the roles and responsibilities of state Technical Advisory Committee and the Dist. Level Committee for prevention and control of Non-Communicable Diseases.

2. Major focus is early detection and treatment of hypertension, diabetes and Cervical Cancer. Project will undertake screening for Hypertension, Diabetes and Cervical Cancer in 2 Pilot District viz., Dakshina Kannada & Davangere from PHC level. Community-Level health promotion efforts planned

#### **Road Safety & Emergency Health Service Programme:**

1. Procurement of 150 new Ambulances Advance Life Support (ALS) & Basic Life Support (BLS) is in progress.
2. KHSRDP in association with the Karnataka state Highway Improvement project (KSHIP) will undertake a pilot road safety strategy and systems approach in 2 demonstration corridors. The project will finance necessary investments-equipment's, human resources, standards/guidelines, and training

#### **Service Improvement Challenge Fund (SICF):**

1. 109 Mobile Health Clinics (MHCs) in most backward, hilly and inaccessible areas operationalized. (now this scheme is not running)
2. 37 Citizen Help Desks operationalised in the District and major hospitals. (now this scheme is not running)
3. 50 specialists contracted to address the problem of shortage of specialists in Govt. health facilities.
4. Two Regional Diagnostic Laboratories contracted out on pilot basis.
5. To improve health infrastructure, 254 civil facilities comprising of 35 PHCs, 152 Sub Centres, and 9 ANM training centres & 13 drug warehouses, 45 24x 7 Model PHCs, completed and handed over to the Do H& FW. 73 facilities have been repaired and renovated including 3 Regional food labs. 6 more facilities including 24 x 7 Model PHCs, State food laboratory is under up gradation/construction.

6. 45 more 24 x 7 Model PHCs are planned

#### **Health Financing (HF):**

1. GoK sponsored Vajpayee Arogyashree Scheme is implemented by SuvarnaArogyaSuraksha Trust, to support the BPL families in the state of Karnataka, for tertiary care and serious ailments, under a cashless benefit scheme. The project has reimbursed Rs 90.85 crores for 19635 beneficiary claims by the trust.

#### **Infrastructure**

#### **Facilities**

#### **Improved/Upgraded:**

1. 1133 computers provided to PHC/taluk hospitals towards infrastructure development and improving communication & managing HMIS effectively along with furniture & essential equipments to new facilities. High end equipment's - 42 No's of HPLC systems, 7 No's UV Spectro-Photometer, 7 Water Purification Systems, 15 Dissolution Test Apparatus- provided to strengthen the Drug Controllers Office
2. Equipment provided to strengthen State Food Lab and Regional Food Labs.
3. Equipment to 13 newly constructed Drug Ware Houses.
4. Support provided to strengthen the blood bank monitoring system in the state by providing IT hardware to Govt. Blood Bank and Blood Storage Centers.
5. Equipment provided to Indira Gandhi Institute of Child Health, Bengaluru for improving and strengthening pediatric health care.
6. Equipment provided to strengthen the intermediate referral laboratory of TB(RNTCP).
7. Equipment provided to the drug testing laboratories of the drug control department.
8. Manniquins, equipment and VC equipment -facility is provided for the

strengthening of the SIHFW and its allied institutions.

#### **Impact Assessment and Evaluation Studies Taken Up:**

1. Impact evaluation of MHCs and citizen helpdesks completed.
2. Report of Baseline survey for ThayiBhagyaYojane submitted and health facility survey is completed.
3. Impact assessment of embedding leadership excellenc for Doctors conducted by M/s. Deloitte Touch thomatsuPvt. Ltd.
4. Assessment of methodology and documentation of the attitudinal change and managerial capacity building conducted and report submitted by IIM Bangalore.
5. Monitoring and verification agency for SAST and costing study of health care services by SAST is in progress.
6. Public expenditure review (PER) & medium-term expenditure framework (MTEF) for the Do H& FW for the period of 5 years from 2011-16 is completed. Rolling MTEF work is being done.
7. Support provided for the establishment of a State health informatics center and a new integrated health management information system (HMIS).

#### **12.2.11 Karnataka State Aids Prevention Society (KSAPS):**

Karnataka State AIDS Prevention Society (KSAPS) was registered as a Society on 9<sup>th</sup> December 1997; it is an autonomous

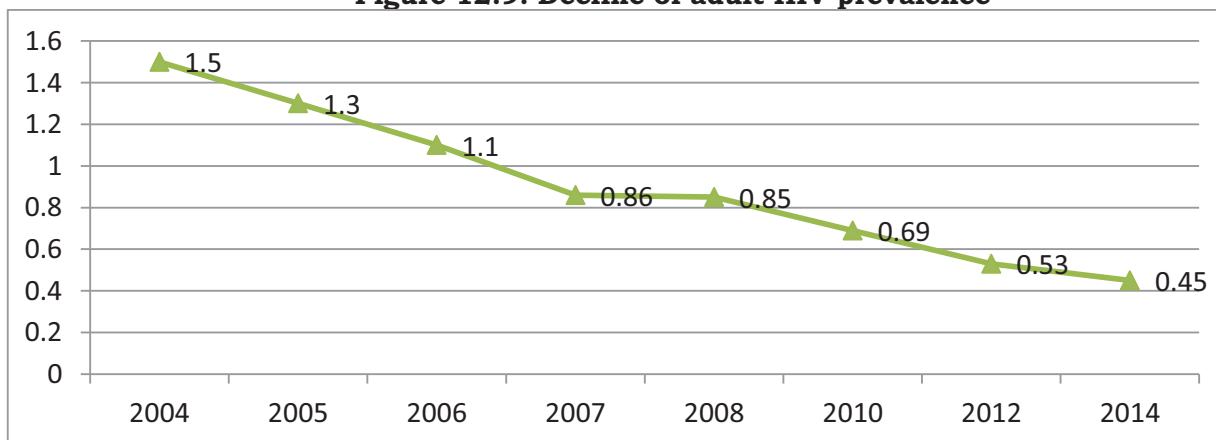
institution and the highest policy-making structure with respect to HIV/AIDS in Karnataka. The governing council is headed by the Chief Minister and the Vice chairman is the minister for Health and Family Welfare Services.

The Chairman of Executive Committee is Secretary to Government Health & Family Welfare Department. As per NACO, Karnataka is one of the “High Prevalent States” in India. The other high prevalent states in India are Andhra Pradesh, Mizoram, Maharashtra, Manipur and Nagaland. KSAPS is implementing NACP IV. Karnataka has 30 Category “A” Districts

#### **KSAPS is Implementing NACP IV Funded by NACO, New Delhi:**

Karnataka has been conducting HIV Sentinel Surveillance since 1998. Surveillance is carried out annually by testing for HIV at designated sentinel sites. The prevalence among antenatal clinic (ANC) attendees as per HSS 2012-13 was 0.53%. This is close to the NFHS-3 estimate of 0.69% in 2006. HIV prevalence among the ANC attendees indicates decline in adult HIV prevalence in the state from 1.5% in 2004 to 0.45% in 2014-15. HIV prevalence level (as per HSS 2012-13)

**Figure 12.9: Decline of adult HIV prevalence**



**Table: 12.66: Tested and found Positive in ICTC**

Year	General clients					ANC				
	Target	Achievement				Target	Achievement			
		Tested	% Achievement	+ve	% Positivity		Tested	% Achievement	+ve	% Positivity
2007-08	500000	195124	39.02	28279	14.49	400000	276301	69.08	2399	0.870
2008-09	650000	445761	68.58	44847	10.06	550000	568467	103.36	3249	0.570
2009-10	800000	745292	93.16	48417	6.5	700000	796748	113.82	3501	0.440
2010-11	1000000	775712	77.57	41617	5.37	900000	784794	87.20	2542	0.320
2011-12	1000000	1179801	117.98	39477	3.35	1000000	1010822	101.08	2333	0.230
2012-13	1491400	1239661	83.12	33611	2.71	1207268	962034	79.69	1831	0.190
2013-14	1467137	1664848	113.00	29437	1.77	1292519	1178907	91.00	1443	0.120
2014-15	1540494	1906237	124.00	26509	1.39	1253456	1232862	98.40	1295	0.110
2015-16 (Till Dec)	1617519	1328039	82.10	15598	1.18	1287757	851351	66.11	797	0.100



### Karnataka State AIDS Prevention Society Programmes:

**1. Targeted Intervention:** Response from Karnataka State AIDS Prevention Society (KSAPS) has been to saturate targeted interventions (TIs) in Karnataka under the thrust area of NACP -IV.

**I. Core TI (FSW, MSM ,TG & IDU):** This saturation currently covers around 81,316 Female Sex Workers (FSWs) under targeted interventions and 25,816 Men who have sex with Men (MSM). 1796 transgender are covered under this programme. This programme is funded by NACO through KSAPS.

4 TIs are implementing Injecting Drug User (IDU) programme of which 3 in Bangalore and 1 in Kolar covering 1,840 IDUs. 3 Opioid Substitution Therapy (OST) centers, 2 in Bangalore and 1 in Kolar covers intravenous drug user population

**II. Bridge TI (Migrant & Truckers):** 18 TI projects in Karnataka covers 1,82,000 destination migrants. 6 truckers TIs covers a population of 80,000 long distance male truckers. The Truckers program is implemented at Trans-shipment locations.

### 2. HIV Counseling & Testing at Integrated Counseling and testing Centre:

During 2013-14, 16,64,848 General clients were counseled and tested with a positivity rate of 1.77% and 11,78,907 ANCs were counseled and tested with a positivity rate of 0.12% in ICTCs. For the FY 2014-15, 19,06,237 General clients were counseled and tested with a positivity rate of 1.39% and 12,32,862 ANCs were counseled and tested with a positivity rate of 0.11% in ICTCs. For the FY 2015-16, 1328039 General clients were counseled and tested with positivity rate of 1.18% and 851351 Antenatal women were counseled and tested with positivity rate of 0.10% in ICTCs till Nov 2015. It is anticipated to cover the target of the both General Clients and ANC attendees by end of Mar 2015.

### 3. Care Support & Treatment:

During 2015-16, 64 ART centers and 196 Link ART Centers including Link Plus ART Centers have been functioning. The cumulative number of HIV cases registered at ART Centers till November 2015 were 2,78,365, out of which, 1,24,671 cases are alive and on ART. The progress of ART centers is given in Table 12.67.

**Table 12.67. Status report on ART (till December - 2015)**

Indicator	Adult Male	Adult Female	TS/TG	Child Male	Child Female	Total
Pre ART Registration	132157	128023	617	9602	7966	278365
Ever Started on ART	91759	85956	342	5514	4377	187948
Alive on ART	54369	62208	215	4374	3505	124671
Reported Death	27783	15979	89	768	590	45209

#### 4. STI (Sexually Transmitted Infections / Reproductive Tract Infections):

Major route of transmission of HIV in Karnataka in unprotected sexual intercourse and HIV is primarily considered to be a sexually transmitted infection. A person with STI/RTI is 2 to 9 times prone to get HIV. HIV positive patients with STI are more likely to acquire HIV. Hence, control of STIs contributes significantly to the reduction in HIV transmission. Upto 40% of HIV transmission can be reduced by treating STI, hence STI control could be considered as the most cost effective programme. There are 54 DSRCs in Karnataka, The DSRCs are located in all District Hospitals and some Taluka Hospitals.

#### 5. IEC Activities undertaken for the year 2015-16:

KSAPS put all its efforts in strategizing IEC activities during the year 2015-16 in the state. IEC strategy aims at creating enabling environment to empower individuals and communities. It also enables to make correct decisions about safe behavior practices and to dispel some of the prevailing misconceptions and reduces stigma and discrimination attitude toward people living with HIV/AIDS among youth and adolescents.

As a process, all its strategies are aiming at providing information, motivation and support to make correct decision about safe behavior practices and maintain healthy

practices. This also addresses the complex issue of societal and cultural phenomenon with regard to the issue of prevention and control of HIV/AIDS. Effective and sustained strategies that are formulated by IEC would result in zero down HIV/AIDS in Karnataka.

The Strategy of adapting of communication tools and methods of BCC and IPC, traditional and folk media bringing the changes in the behaviors of youth, women and rural folk and increases the level of knowledge and motivates people to go for HIV tests and adopt safe sex practices, stigma and discrimination, available services for infected and affected people HIV/AIDS treatment for STIs and TB.

All IEC initiatives and messages focused on behavior change, risk reduction, adopting health seeking behavior and safe sex and reduce the prevailing stigma and discrimination. A full range of key activities that are being implemented includes Mass and Mid Media campaigns and IPC for general public and targeting specific interventions for youth, rural community and tribes. IEC interventions integrated within the various components of the program such as PPTCT, ICTC services, STD services, Condom promotion, Blood safety, TIs, etc. These messages and IEC material have been utilized to raise awareness, and social mobilizations at various levels. Combining IEC activities are contributing to create a HIV/AIDS free state and getting to zero new HIV/AIDS infection in Karnataka.

**Table 12.68: The reports from these hospitals are as follows**

Year	Target	Achievement	Percentage
2012-13	18737	143950	77
2013-14	237493	167526	71
2014-15	248952	101141	43
2015-16 (Up to Dec 2015)	319996	141382	44.2

\* Note Source CIMS / SIMS

1. 378 spots on Blood Donation were broadcast through state hook AIR, Vivid Bharathi, FM Rainbow and other private radio channels during “World Blood Donors Day (WBDD – 2015”.
2. Day Branding through All India Radio, Dharwad (includes 327 spots and 15 minutes 13 programmes).
3. In 19 newspapers, advertisement on World Blood Donors Day was published on 18.6.2015.
4. KSAPS Website is redesigned (WWW.ksaps.gov.in)
5. Printed 3000 roll calendars and supplied to Mandya, Bagalkot, Chamarajnar, Davangere, Yadgir, Mangalore, Udupi, Gadag, Bidar, Bellary, Mysore, Raichur, Kalburagi, Districts
6. Printing and supply of folders, posters, stickers on blood donation and supplied to all 30 Districts.
7. 57780 audio spots were broadcast in 107 bus stations in 24 Districts on Blood Donation.
8. Branding of 50 BMTC and 225 KSRTC and 175 NWKRTC, NEKRTC buses – Blood Donation messages, PPTCT.
9. Bulk SMS message in Kannada/English were sent to Airtel, Vodaphone, Reliance, TATA, Aircel– 4 lakh SMS each (24 lakhs SMS) and BSNL – 6 lakhs (2 lakhs SMS was sent at free of cost by the agency) totally 32 lakhs SMS was sent. Messages on Blood Donation.
10. 321720 spots on blood donation in 383 LCD screens was telecast in railway stations and KSRTC bus stations.
11. 690 folk shows were performed on eve of World Blood Donors Day, National Voluntary Blood Donation Day and Phase-I folk campaign.
12. International Youth Day was observed in all 30 Districts involving RRCs.
13. Observation of World AIDS Day at District level.

**6. Blood Bank:** State Blood Council was established in Karnataka during 1998-99 to provide adequate and safe blood and blood products at reasonable rates. At present there are 193 registered blood banks in Karnataka of which 67 are supported by NACO. Out of 193 blood banks, 43 are in Governments Sectors (State Govt. - 36, Central Govt.- 3 and Public Sector Undertaking (PSU)-4), 9 IRCS blood banks, 19 are Voluntary/Charitable blood banks and 122 are in private sector (90 private Hospital Blood Banks & 32 are Private Stand Alone Blood Banks) .

**Table 12.69: Blood Safety Indicators (2010-11 to 2014-15)**

Indicator	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16 (Apr –Dec)
Total blood units collection	6,14,787	5,94,512	6,60,138	6,94,151	7,54,485	4,83,681
Blood units collected from Voluntary Donors (VBD)	3,78,933	3,93,694	4,35,258	4,08,974	5,19,260	3,45,992

**7. Financial Progress: F Y – 2015-16:****Table 12.70: Programme Component wise expenditure of KSAPS Budget**

Sl. No.	Programme	Year 2015-16 (01.04.2015 to 30.09.2015)			
		Approved Budget for 2015-16 (80% of AAP 2014-15)	Total Grant (O/B + Other Receipt + Grant Received from NACO)	Expenditure (in Lakhs)	Expenditure by Programme on total grant Col No -4 (%)
		(in Lakhs)			
1	Targeted Interventions	1976.46	745.73	713.94	95.74
1.1	Link Worker Scheme	173.62	116.63	60.62	34.92
2	Sexually Transmitted Infection / Reproductive Tract Infections Services	113.97	70.61	32.44	28.46
3	Blood Safety	412.79	341.94	77.94	18.88
4	Lab Services	24.91	21.89	8.92	35.81
5	ICTC/HI-TB/PPTCT	1866.48	1076.55	816.10	43.72
6	Information, Education & Communication	634.31	216.15	104.88	16.53
7	ART/CCC	1908.21	956.35	654.83	34.32
8	Institutional Strengthening	554.65	209.70	379.82	68.48
9	Strategic Information Management System	65.99	58.54	0	0.00
10	UNICEF	12.27	24.28	14.54	59.88
11	State Fund				
11a	2210-06-101-7-15 Grant in Aid Salary	200.00	294.80	206.18	69.94
11b	2210-06-101-7-17 Reimbursement of Travel cost to HIV patient	10.00	131.35	131.13	99.83
11c	2210-06-101-7-18 – LWS programme	200.00	225.14	125.07	55.55
11d	2210-06-800-0-14- TB & HIV patients nutrition foods	25.00	0.00	0	
	Total	8178.66	4489.66	3326.41	74.09

**12.2.12 DEPARTMENT OF AYUSH:**

The Department of AYUSH includes Health care and Medical Education System. AYUSH Department is an independent department works parallel to the Health and Family Welfare.

**Aim:**

The Department is providing primary health care through AYUSH System to the public. The main aim is to give Preventive, Promotive and Curative health care particularly in the management of life style disorders.

**Health Sector:**

Ayush Health sector is providing primary health care services through AYUSH system to the public. There are 661 AYUSH Dispensaries, 153 AYUSH Hospitals and Teaching Hospitals are rendering Health Services.

**AYUSH Health care facilities:** Providing Panchakarma, Ksharasutra and other special treatment.

- Giving Training to the AYUSH staff, thereby bring AYUSH in to the mainstream.
- Strengthening regulatory mechanism for ensuring quality control.
- Government Central Pharmacy manufactures AYUSH medicines. These manufactured AYUSH medicines will be supplied to AYUSH Dispensaries, AYUSH Hospitals and Teaching Hospitals.
- Drug controlling Authority regulates Ayurveda, Unani & Homoeopathy drug and cosmetics manufacturers & manufacturing units.

**MEDICAL EDUCATION:**

There are 78 Government, Government Aided, and Un-aided AYUSH Medical

Institutions functioning in the state. The details are given in Table 12.71 to 12.74.

During the year 2011-12 the Government sanctioned schemes for AYUSH department under Health and IEC programme. In this regard, the department successfully conducted all AYUSH programmes in various taluks across the state. Anemia and Yoga training are two important programmes under this Health and IEC activity. In Yoga training, first the high school teachers are trained; in turn the teachers are made to teach Yoga to their school children. By this programme many number of school children are benefitted. Anemia is another important programme. The anemic children are identified and treated with AYUSH Hematenics, and now, the proposal is given to the Government to continue this programme in all taluks across the state.

During the year 2012-13, to popularize the AYUSH health care services in general public, the department has implemented some more programmes along with the above schemes.

**They are:**

1. AYUSH Health camp
2. Seminar and Work shop
3. Home remedy and AYUSH awareness
4. Diabetic control programme
5. School health programme
6. Vector borne diseases control programme
7. Yoga and Naturopathy programme [Micro]
8. AYUSH health expo
9. AYUSH Trainings

**Table 12.71: Number of AYUSH medical colleges / institutions in Karnataka**

Faculty	Government			Government aided			Unaided			Total	
	Institutions	Students enrolled	Institutions	Students enrolled	Institutions	Students enrolled	Institutions	Students enrolled	Institutions	Students enrolled	
Ayurveda	-	-	-	-	-	-	-	-	-	-	
Graduate	3	150	5	310	51	2505	59	2965			
Postgraduates		59		43		94		196			
Unani	-	-	-	-	-	-	-	-	-	-	
Graduate	1	50			3	120	4	170			
postgraduates											
Homoeopathy	-	-	-	-	-	-	-	-	-	-	
Graduate	1	40			10	740	11	780			
postgraduates						24		24			
Yoga and nature cure	-	-	-	-	-	-	-	-	-	-	
Graduate	1	25			3	210	4	235			
postgraduates								2		2	
Total	6	324	5	353	67	2955	78	4372			

**Table 12.72: Details of in-patient and out-patient in AYUSH Hospitals**

Year	Ayurveda		Unani		Homoeopathy		Yoga and Naturopathy		Total	
	In-patient	out-patient	In-patient	out-patient	In-patient	out-patient	In-patient	out-patient	In-patient	Out-patient
2008-09	4,766	40,83,262	773	5,62,050	412	2,15,318	-	34,177	5951	48,94,807
2009-10	8,199	31,77,807	1594	5,66,104	545	7,64,418	144	26,639	10,482	45,34,968
2010-11	5,443	37,83,417	794	4,91,148	280	5,20,395	41	18,045	6558	48,13,005
2011-12	60,587	38,59,795	748	4,75,501	429	3,85,394	31	20,974	7265	47,41,664
2012-13	13,661	38,00,729	473	5,74,435	565	1,37,975	21	24,492	15,020	47,39,828
2013-14	10,569	43,87,176	897	3,46,428	565	3,59,673	0	50,697	12,031	51,43,974
2014-15	25,180	22,68,388	10,589	2,93,851	281	1,92,389	435	28,538	39,085	27,83,065
2015-16*	28,000	25,00,500	10,900	3,00,700	425	2,00,200	520	29,100	39845	30,30,500

\*upto Dec 2015

**Table 12.73: Cadre strength details in AYUSH**

Group	Teaching			Non-teaching			total	
	Sanctioned	Filled	vacant	Sanctioned	Filled	vacant	Sanctioned	Filled
Gr-A	194	80	114	1035	804	887	1189	903
Gr-B	121	57	64	11	20	21	149	72
Gr-C	-	57	--	1157	417	740	932	414
Gr-D	-	--	--	1423	641	782	1300	716
TOTAL	315	143	172	3255	1962	1293	3570	2105

**Table 12.74: AYUSH Institutions and Their Intake Capacity**

Sector/Faculty	Ayurveda		Unani	Homoeopathy		Nature cure and yoga
	No. of Institutions	Intake Capacity		No. of Institutions	Intake Capacity	
2011-12						
	No. of Institutions	58	4	11	4	
	Intake Capacity	2780	170	780	235	
	Enrolment	1930	127	780	209	
2012-13						
	No. of Institutions	58	4	11	4	
	Intake Capacity	2780	170	790	235	
	Enrolment	2750	140	780	225	
2013-14						
	No. of Institutions	58	4	11	4	
	Intake Capacity	2800	170	780	235	
	Enrolment	2225	165	765	235	
2014-15						
	No. of Institutions	59	4	11	4	
	Intake Capacity	4372	170	780	235	
	Enrolment	3800	165	765	235	

**Other Programmes:**

1. During the year 2012-13 started AYUSH GramaYojane as a pilot project.
  2. During the year 2012-13 started AYUSH PustiKaryakrama as a pilot project.
- Free health check up programmes to popularize AYUSH system in rural areas.
  - To update the knowledge the AYUSH Doctors, Nurses, Pharmacists and others are given periodical Seminar and work shop are conducted.
  - Home Remedy programme is started in view to provide Health awareness and Primary Health Care to the rural population. In this programme, the participants are trained about the use of locally available medicinal plants to their common ailments.
  - There is a raise in life style disorder like diabetes in the population due to increased mental tension, improper food habit and others. To modify their life style in control of diabetes, the department is conducting Diabetes control programme to the general public.
  - To maintain mental and physical well-being the school children are taught Yoga.
  - Vector borne diseases are controlled through plantation of some medicinal plants.
  - First the high school teachers are given yoga training; in turn the teachers are made to teach Yoga to maintain physical and mental health of their school children.
  - Health expo is conducted in state and District to promote and popularize AYUSH System.
  - Trainings are given to Medical and Paramedical staff, General Public, ASHA worker, Anganawadi worker and others regarding AYUSH health system.
  - Providing AYUSH Health care services to rural people at their door steps. This programme was introduced as a pilot project with 3 years tenure. In this programme is introduced to provide

AYUSH Health care from pediatric to geriatric level.

- AYUSH Pustiprogramme is a pilot project. In this project, it is designed to correct malnourishment in children aged between 3 to 6 years. AYUSH medicines are given in the form of Syrup and Biscuits to correct malnourishment. These Syrup and Biscuits improves digestion as well as appetite and corrects the malnourishment.

**During the year 2013-14, to popularize AYUSH health care services in general public, the department has implemented the following programmes:**

1. AYUSH Health camp
2. Seminar and Work shop
3. Home remedy and AYUSH awareness
4. Diabetic control programme
5. School health programme
6. Vector borne diseases control programme
7. AYUSH health expo
8. AYUSH Trainings

**During 2014-15 the following programmes were implemented:**

1. Yoga Training for School Teachers
2. AYUSH ArogyaShibhira
3. AYUSH Seminar / Workshop
4. AYUSH ManemadduKaryakrama
5. AYUSH ArogyaMela
6. AYUSH GramaYojane

**12.2.13 DRUGS CONTROL:**

The State Drug Control Department is existing since 1956 as an Independent body under the control of the Ministry of Health and Family Welfare. It is headed by the State Drug Controller. The main objective of the Department is to implement the Drugs and Cosmetics Act, 1940 and Rules there under and to ensure the quality control over the Drugs and Cosmetics manufactured and marketed in the state in the interest of the public health. By exercising strict control and



vigilance on the drug marketed in the State, the Department eradicates the menace of Spurious and substandard drugs, ensures safety of drugs and its availability on the controlled prices to the public. The Department has three wings: (1) The Enforcement Wing (2) Drugs Testing and Laboratory and (3) The Pharmacy Education.

During the period of 2015-16 financial years, a total provision of Rs. 1767.00 lakhs -under Plan scheme, Rs. 1696.00 lakhs under the State Non-plan scheme and around Rs. 123.00 lakhs -under Centrally Sponsored schemes have been allocated for this Department.

The establishment and construction work of laboratory buildings for the 2 Regional Drugs Testing Laboratories at Hubli and Bellary in North Karnataka, are completed through KHSDRP and have already started functioning in its own buildings as proposed under the State budget 2008-09. The Department is taking initiatives to get the NABL accreditation in the National level for these two laboratories as proposed in the State budget 2014-15.

Karnataka State is the first state to bring the Pharmaceutical Policy. The Department is providing five services under SAKALA Scheme to assure the accomplishment of services to the public within the specified time frame. The licensing activity of the drugs sales establishments is fully computerized while, the computerization of process of licensing to drug manufacturing units is under progress. The Department has successfully adopted the LMS/FMS software under e-governance for its internal files and letters management.

The Department has also successfully implemented e-sampling programme for the process of Drug Testing and Analysis in the State Drugs Testing Laboratories as a part of e-governance. The information about the

substandard drugs is being published through the Departmental web portal, as soon as it is declared as substandard quality. Not only that, around 32,000 auto generated SMS alerts has made this possible to prevent the usage and distribution of the substandard drugs by reaching the various stake holders like retailers, wholesalers, Doctors and Enforcement officers. As announced in the 2013-14 financial year budget, the Department has got an allotment of 4.30 acres of land, by the Dist. Commissioner, Gulbarga, for the establishment of a Government College of Pharmacy at Gulbarga, with an estimated cost of Rs. 35.25 crores.

In order to encourage the Pharmacy Education in the State, Admissions through CET has been introduced for B. Pharma course. For the proposed new pharmacy college Government has sanctioned totally 158 teaching and non-teaching staff in different faculty. The joint venture with the Karnataka Power Corporation Ltd., for the construction of a Multi-storied building comprising an area of 1,19,000 Sq.ft., at Bangalore for the Department, is under progress. In the present financial year a provision of Rs. 392.00 lakhs has been allocated for the construction of office buildings at Mysore, Belgaum, Ramanagara and Bidar. The work is under progress. DTL Bangalore is approved by the state of Punjab, J & K & State of Goa

2024 Drug Samples have been received from Govt. of India for the Analysis under the National Sample Survey project. A web portal regarding availability of Blood "RAKTHA SANJEEVINI" has been implemented in departmental website "<http://blood.kar.nic.in>" for the information of public.

### 12.2.14 KARNATAKA STATE DRUGS LOGISTIC WAREHOUSING SOCIETY:

#### Introduction and Objectives:

Karnataka State Drug Logistics and Warehousing Society, Bangalore was established with an objective to cater to the needs of Health Institutions coming under the Directorate of Health and Family Welfare Services as well as those Hospitals coming under the control of Directorate of Medical Education and such other programmes coming under Health and Family Welfare Services.

#### Objectives:

Karnataka State Drug Logistics and Warehousing Society, Bangalore is headed by Additional Director. He functions under the Administrative control of the Commissioner, Health & Family Welfare Services and the Director of Health & Family Welfare Services. The requirement of Drugs, Chemicals & other items of all State Sector Hospital, Teaching Hospitals under the Directorate of Medical Education and the Hospitals/Institutions coming under ZP, are procured and supplied in accordance with the budget allotted and the indent of individual Hospitals/Institutions through District Drugs Warehouses.

#### Plan of Action:

#### Budget Allocations:

**Table 12.75. Budget released for procurement of Drugs and Chemicals and expenditure for the past five years is as follows:**

Year	Budget Released (Rs. In lakhs)	Expenditure (Rs. In lakhs)
2011-12	6600.00	5920.85
2012-13	9375.00	9375.00
2013-14	10,500.00	10,500.00
2014-15	13,349.00	13,349.00
2015-16 (up to Dec 2015)	7571.50	7571.50

1. The erstwhile Government Medical Stores has been restructured into a society and is functioning as Karnataka State Drugs Logistic & Warehousing Society ® which was formed with the financial assistance of the European Commission through Government of India during the year 2003. Presently 27 Dist. Ware Houses catering to the needs of hospitals. Cold Storage Room has been installed in all 27 Dist. Drug Warehouses. As per the indents of the Health Institutions drugs are supplied to them through the Troop Carrier Vehicles of Warehouses. During 2014-15, 6 new Troop Carriers were issued to warehouses.
  2. The essential equipment's and necessary materials were supplied to all the 27 Drug Warehouses, All the warehouses are computerized and internet connection is also provided. Karnataka State Drugs and Logistics Warehousing Society is connected to all Districts. Drug Warehouses, where in data is feed through Warehouse Information System WIS.
  3. From 2014-15, Online Drug Inventory Management System, has been followed for Indenting of Drugs from various Health Institutions & Medical Educational Institutions.
- Drugs and Chemicals are also supplied by this Society to combat Natural calamities like floods, droughts which are supplied as per the directions of the Government from time to time.

4. The Equipments and Furniture required for different health institutions are procured through KDLWS from the year 2011-12.
5. Bio-Medical Equipment Maintenance Outsourcing Cell is under process, This Cell compiles the Equipments information of the state, monitors the repair work and AMC/CMC of the equipments.
6. Bike Ambulance inaugurated by Honorable Chief Minister on 15/04/2015. The Bike Ambulance are aimed to save the Critical Trauma Patient by reaching the incident site before the regular ambulance can reach and within the Golden Period of the Trauma Patient, so that the patient life can be saved.
7. Providing Need Based Drugs to 2800 Health Institutions in the state without Budget ceiling.

**Other Department Programmes:**

Under “AksharaDasoha” Programme of the Education Department certain drugs like Tab.

Albendazole, Iron with Folic Acid and vitamins ‘A’ Capsules are being procured and supplied to BEO’s which are in turn supplied to schools for distribution to students from class I to 7th Std. as per requirement of education Dept.

Drugs, Chemicals diagnostic kits, Lab consumables, Blood Bank Consumables and instruments medical equipment required under AYUSH, National Rural Health Mission, Karnataka Aids Prevention Society are procured and supplied as per their requirements.

**12.2.15 Expenditure on Health:**

The plan and non-plan outlays for the health sector during the last three years is given in Table 12.76. The details of the central assistance and its disbursement are also provided in Table 12.77.

**Table 12.76: Plan & non-plan Expenditure on Health & Family Welfare (Rs.in lakh)**

Year	Plan	Non-Plan	Total
2013-14 A/c	225909.99	227437.50	453347.49
2014-15 BE	364223.29	225854.07	590077.36
2014-15 RE	402023.86	225620.93	627644.79
2015-16 BE (Up to Dec 2015)	388898.00	226916.00	615814.00

**Table 12.77: Funds received from Government of India and Utilization (Rs.in lakh)**

Financial Year	GoI releases to State Health Society	GoK releases to State Health Society	Opening Balance (Unspent Balance)	Total Funds	Expenditure of State Health Society	% of Expenditure on Total Funds
2011-12	65,573.00	16,000.00	23,544.96	1,05,117.96	78,931.00	75.09
2012-13	64,573.00	18,036.00	25,084.42	1,07,693.42	86,547.00	80.36
2013-14	66,502.00	26,200.00	27,874.82	1,20,576.82	82,032.00	68.03
2014-15	70,140.00	21,988.00	38,818.02	1,30,946.02	91,877.00	70.16
2015-16 (Up to 31 <sup>st</sup> Dec)	43,711.00	14,570.00	57,605.00	1,15,887.00	64,724.71	55.85

## 12.3 Human and Gender Development

### 12.3.1 Introduction

To advance human development – a choice expansion process for people to live long, healthy and creative lives – is the central objective of any planning and policy process. Given the well-proven fact that the economic growth does not necessarily correlate with progress in human development, the development needs have to be broadly viewed to build and reinforce human capabilities and opportunities to exercise choices.

The UNDP methodology of measuring quality of human development is based on the level of achievements in education, health along with per capita income in a country. The most basic and critical capabilities for human development are to live a long and healthy life, possess knowledge and skill and to have access to resources needed for a decent standard of living. The Human Development Index (HDI) is a measure of these capabilities quantified and tries to capture the development in its true and broader / multi-directional way than the single / uni-directional economic indicators like per-capita income. Thus, the measurement of human development is now broad based and considers several additional indicators although dimensions have remained more or less the same. Subsequently, UNDP enlarged the understanding of human development by considering other dimensions of human development like Multi-Dimensional Poverty Index (MPI), Gender Inequality Index (GII), etc. The methodology for estimating the Human Development Indices (HDI) also

underwent minor changes from 2010 Human Development Reports (HDR). While the UNDP has been publishing Human Development Reports since 1990, the Government of India released the first National Human Development Report (NHDR) in 2001. Efforts have been made since then to release such reports at the State level, reflecting the status of their districts.

This chapter presents human development and gender perspective of human development through related indices. Table 12.78 presents comparative position of India with some selected countries. Similarly, Table 12.79 gives the position of Karnataka State among the major States in the country. Globally, India ranks 119 out of 169 countries with a global HDI value of 0.504 and falls in the category of countries with medium HDI. It falls short of the world average, which is 0.604.

### 12.3.2 Human Development Index among Major States in India

To understand the human development scenario among major states in the country several reports have been published since 1981. These reports, present the Human Development Index along with other issues for major states in the country. The latest human development report available at the country level is 'India Human Development Report 2011', published by IAMR, NITI Aayog, Government of India. The index values and ranking of states since 1981 are given in Table 12.79.

**Table 12.78 Comparison of India with its neighbouring countries in HDI, 2010**

Country	HDI Value	HDI Rank
Countries with Very High HDI	0.788 – 0.938	1 to 42
Countries with High HDI	0.677 – 0.784	43 to 85
Countries with Medium HDI	0.488 – 0.669	86 to 127
Countries with low HDI	Below 0.488	127 +
China	0.633	89
Sri Lanka	0.658	91
Thai Land	0.654	92
<b>Kerala</b>	<b>0.625</b>	
<b>Karnataka</b>	<b>0.508</b>	
<b>India</b>	<b>0.504</b>	<b>119</b>
Pakistan	0.490	125
Bangladesh	0.469	129
Nepal	0.428	138

Source: UNDP, 2010

**Table 12.79 Human Development Index among major states in India, 1981 – 2011**

States/UTs	1981		1991		2001		2011	
	Value	Rank	Value	Rank	Value	Rank	Value	Rank
Andhra Pradesh	0.298	9	0.377	9	0.416	10	0.485	11
Assam	0.272	10	0.348	10	0.386	14	0.474	12
Bihar	0.237	15	0.308	15	0.367	15	0.447	18
Gujarat	0.360	4	0.431	6	0.479	6	0.514	8
Haryana	0.360	5	0.443	5	0.509	5	0.545	5
Karnataka	0.346	6	0.412	7	0.478	7	0.508	10
Kerala	0.500	1	0.591	1	0.638	1	0.625	1
M. Pradesh	0.245	14	0.328	13	0.394	12	0.451	16
Maharashtra	0.363	3	0.452	4	0.523	4	0.549	4
Orissa	0.267	11	0.345	12	0.404	11	0.442	19
Punjab	0.411	2	0.475	2	0.537	2	0.569	2
Rajasthan	0.256	12	0.347	11	0.424	9	0.468	14
Tamil Nadu	0.343	7	0.466	3	0.531	3	0.544	6
Uttar Pradesh	0.255	13	0.314	14	0.388	13	0.468	13
West Bengal	0.305	8	0.404	8	0.472	8	0.509	9
All India	0.302		0.38		0.472		0.504	

Source: 1. National Human Development Report 2001 [Note: The HDI for 2001 has been estimated only for a few selected States for which some data, including the Census 2001, was available]. 2. M.H. Suryanarayana, Ankush Agrawal and K. Seetha Prabhu (2011), UNDP working paper.

From the Table, it can be observed that the performance of Karnataka in human development has been improving over the years in terms of HDI value, despite lowered ranking position of 10 in 2011 (HDI value 0.508) as compared to 7 (HDI value 0.478) in 2001. Formation of new States could be one of the reasons for the change of ranking position. Among southern states, Karnataka is marginally better than Andhra Pradesh (before the formation of Telangana State). However, Karnataka is way behind Kerala (rank 1) and Tamil Nadu (rank 5).

### 12.3.3 Human Development Reports in Karnataka – An Overview

Karnataka published its first Human Development Report in 1999. The first report helped the State to appreciate the existence of sharp socio-economic disparities between districts. The second State human development report brought out in 2005 provided a comprehensive analysis of district human development goals and outcomes especially for vulnerable sections and also examined the efficacy of service delivery

mechanisms. Table 13.3 provides a comparative picture of the performance of the districts in human development index in 1999 and 2001. During this period, the issue of prevailing regional disparities and the need to address the same through focused interventions became paramount, leading to the constitution of High Power Committee For Redressal of Regional Imbalances (HPCFRRI) under the renowned economist, Dr. Nanjudappa. An attempt was needed to assess the status of human development indicators at the taluk levels. This led to an exercise during 2005-2008 for the preparation of district human development reports for districts of Kalaburagi, Mysuru, Udupi and Vijayapura with the assistance of UNDP. The reports were released in 2010.

It is a matter of pride that the reports of Udupi and Vijayapura districts were nationally recognized. The first ever India Human Development Award – *Manava Vikas* – was awarded to the DHDR of Udupi district for 'focus on innovation in measurement'.

The third Karnataka State Human

Development Report, 2016 is under preparation and it is supported by UNDP and Niti Aayog under the project, “*Human Development Towards Bridging Inequality*”. The theme of the report is – ‘*Accelerating Equitable Human Development*’.

### **1 Preparation of DHDRs, 2014 for all the districts**

Encouraged by the preparation of four DHDRs, Government of Karnataka decided to prepare district human development reports for all the thirty districts in the State simultaneously. The DHDRs-2014, prepared by each Zilla Panchayat have been released by the ZPs in their district head quarters. The reports are available on the website of respective ZPs.

### **2 Results of DHDRs-2014**

All the 30 DHDRs, 2014 already released uniformly present, for the first time in the country, seven unique indices namely, Human Development Index (HDI), Gender Inequality Index (GII), Child Development Index (CDI), Food Security Index (FSI), Composite Taluk Development Index (CTDI) and Urban Development Index (UDI) for Urban Local Bodies (ULB) for all the taluks of each district. The methodology considers the values of these entities within the district. The relative performance of taluks and ULBs in various human development indices is shown along with ranking positions. As a case study, each DHDR computes the Composite Dalit Development Index (CDDI) in a selected Grama Panchayat (GP) having more than 50 Households of Scheduled Castes in that GP. In addition, four Small Area / Micro Studies specific to the district have been studied and presented in the report.

Each DHDR is an independent document restricted to the human development scenario of taluks and ULBs within the district. Hence, the Planning department felt that there is a need to present a consolidated and comparable picture of the major findings

of all DHDRs at a single place. Succinct and relevant information on key human development indices have been extracted from all 30 DHDRs and presented in foregoing paras.

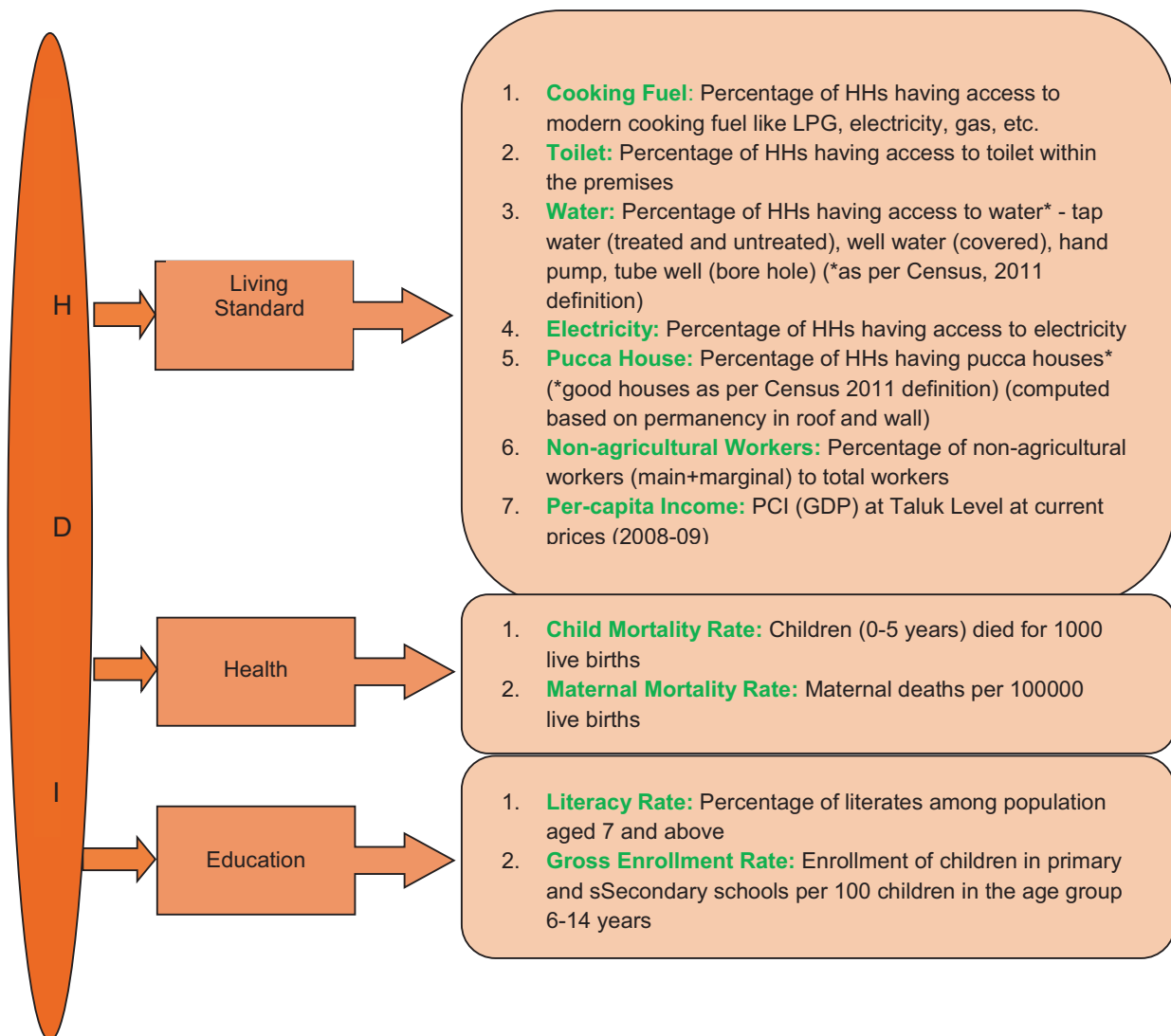
It may be noted that for computing various indices in DHDRs, minimum and maximum values for each indicator for the constituent taluks and ULBs within the district have been used. Here in this document, the minimum and maximum values for each indicator have been used considering the values for each indicator of all the 30 districts, 176 taluks and 219 ULBs in the State. As a result, the values in DHDRs vary with the values of similar indices computed and presented here.

The values for various indices along with dimensional indices for districts are presented in the foregoing paras to show the relative performance of districts. The values for various indices of all 176 taluks and 219 ULBs along with brief analysis are presented in a document titled, “*Human Development: Performance of Districts, Taluks and Urban Local Bodies in Karnataka, 2014 – A Snapshot*”, which is being released separately. However, having regard to the constraint on space, only the thematic maps for all HD-Indices for all taluks and the top five and bottom five ranking taluks in various HD Indices are briefly presented at the end of each index. Similarly, the first and the last ranking ULB under each type (MC, CMC, TMC and TP) based on UDI Value are presented with a brief analysis.

### **12.3.4 Human Development Index (HDI)**

#### **a. Indicators used in computing HDI**

The 11 indicators – covering three dimensions of human development, namely, living standard, health and education – used for computing HDI at district and taluk levels, are given in the flow chart 12.1.

**Flow Chart 12.1: Indicators for measuring Human Development Index (HDI)**

*Note: UNDP Methodology has been used for measuring HDI. Further details can be obtained from "Guidelines Document for the preparation of DHDRs, 2013-14"*

**b. HDI across Districts of Karnataka**

Table 12.80 presents the HDI values across districts of Karnataka. The Table also provides dimensional index values at the district level. This will provide insights on the dimension in which a particular district is performing better or poor.

There is a wide variation across districts in HDI values, which varies from 0.928 to 0.165. There are critical differences in the performance of certain districts with reference to three dimensions. Some districts have performed well in some dimensions while others have excelled in other dimensions.

**c. Relative Performance of Districts in**

**HDI:** To understand the performance of each district, the HDI values are classified into five groups and the same has been depicted in Thematic Map 12.3.1. It is found that there are 13 districts which either very poorly perform or have poor performance as far as HDI is concerned. Other 10 districts show moderate performance. Only 07 districts fall under good or better performing districts. It is important that more attention is paid among the very poor and poor performing districts for achieving better human development in the coming years.

**Table 12.80 Human Development Index (HDI) across DISTRICTS with dimensional index values and ranking in Karnataka, 2011**

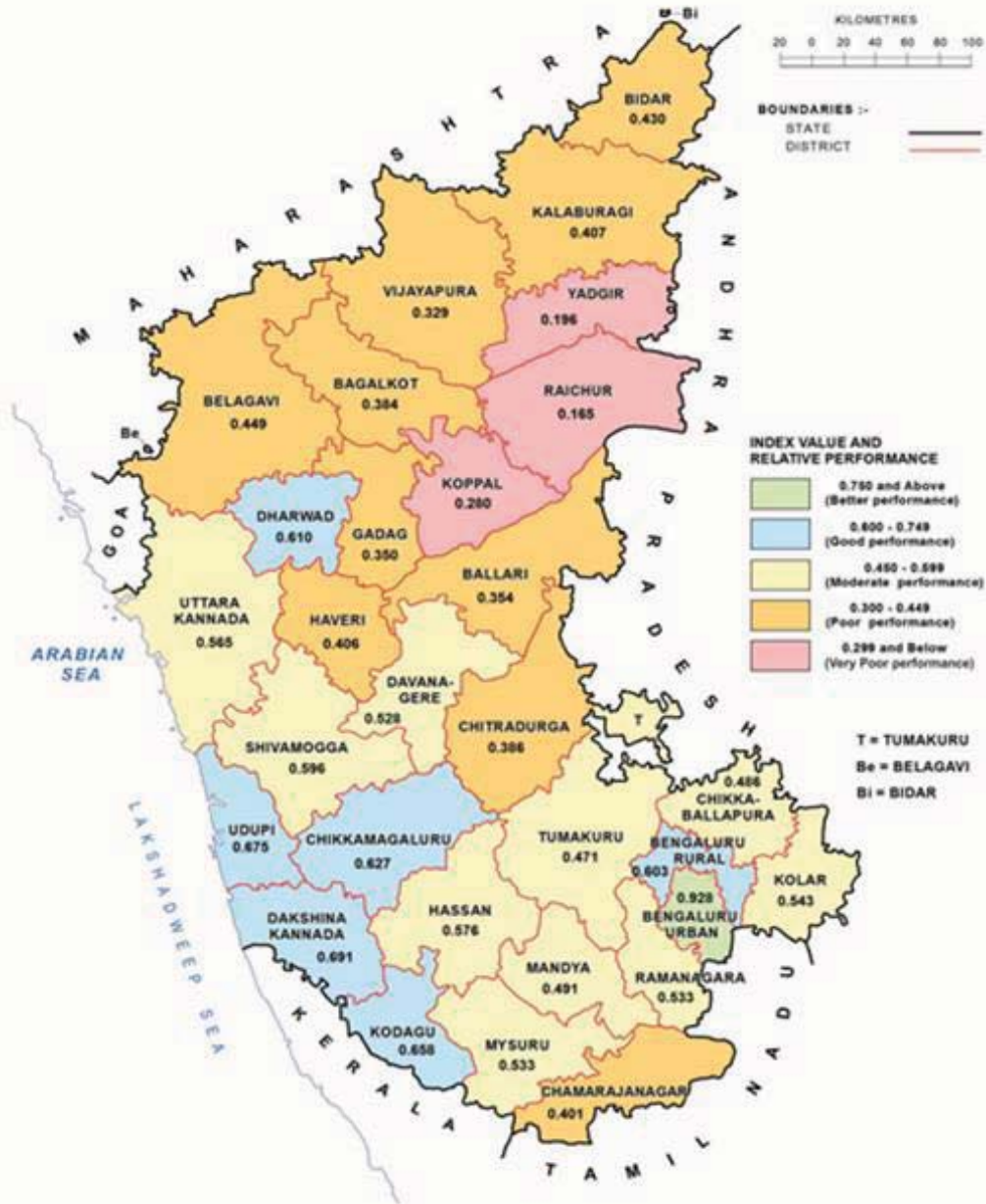
District	Living Standard Index		Health Index		Education Index		HDI	
	Value	Rank	Value	Rank	Value	Rank	Value	Rank
Bagalkot	0.191	25	0.490	23	0.605	15	0.384	24
Ballari	0.404	11	0.240	28	0.459	26	0.354	25
Belagavi	0.296	18	0.556	19	0.550	19	0.449	18
Bengaluru (R)	0.636	3	0.713	11	0.483	25	0.603	7
Bengaluru (U)	1.000	1	0.919	2	0.868	1	0.928	1
Bidar	0.189	26	0.653	12	0.646	10	0.430	19
Chamarajnar	0.234	22	0.607	17	0.452	27	0.401	22
Chikkaballapur	0.340	16	0.619	15	0.545	20	0.486	16
Chikkamagaluru	0.446	8	0.815	5	0.677	6	0.627	5
Chitradurga	0.246	21	0.445	24	0.523	22	0.386	23
Dakshina Kannada	0.647	2	0.848	3	0.600	16	0.691	2
Davanagere	0.396	13	0.523	22	0.710	5	0.528	14
Dharwad	0.539	4	0.564	18	0.748	3	0.610	6
Gadag	0.208	23	0.307	27	0.670	7	0.350	26
Hassan	0.355	15	0.819	4	0.657	9	0.576	9
Haveri	0.196	24	0.542	21	0.629	11	0.406	21
Kalaburagi	0.256	20	0.398	25	0.659	8	0.407	20
Kodagu	0.527	6	0.743	8	0.727	4	0.658	4
Kolar	0.430	9	0.612	16	0.610	14	0.543	11
Koppal	0.183	27	0.197	29	0.613	13	0.280	28
Mandya	0.287	19	0.741	9	0.556	18	0.491	15
Mysuru	0.532	5	0.543	20	0.524	21	0.533	12
Raichur	0.179	28	0.110	30	0.231	29	0.165	30
Ramanagar	0.402	12	0.728	10	0.517	23	0.533	13
Shivamogga	0.458	7	0.774	7	0.597	17	0.596	8
Tumakuru	0.330	17	0.649	13	0.489	24	0.471	17
Udupi	0.405	10	1.000	1	0.760	2	0.675	3
Uttara Kannada	0.372	14	0.776	6	0.624	12	0.565	10
Vijayapura	0.144	29	0.624	14	0.400	28	0.330	27
Yadgir	0.084	30	0.389	26	0.230	30	0.196	29

Source: DHDRs- 2014



**Thematic Map 12.1: HDI in DISTRICTS of Karnataka, 2011**

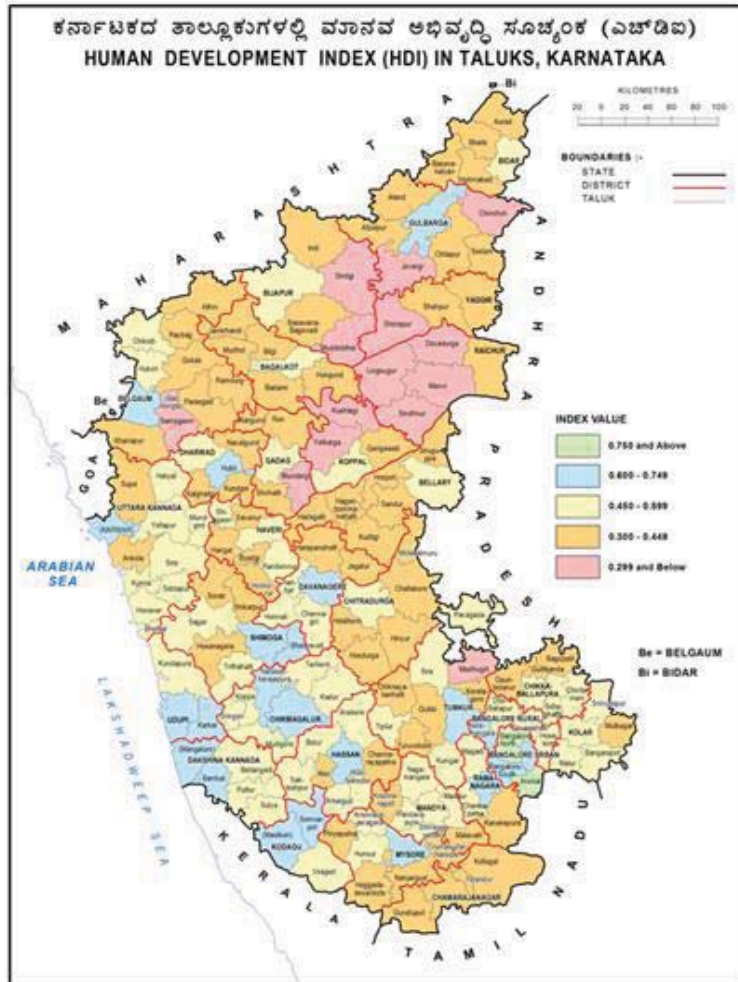
**ಕರ್ನಾಟಕದ ಜಿಲ್ಲೆಗಳಲ್ಲಿ ಮಾನವ ಅಭಿವೃದ್ಧಿ ಸೂಚ್ಯಂಕ (ಎಚ್‌ಡಿಐ)  
HUMAN DEVELOPMENT INDEX (HDI) IN DISTRICTS, KARNATAKA**



**d. Relative performance of Taluks in HDI**

The relative performance of all the 176 taluks shown in the thematic map and the top five and the bottom five performing taluks with their HDI values are given below.

**Thematic Map 12.2: HDI in TALUKS of Karnataka, 2011**



**Human Development Index (HDI) - Taluks**

**Top FIVE** taluks or good performing in HDI in the State.

- o Anekal - 1<sup>st</sup> rank (0.775)
- o Bengaluru North - 2<sup>nd</sup> rank (0.770)
- o Tumkuru - 3<sup>rd</sup> rank (0.740)
- o Mangaluru - 4<sup>th</sup> rank (0.729)
- o Bengaluru South - 5<sup>th</sup> rank (0.718)

**Bottom FIVE** or poor performing or backward taluks in HDI in the State.

- Devadurga - 176<sup>th</sup> rank (0.183)
- Shorapura - 175<sup>th</sup> rank (0.249)
- Sindhanur - 174<sup>th</sup> rank (0.260)
- Chinholi - 173<sup>rd</sup> rank (0.263)
- Manvi - 172<sup>nd</sup> rank (0.267)

The depiction of performance in HDI across districts and taluks brings out several important aspects needing attention. First, the regional differences in HDI performance continue to exist in the State with districts and taluks of Belagavi and Kalaburagi divisions falling in bottom of the HDI ranking as compared to districts and taluks of Bengaluru and Mysuru divisions. Second, the differences are wide in Living Standard and Health dimension as compared to Educational dimension. Therefore, it is important that more attention is paid in basic amenities and health care services.

### **12.3.4 Gender Perspective of Human Development**

Inclusive Development cannot be attained unless women participate equally in the development process. Developing countries like India face huge gender inequalities, which have a direct bearing on their human development. For instance, in a patriarchal set-up where gender discrimination is rampant, a female child is ignored when it comes to health or education. Females have little control over their lives and suffer a great deal from intra-household discrimination. Thus, HDI dimensions by themselves do not portray a complete picture of human development. In order to account for such inequalities, UNDP developed the Gender-related Development Index (GDI) in 1995.

The Gender Perspective in Human Development emphasizes the need to assess the relative levels of progress or backwardness of status of women, on different development indicators covering various issues of education, health, income, safety, survival, work, participation in decision making, political participation, etc. The indicators include either attainment levels or gaps between men and women or

both in selected spheres. The Gender Perspective also highlights the need for the effective adoption and implementation of policies / programmes to achieve the set attainment levels and remove gaps between men and women.

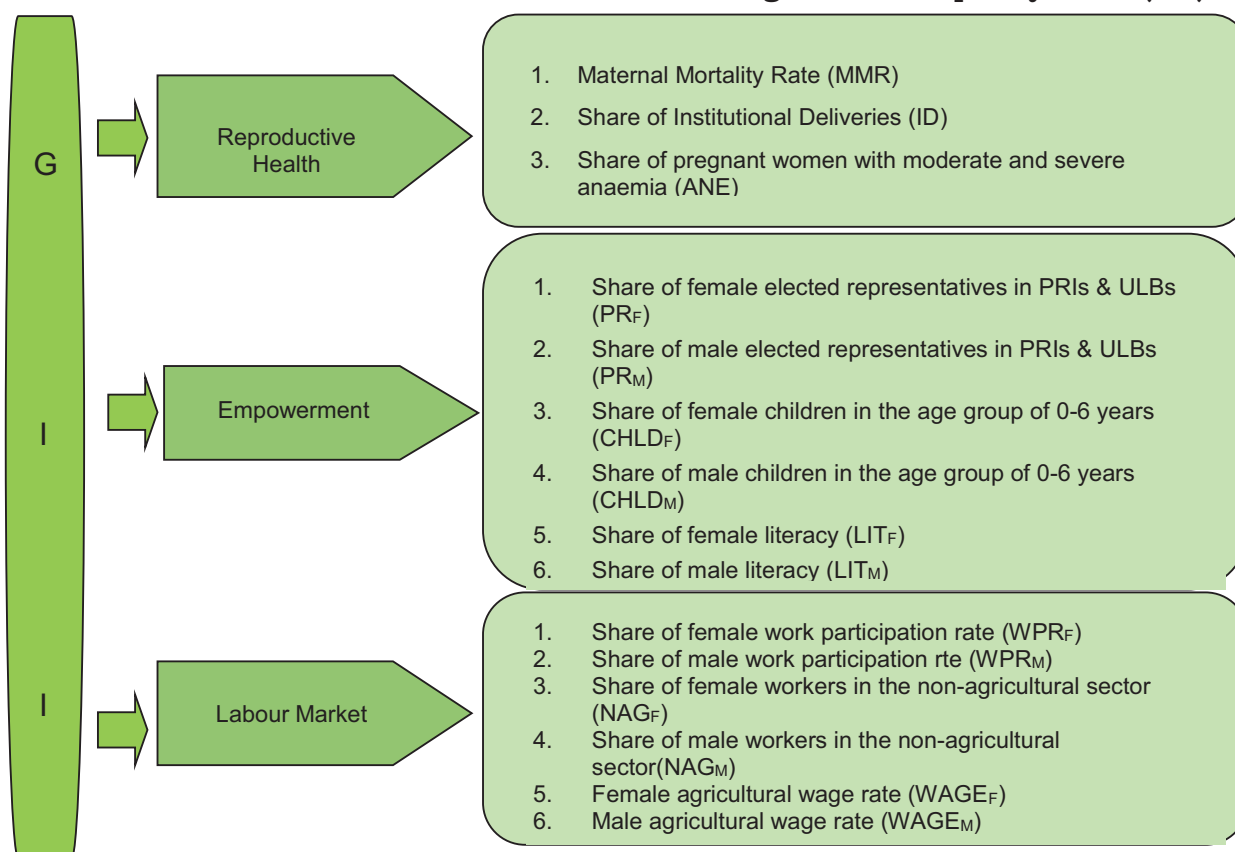
According to UN Human Development Report, 2013, India has poor Gender Inequality Index (GII), apart from the overall poor Human Development Index (HDI). India got the rank of 132 amongst all countries. All the countries in the region of South Asia were ranked very higher on GII. China was also ranked very high on GII. This GII measures the inequality in terms of achievements between males and females in three main aspects namely, labour market, reproductive health and empowerment.

The State-wise GII in India with improved methodology has not been calculated by UNDP or any other organization so far. However, based on the GII values in DHDRs, 2014, the GII for districts and top 10 and bottom 10 ranking taluks have been computed and presented here.

### **1 Gender Inequality Index (GII) in Karnataka**

The Gender Inequality Index (GII) measures the loss in potential of human development due to inequality between female and male achievements. The GII value ranges between 'zero'- indicating absence of gender inequality and 'one'- indicating highest gender inequality.

The 15 indicators – covering three dimensions of reproductive health, empowerment and labour market – used for deriving GII at district and taluk levels, are given in flow chart 12.2.

**Flow Chart 12.2: Indicators for measuring Gender Inequality Index (GII)**

Note: UNDP Methodology has been used for measuring GII. Further details can be obtained from “Guidelines Document for the preparation of DHDRs, 2013-14”.

Table 12.81 presents the estimated GII values across districts of Karnataka, along with the dimensional index values. As already indicated, lower the GII value, lower is the inequality. However, the dimensional index presents the reverse and those districts with higher dimensional values represent lower inequality. The GII values vary from 0.038 to 0.169. The districts such as Bengaluru Urban, Dakshina Kannada and Udupi are showing less inequality in health dimension and empowerment dimension. They are also

at the top in the case of labour market dimension. In addition, Kodagu also show less inequality in the labour market for women.

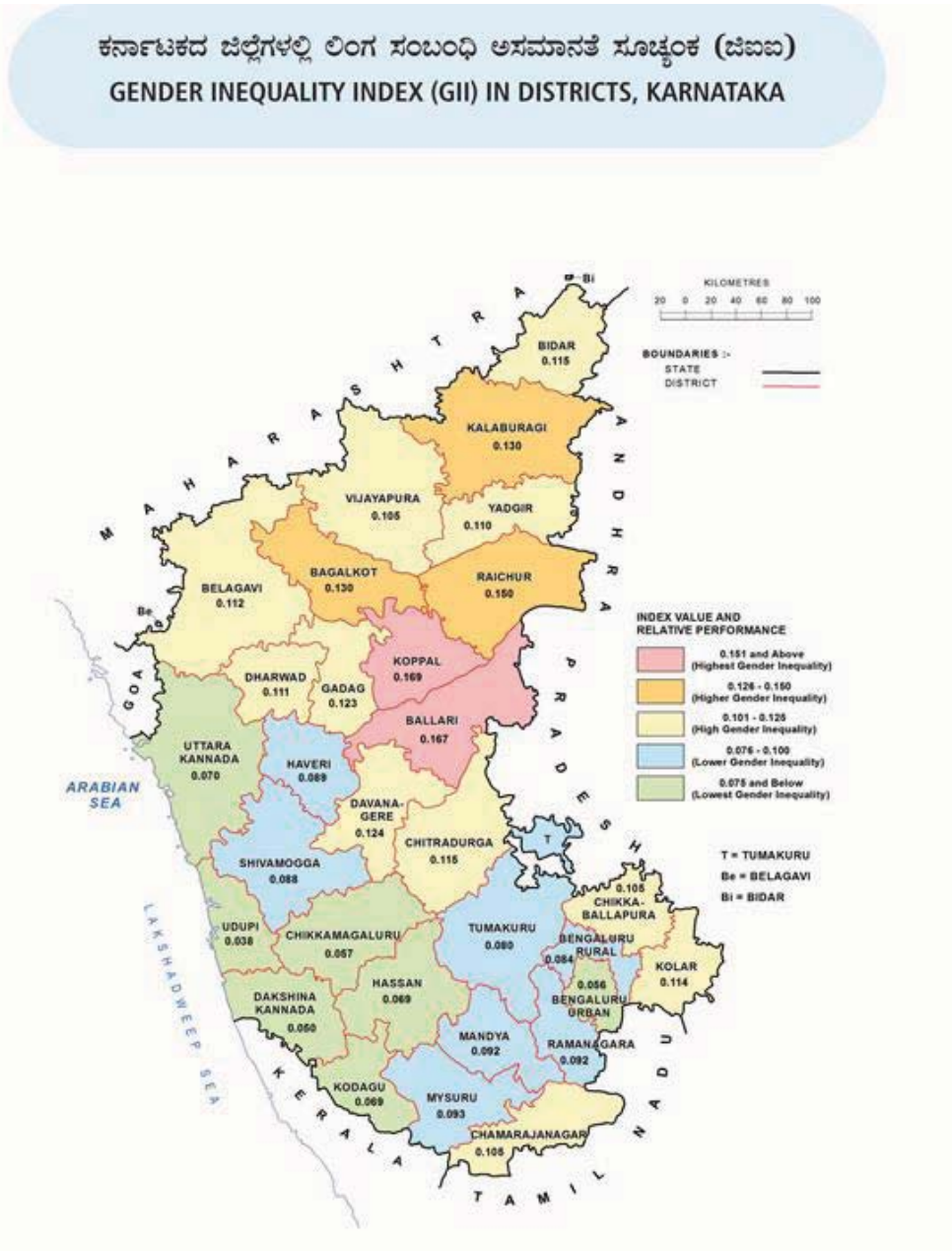
There appears to be a correspondence between HDI values and GII values. The top districts in GII values (lower values) are also those with higher HDI values. This reflects the fact that once human development dimensions are addressed, the gender inequality also will reduce in the society.

**Table 12.81: Gender Inequality Index (GII) across Districts with dimensional index values and ranking in Karnataka, 2011**

District	Health Index		Empowerment Index		Labour Index		GII	
	Value	Rank	Value	Rank	Value	Rank	Value	Rank
Bagalkot	0.646	22	0.555	24	0.451	9	0.130	27
Ballari	0.602	29	0.558	22	0.187	30	0.167	29
Belagavi	0.640	25	0.568	16	0.370	20	0.112	20
Bengaluru Rural	0.680	8	0.579	9	0.542	5	0.084	9
Bengaluru Urban	0.740	2	0.602	2	0.662	2	0.056	3
Bidar	0.661	14	0.560	19	0.328	25	0.115	23
Chamarajnar	0.641	24	0.535	28	0.375	19	0.105	17
Chikkaballapur	0.649	17	0.558	21	0.394	14	0.105	15
Chikkamagaluru	0.693	4	0.583	8	0.352	23	0.057	4
Chitradurga	0.649	19	0.566	18	0.292	27	0.115	22
Dakshina Kannada	0.708	3	0.605	1	0.788	1	0.050	2
Davanagere	0.644	23	0.574	12	0.385	18	0.124	25
Dharwad	0.647	21	0.584	7	0.391	16	0.111	19
Gadag	0.628	26	0.571	14	0.272	29	0.123	24
Hassan	0.687	5	0.575	11	0.493	7	0.069	6
Haveri	0.648	20	0.578	10	0.274	28	0.089	11
Kalaburagi	0.649	18	0.544	27	0.405	13	0.130	26
Kodagu	0.664	13	0.591	5	0.647	3	0.069	5
Kolar	0.624	27	0.570	15	0.529	6	0.114	21
Koppal	0.593	30	0.553	25	0.413	10	0.169	30
Mandya	0.677	9	0.560	20	0.411	12	0.092	13
Mysuru	0.670	12	0.566	17	0.386	17	0.093	14
Raichur	0.603	28	0.529	29	0.307	26	0.150	28
Ramanagar	0.659	15	0.556	23	0.484	8	0.092	12
Shivamogga	0.681	7	0.586	6	0.359	22	0.088	10
Tumakuru	0.671	11	0.572	13	0.413	11	0.080	8
Udupi	0.748	1	0.600	3	0.544	4	0.038	1
Uttara Kannada	0.685	6	0.594	4	0.392	15	0.070	7
Vijayapura	0.673	10	0.550	26	0.366	21	0.105	16
Yadgir	0.650	16	0.505	30	0.345	24	0.110	18

Source: DHDRs, 2014

**Thematic Map 12.3: GII in DISTRICTS of Karnataka, 2011**



**2 Relative Performance of Districts in GII**

In order to understand the performance of the districts in terms of gender inequality, the index is divided into five groups as exhibited in Thematic Map 12.4. It is found that there are two districts with highest gender inequality followed by 3 and 11 districts with higher and high gender inequality respectively. Nearly 14 districts can be

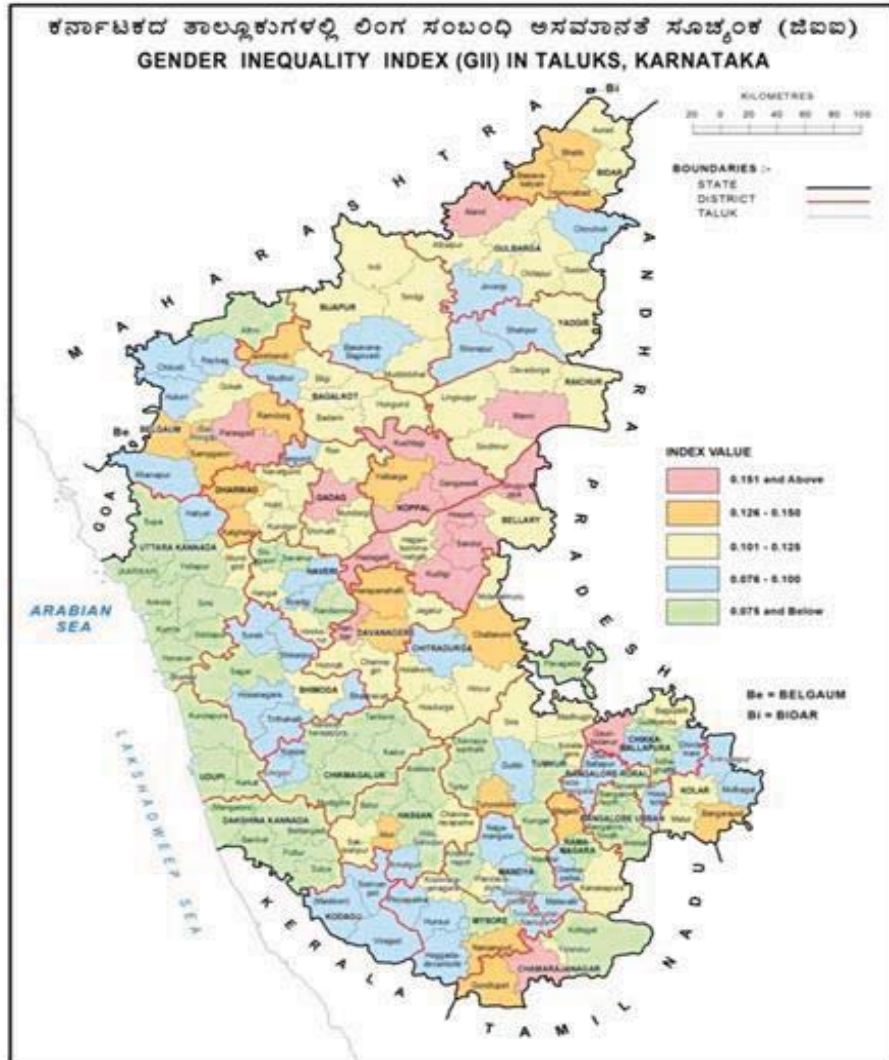
classified as having lowest and lower gender inequality. Thus, more than half of the districts are in the high gender inequality category. Therefore, it is important that human development efforts also address the issues of gender dimension equally so that everyone enjoys the fruits of development.

**3 Relative performance of Taluks in GII**

The relative performance of all the 176 taluks shown in the thematic map and the top five

and the bottom five performing taluks with their GII values are given below.

**Thematic Map 12.4: GII in TALUKS of Karnataka, 2011**



Gender Inequality Index (GII) - Taluks	
Top FIVE taluks in the State with least Gender Inequality	Bottom FIVE taluks in the State with highest Gender Inequality
<ul style="list-style-type: none"> <li>▪ Bengaluru south - 1<sup>st</sup> rank (0.0246)</li> <li>▪ Belthangadi - 2<sup>nd</sup> rank (0.0255)</li> <li>▪ Kadur - 3<sup>rd</sup> rank (0.0280)</li> <li>▪ Hassan - 4<sup>th</sup> rank (0.0305)</li> <li>▪ Mangaluru - 5<sup>th</sup> rank (0.0336)</li> </ul>	<ul style="list-style-type: none"> <li>▪ Siraguppa - 172<sup>nd</sup> rank (0.1926)</li> <li>▪ Hosapete - 173<sup>rd</sup> rank (0.2022)</li> <li>▪ Gadag - 174<sup>th</sup> rank (0.2060)</li> <li>▪ Harihara - 175<sup>th</sup> rank (0.2121)</li> <li>▪ Kudlagi - 176<sup>th</sup> rank (0.2206)</li> </ul>

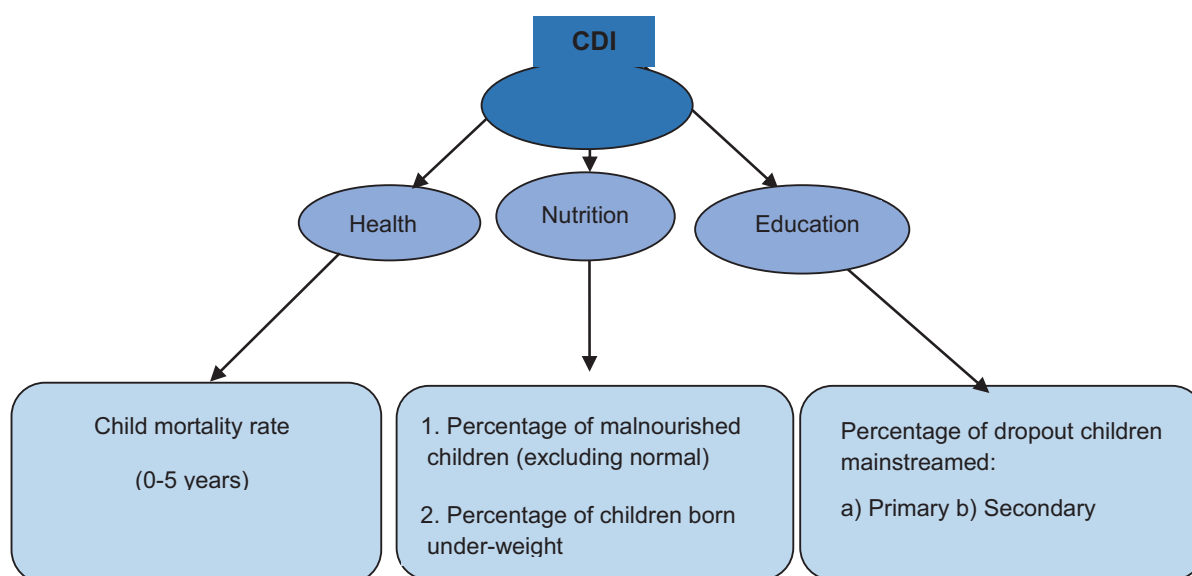
### 12.3.6 Child Development Index (CDI)

Sustainable development of a nation depends on the care and effort. It invests in moulding lives of its children. The developing countries are deprived off access to good nutrition, health, education and a nurturing environment in which their innate talent could blossom. A UNICEF report says that “Mal-nutrition is more common in Indian than in Sub-Saharan Africa... around 46 percent of all children below the age of three are too small for their age, 47 per cent are under weight and at least 16 percent are wasted. Many of these children are severely mal-nourished”.

Hence, there is a need to assess the level of child development across districts and taluks of the State for facilitating more focused

approach to the issue. The concept of child development (CDI) has been used for the first time in Karnataka. The CDI – a composite index is a simple average of the three domain indices, namely, Health Index (Child Mortality Index), Nutrition Index (Percentage of mal-nourished and children born under-weight) and Education Index (Percentage of primary and secondary school dropout children mainstreamed). The CDI has been computed for all taluks in each of the 30 districts of the State and reflected in the respective DHDRs. The CDI values extracted from all the taluks across the State have been computed and presented in the foregoing section. Flow chart 12.3 shows the indicators used under different dimensions to compute Child Development Index (CDI).

**Flow Chart 12.3 Indicators used for measuring Child Development Index (CDI)**





**Table 12.82: Child Development Index (CDI) across DISTRICTS with dimensional index values and ranking in Karnataka, 2011**

District	Health Index		Nutrition Index		Education Index		CDI	
	Value	Rank	Value	Rank	Value	Rank	Value	Rank
Bagalkot	0.438	23	0.312	29	0.834	5	0.474	24
Ballari	0.219	28	0.630	14	0.796	7	0.569	17
Belagavi	0.547	20	0.440	23	0.760	8	0.547	19
Bengaluru Rural	0.719	9	0.757	9	0.700	11	0.733	6
Bengaluru Urban	0.938	2	0.760	8	0.301	26	0.690	9
Bidar	0.656	12	0.515	21	0.432	22	0.530	21
Chamarajnar	0.594	13	0.614	15	0.397	23	0.555	18
Chikkaballapur	0.594	13	0.718	11	0.711	10	0.685	10
Chikkamagaluru	0.813	5	0.878	2	0.564	16	0.783	2
Chitradurga	0.372	24	0.312	28	0.882	4	0.469	25
Dakshina Kannada	0.859	3	0.770	7	0.959	3	0.840	1
Davanagere	0.516	21	0.545	19	0.697	12	0.575	16
Dharwad	0.578	18	0.560	18	0.800	6	0.624	13
Gadag	0.313	27	0.602	17	0.998	2	0.628	12
Hassan	0.844	4	0.794	4	0.487	20	0.730	7
Haveri	0.563	19	0.524	20	0.491	19	0.525	22
Kalaburagi	0.328	25	0.336	27	0.336	25	0.334	28
Kodagu	0.688	11	0.906	1	0.156	27	0.664	11
Kolar	0.594	13	0.660	13	0.000	30	0.479	23
Koppal	0.172	29	0.341	26	0.360	24	0.303	29
Mandya	0.734	8	0.780	5	0.116	28	0.603	15
Mysuru	0.516	21	0.483	22	0.667	13	0.537	20
Raichur	0.000	30	0.185	30	0.555	17	0.231	30
Ramanagar	0.719	9	0.776	6	0.627	14	0.725	8
Shivamogga	0.781	6	0.794	3	0.604	15	0.743	4
Tumakuru	0.594	13	0.413	25	0.445	21	0.466	26
Udupi	1.000	1	0.725	10	0.533	18	0.746	3
Uttara Kannada	0.750	7	0.715	12	0.755	9	0.734	5
Vijayapura	0.594	13	0.437	24	1.000	1	0.617	14
Yadgir	0.328	25	0.612	16	0.111	29	0.416	27

Source: DHDRs, 2014

Of the top five districts in CDI, two belong to the Mysuru division, two to the Bengaluru division and one to the Belagavi division. None of the districts of the Kalaburagi division appears in the list of top five CDI districts. Of the five bottom districts, four belong to the Kalabuagai division and one to Bengaluru

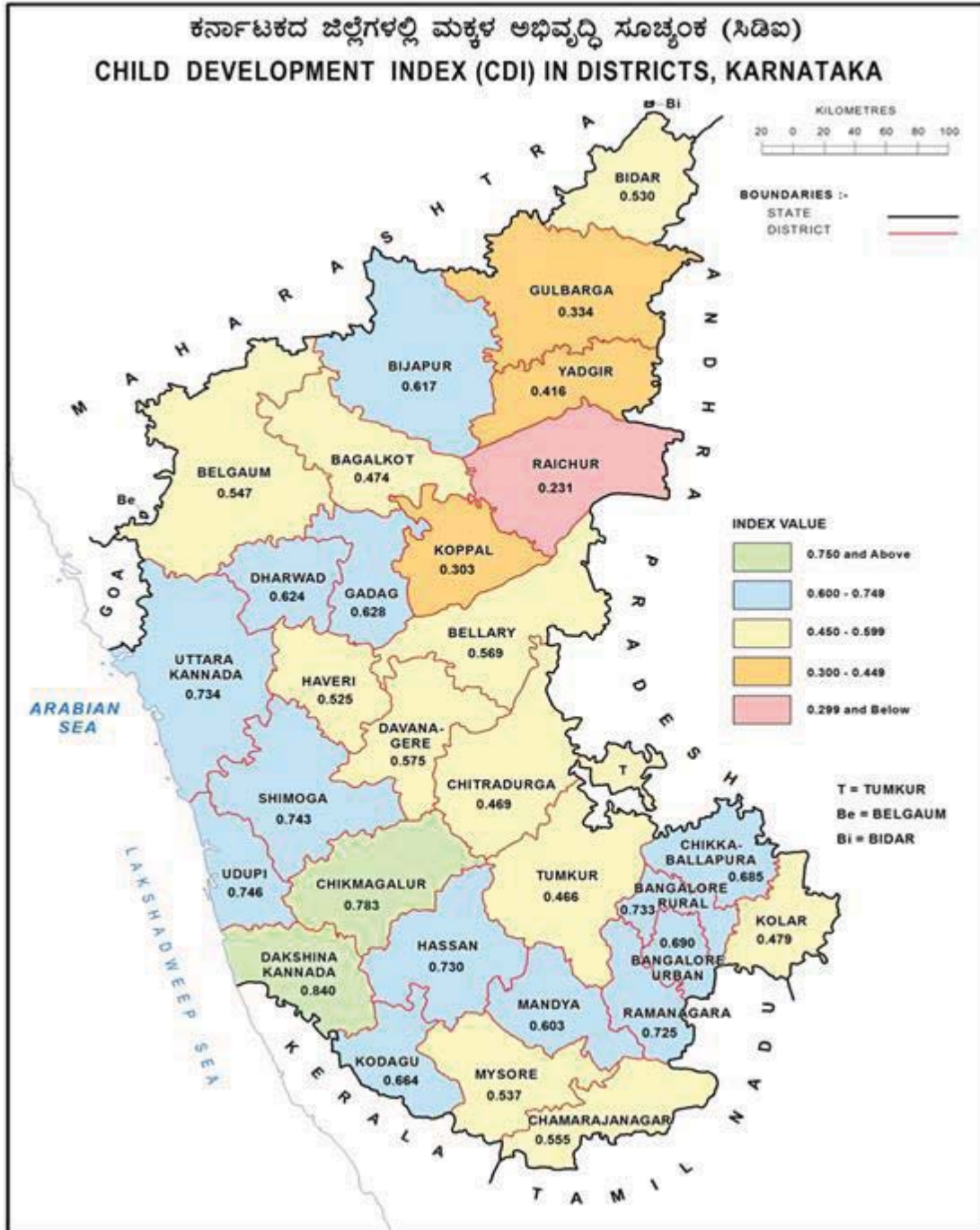
division. The CDI value of Dakshina Kannada district is 3.64 time is greater than that of the CDI value of Raichur district. The issues of child well being has to be ensured by giving due consideration to the CDI dimensional indices and their components.

**1 Relative performance of Districts in CDI**

The thematic map 12.5 demonstrates that the regional distinction is not clear in respect of CDI values. the districts of all four divisions (Belagavi, Kalaburagi, Bengaluru and

Mysuru) are found in the good and moderate performance categories. However, the better performance in CDI is dominated by the districts of Bengaluru and Mysuru divisions, while the very poor performance is witnessed in all the districts of Kalaburagi division.

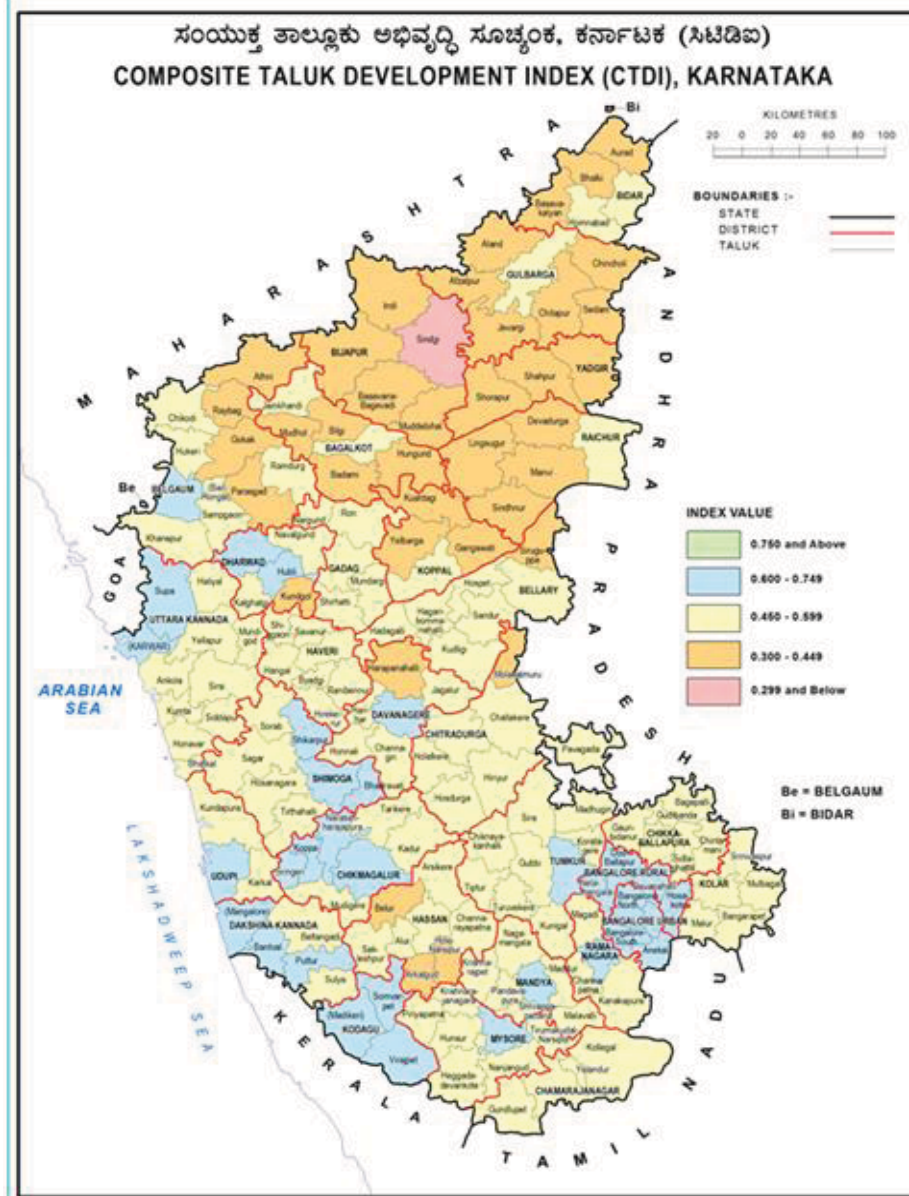
**Thematic Map 12.5: CDI in Districts of Karnataka, 2011**



**2 Relative performance of Taluks in CDI**  
 The relative performance of all the 176 taluks shown in the thematic map and the top five

and the bottom five performing taluks with their CDI values are given below.

**Thematic Map 12.6: CDI in Taluks of Karnataka, 2011**



**Child Development Index (CDI) -Taluks**

**Top five or good performing taluks in CDI in the State**

- ✓ Honnavara (U.K) - 1<sup>st</sup> rank (0.889)
- ✓ Bantwala (D.K) - 2<sup>nd</sup> rank (0.879)
- ✓ Sidlaghatta(Chikaballapura) - 3<sup>rd</sup> rank (0.868)
- ✓ Yellapura (U.K) - 4<sup>th</sup> rank (0.848)
- ✓ Pandavapura (Mandya) - 5<sup>th</sup> rank (0.845)

**Bottom five or poor performing taluks in the State, where the CDI value is less than 0.4.**

- ✓ Bhalgi (Bidar) rank - 176<sup>th</sup> rank (0.327)
- ✓ Devadurga (Raichur) - 175<sup>th</sup> rank (0.354)
- ✓ Shorapura (Yadgir) - 174<sup>th</sup> rank (0.364)
- ✓ Gangawathi (Koppal) - 173<sup>rd</sup> rank (0.383)
- ✓ Manvi (Raichur) - 172<sup>nd</sup> rank (0.386)

### 12.3.7 Food Security Index (FSI)

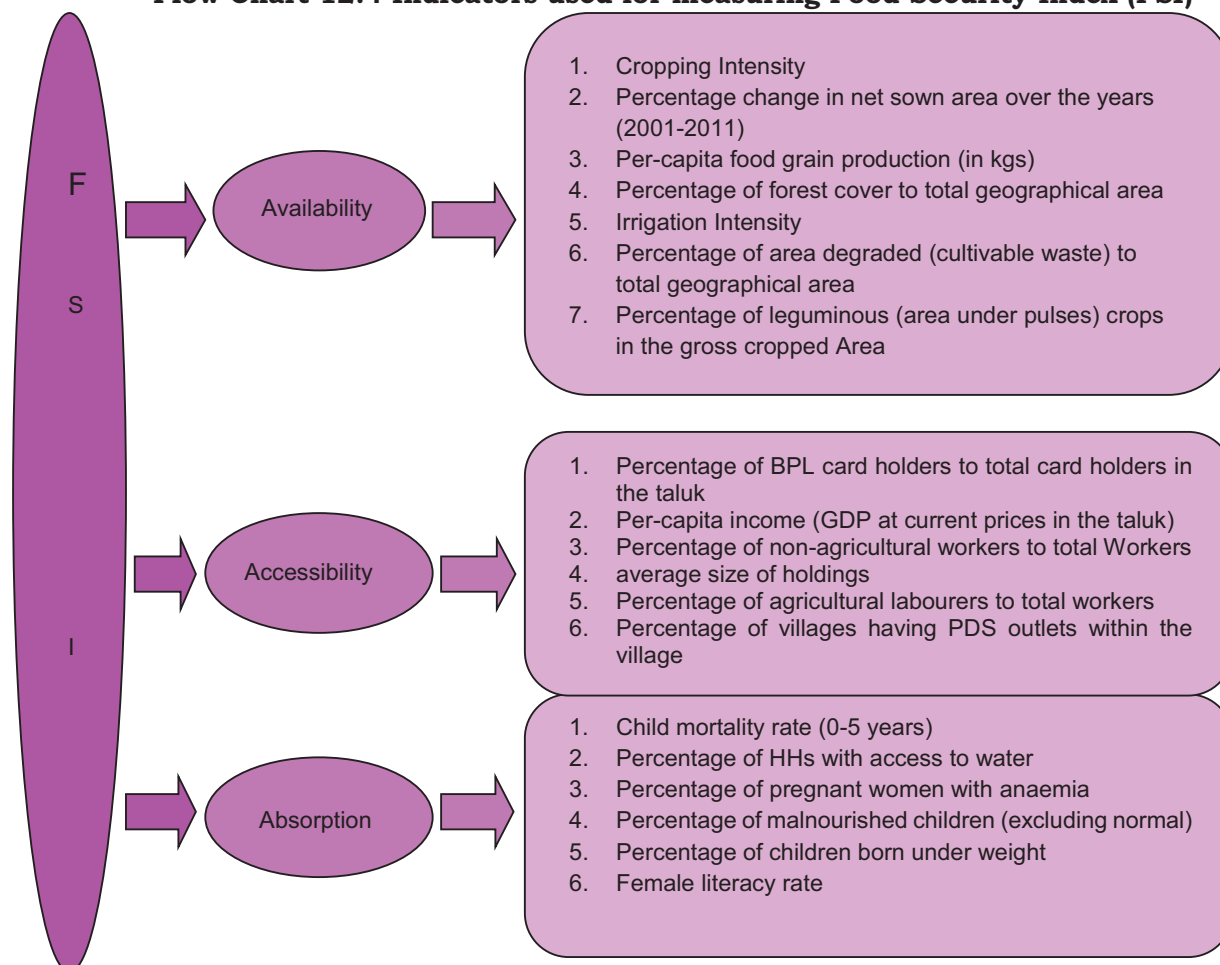
Food security situation in India is on the road to achieving self-sufficiency. However, the country has not been able to eliminate chronic hunger and poverty due to lack of access to food grains and also ability to absorb them. Post World War II, food security meant building emergency grain reserves and ensuring **physical availability** of food in the market. After the onset of green revolution in the late 60's, it became obvious that **economic access** to food is equally important for ensuring food security at the household level. During 80's, the concept of food security revolved around the principle of **social access**, with special reference to marginalised communities and gender discrimination. The ecological foundation essential for sustained agricultural progress are increasingly under stress due to human activities. Thus, the **environmental access** to food becomes important (MMSRF, 2003). One of the earliest efforts to measure food security scenario in the country was taken up

by the M S Swaminathan Reserach Founadtion by way of bringing food security related atlas in rural and urban areas across the Indian States.

Sustainability of food security is a long term perspective of being able to produce and provide food in perpetuity. It is directly related to long term ecological health. Economic development is required for food security, so that a country is not only able to produce enough food but also provide livelihood security so that people can afford enough food. Ecology and economy were in the past considered as contradictory to each other. Reconciling the environment and economic development was first discussed at the UN Conference on human environment Stolkhome in 1972.

The present exercise is an offshoot of those efforts. Food Security Index (FSI) has been computed across all 176 taluks in the 30 districts. The indicators used for deriving FSI are in following flow chart 12.4.

**Flow Chart 12.4 Indicators used for measuring Food Security Index (FSI)**



The Food Security Index Values of all the districts in the State are presented in Table 12.3.6 along with dimensional index values and ranking. It shows that Dharwad district followed by Dakshina Kannada districts have performed better among the districts. Dharwad district performs well in availability parameters but the with regard to the accessibility and absorption parameters much more needs to be achieved in the district. Similarly, in Dakshina Kannada, the accessibility and absorption parameters

perform better as compared to the availability parameter. The performance of a district with respect to one or two parameters have given a better picture about the food security scenario but in all these districts, suitable initiatives need to be taken up to improve the performance of other indicators and parameters. Among the districts, Chikkaballapur followed by Raichur are at the bottom among the districts, with Chikkaballapur performing poorly in all the three dimensions.

**Table 12.83: Food Security Index (FSI) across DISTRICTS with dimensional index values and ranking in Karnataka, 2011**

District	Availability Index		Accessibility Index		Absorption Index		FSI	
	Value	Rank	Value	Rank	Value	Rank	Value	Rank
Bagalkot	0.390	9	0.749	6	0.418	25	0.519	9
Ballari	0.248	15	0.464	14	0.339	26	0.350	22
Belagavi	0.301	10	0.787	4	0.545	19	0.544	8
Bengaluru Rural	0.054	29	0.083	29	0.702	9	0.280	27
Bengaluru Urban	0.094	25	0.707	7	0.967	2	0.589	4
Bidar	0.465	5	0.678	8	0.564	17	0.569	5
Chamarajnaraga	0.255	14	0.483	13	0.455	23	0.398	16
Chikkaballapur	0.068	28	0.049	30	0.533	20	0.216	30
Chikkamagaluru	0.119	22	0.244	24	0.778	6	0.380	18
Chitradurga	0.202	17	0.240	25	0.461	22	0.301	26
Dakshina Kannada	0.154	21	1.000	1	0.930	3	0.694	2
Davanagere	0.188	18	0.447	16	0.580	16	0.405	15
Dharwad	0.868	1	0.554	10	0.664	10	0.695	1
Gadag	0.514	4	0.403	18	0.438	24	0.452	13
Hassan	0.266	13	0.091	28	0.729	8	0.362	20
Haveri	0.109	24	0.537	11	0.621	11	0.422	14
Kalaburagi	0.546	3	0.529	12	0.324	27	0.466	12
Kodagu	0.049	30	0.880	2	0.774	7	0.568	6
Kolar	0.154	20	0.289	20	0.595	15	0.346	24
Koppal	0.271	12	0.260	22	0.275	28	0.269	28
Mandya	0.218	16	0.259	23	0.615	12	0.364	19
Mysuru	0.649	2	0.272	21	0.558	18	0.493	11
Raichur	0.298	11	0.413	17	0.086	30	0.266	29
Ramanagar	0.080	26	0.354	19	0.595	14	0.343	25
Shivamogga	0.110	23	0.183	26	0.782	5	0.358	21
Tumakuru	0.425	7	0.153	27	0.601	13	0.393	17
Udupi	0.156	19	0.867	3	0.970	1	0.664	3
Uttara Kannada	0.070	27	0.763	5	0.808	4	0.547	7
Vijayapura	0.421	8	0.626	9	0.476	21	0.508	10
Yadgir	0.429	6	0.452	15	0.164	29	0.348	23

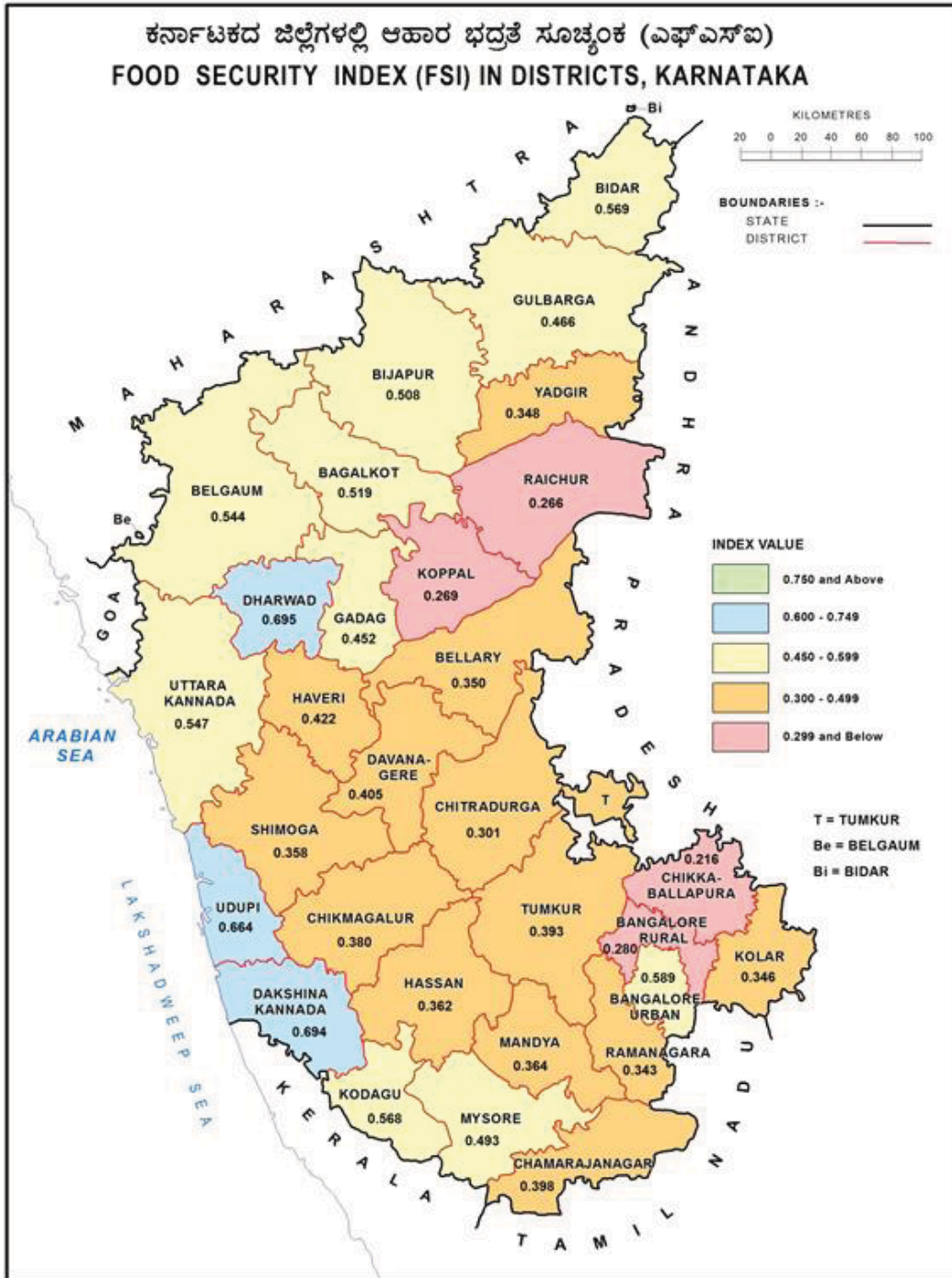
Source: DHDRs, 2014

**1 Relative performance of DISTRICTS in FSI**

The Food Security Map among the districts in the State is given in Thematic Map 12.7. This is based on the Food Security Index Value

consisting of the three dimensions of availability, accessibility and absorption. It may be observed that none of the districts figure in the top most category depicted in green colour. Majority of districts are either moderately performing districts or poorly performing districts.

**Thematic Map 12.7: FSI in Districts of Karnataka, 2011**

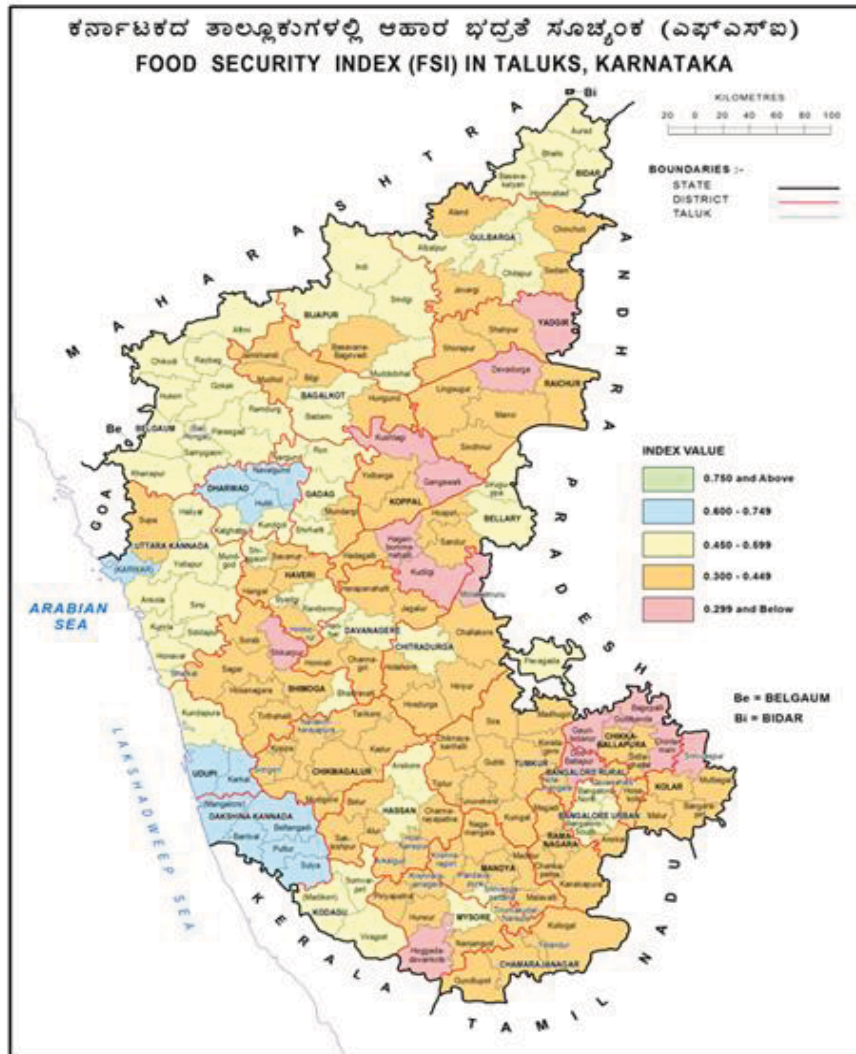


## 2 Relative performance of TALUKS in FSI

The relative performance of all the 176 taluks shown in the thematic map and the

top five and the bottom five performing taluks with their FSI values are given below.

**Thematic Map 12.8: FSI in Taluks of Karnataka, 2011**



### Food Security Index (FSI) - Taluks

Top five or good performing taluks in FSI in the State.

➤Mangaluru	- 1 <sup>st</sup> rank (0.710)
➤Navalgund	- 2 <sup>nd</sup> rank (0.683)
➤Udupi	- 3 <sup>rd</sup> rank (0.666)
➤Hubballi	- 4 <sup>th</sup> rank (0.665)
➤Dharwad	- 5 <sup>th</sup> rank (0.638)

Bottom five or poor performing taluks in FSI in the State

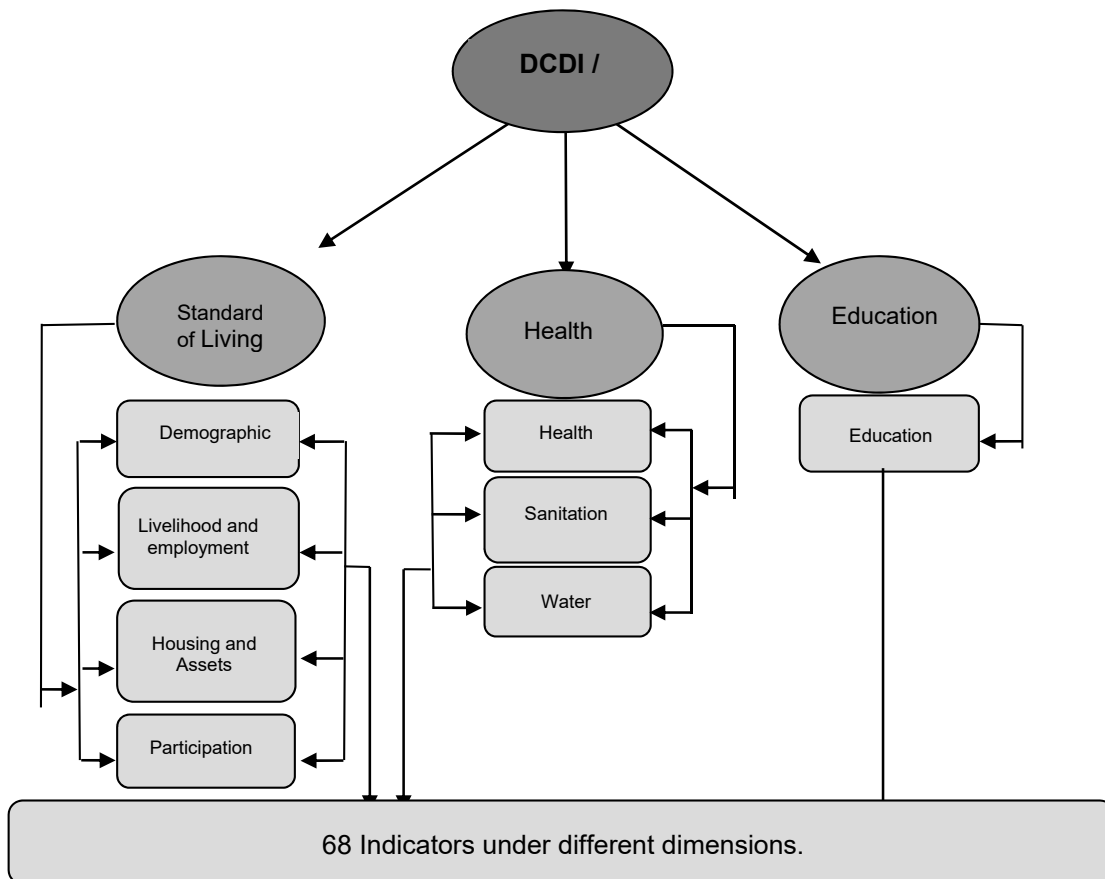
➤Heggaddevanakote	-172 <sup>nd</sup> rank(0.233)
➤Khustagi	-173 <sup>rd</sup> rank (0.223)
➤Gudibande	-174 <sup>th</sup> rank (0.215)
➤Devadurga	-175 <sup>th</sup> rank (0.207)
➤Yadgir	-176 <sup>th</sup> rank (0.133)

**12.3.8 District Composite and Composite Taluk Development Indices (DCDI/CTDI)**

Both the District Composite Development Index (DCDI) and the Composite Taluk Development Index (CTDI) have been computed based on 68 indicators. The indicators comprehensively represent various dimensions such as Demography, Livelihood and Employment, Housing and Assets, Participation, Health, Sanitation, Water and Education. The details are given in the following flow chart 12.5.

Table 12.84 gives the relative positions of the districts based on the eight dimensions. It shows that the performance of the districts varies across different dimensions and the best performance in few dimensions has pushed up the position of some districts compared to other districts. Bengaluru Urban, Shivamogga, Bengaluru Rural, Dakshina Kannada and Mandya districts are performing better as compared to the other districts in the State. The North Karnataka districts of Yadgir, Vijayapura and Kalaburagi are at the bottom among the districts in DCDI.

**Flow chart 12.5 Indicators used for measuring District Composite / Composite Taluk Development Indices (DCDI/CTDI)**





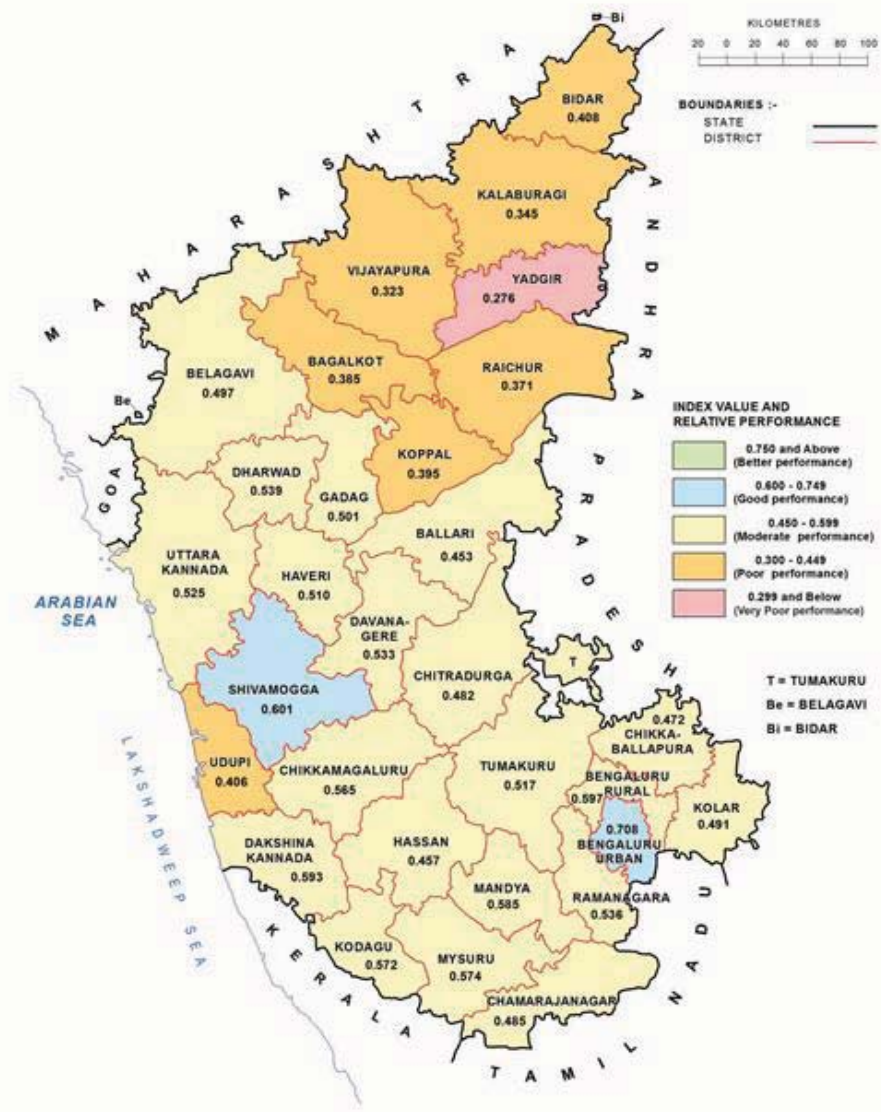
**Table 12.84: District Composite Development Index (DCDI) across DISTRICTS with dimensional index values and ranking in Karnataka, 2011**

District	Demographic Index		Livelihood Index		Housing & Assets Index		Participation Index		Health Index		Sanitation Index		Water Index		Education Index		DCDI	
	Value	Rank	Value	Rank	Value	Rank	Value	Rank	Value	Rank	Value	Rank	Value	Rank	Value	Rank	Value	Rank
Bagalkot	0.500	20	0.366	11	0.049	28	0.497	23	0.260	24	0.109	26	0.678	16	0.624	26	0.385	26
Ballari	0.422	28	0.472	3	0.320	13	0.549	16	0.197	27	0.217	18	0.735	14	0.712	19	0.453	22
Belagavi	0.470	25	0.374	9	0.247	18	0.608	11	0.502	12	0.377	8	0.601	21	0.795	12	0.497	16
Bengaluru Rural	0.535	14	0.352	14	0.547	2	0.625	9	0.422	18	0.624	3	0.818	8	0.855	7	0.597	3
Bengaluru Urban	0.395	29	0.470	4	1.000	1	0.422	26	0.913	2	0.581	4	1.000	1	0.881	6	0.708	1
Bidar	0.504	19	0.244	29	0.181	23	0.549	17	0.416	19	0.123	24	0.490	26	0.754	16	0.408	23
Chamarajnagar	0.562	12	0.276	28	0.224	21	0.499	22	0.646	6	0.236	17	0.806	10	0.631	25	0.485	18
Chikkaballapur	0.529	15	0.332	20	0.441	6	0.505	20	0.500	13	0.250	16	0.726	15	0.496	28	0.472	20
Chikkamagaluru	0.665	3	0.298	26	0.310	16	0.739	5	0.679	5	0.356	11	0.771	12	0.701	21	0.565	8
Chitradurga	0.552	13	0.361	13	0.231	19	0.616	10	0.530	11	0.167	21	0.762	13	0.643	24	0.483	19
Dakshina Kannada	0.665	4	0.568	1	0.494	4	0.666	7	0.305	23	0.660	2	0.388	28	1.000	1	0.593	4
Davanagere	0.526	16	0.432	5	0.317	14	0.542	19	0.411	20	0.389	6	0.818	9	0.825	10	0.533	11
Dharwad	0.492	22	0.483	2	0.387	8	0.672	6	0.156	28	0.378	7	0.860	6	0.883	5	0.539	9
Gadag	0.466	26	0.302	23	0.067	26	0.883	1	0.606	7	0.207	19	0.661	17	0.817	11	0.501	15
Hassan	0.564	11	0.372	10	0.229	20	0.218	30	0.431	16	0.149	23	0.864	5	0.829	9	0.457	21
Haveri	0.508	18	0.302	22	0.053	27	0.580	12	0.696	4	0.305	14	0.786	11	0.848	8	0.510	14
Kalaburagi	0.490	23	0.231	30	0.191	22	0.271	29	0.207	26	0.118	25	0.573	22	0.677	23	0.345	28
Kodagu	0.667	2	0.414	6	0.310	15	0.755	4	0.424	17	0.578	5	0.513	23	0.919	2	0.572	7
Kolar	0.594	9	0.394	7	0.431	7	0.561	15	0.463	14	0.093	27	0.615	20	0.777	14	0.491	17
Koppal	0.431	27	0.284	27	0.095	24	0.402	28	0.368	22	0.198	20	0.660	19	0.721	18	0.395	25
Mandya	0.600	8	0.375	8	0.298	17	0.569	13	0.913	1	0.344	12	0.897	4	0.682	22	0.585	5
Mysuru	0.525	17	0.349	15	0.490	5	0.548	18	0.587	9	0.374	9	0.953	2	0.765	15	0.574	6
Raichur	0.388	30	0.346	16	0.089	25	0.500	21	0.549	10	0.071	28	0.493	25	0.534	27	0.371	27
Ramanagar	0.612	6	0.362	12	0.334	12	0.636	8	0.387	21	0.316	13	0.903	3	0.737	17	0.536	10
Shivamogga	0.611	7	0.299	24	0.350	11	0.784	2	0.459	15	0.753	1	0.660	18	0.889	4	0.601	2
Tumakuru	0.567	10	0.316	21	0.352	10	0.561	14	0.587	8	0.149	22	0.820	7	0.784	13	0.517	13
Udupi	0.815	1	0.343	18	0.532	3	0.468	24	0.254	25	0.366	10	0.000	30	0.468	29	0.406	24
Uttara Kannada	0.617	5	0.298	25	0.363	9	0.768	3	0.895	3	0.272	15	0.090	29	0.898	3	0.525	12
Vijayapura	0.495	21	0.333	19	0.040	29	0.430	25	0.026	30	0.047	30	0.501	24	0.708	20	0.323	29
Yadgir	0.478	24	0.346	17	0.025	30	0.421	27	0.059	29	0.063	29	0.426	27	0.393	30	0.276	30

Source: DHDrs, 2014

**Thematic Map 12.9: DCDI in Districts of Karnataka, 2011**

ಸಂಯುಕ್ತ ಜಿಲ್ಲಾ ಅಭಿವೃದ್ಧಿ ಸೂಚ್ಯಂಕ, ಕರ್ನಾಟಕ (ಡಿ.ಸಿ.ಡಿ)  
**DISTRICT COMPOSITE DEVELOPMENT INDEX (DCDI), KARNATAKA**



**1 Relative performance of DISTRICTS in DCDI**

The thematic map 12.9 shows that no districts are in the better performing category depicted in Green colour. Only two districts are in the good performance category and 13

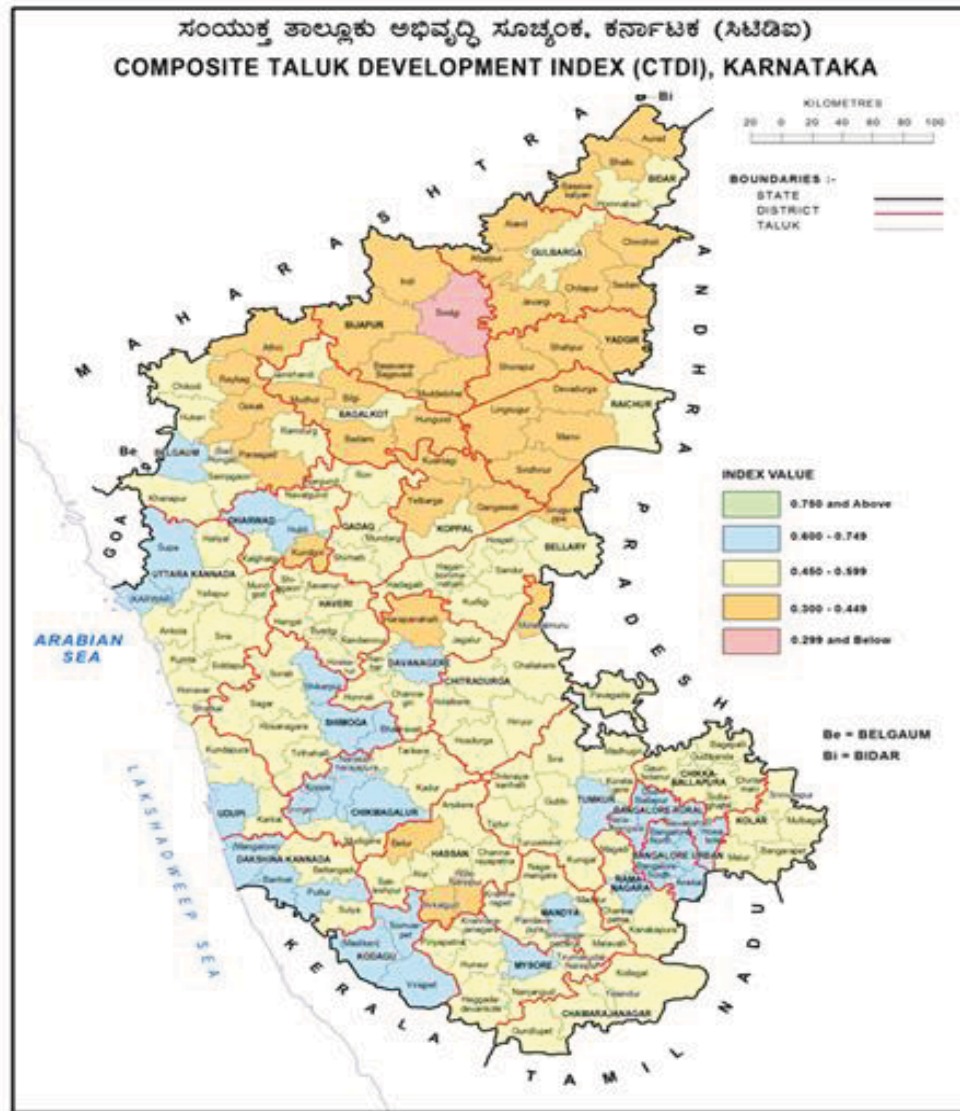
districts are in the third category. The grouping of the districts shows that the coastal, malnad and southern districts are performing better compared to the North Karnataka districts.

## 2 Relative performance of TALUKS in CTDI

The relative performance of all the 176 taluks shown in the thematic map and the

top five and the bottom five performing taluks with their CTDI values are given below.

**Thematic Map 12.10: CTDI in Districts of Karnataka, 2011**



### Composite Taluk Development Index (CTDI)

Top five or good performing taluks  
in CTDI in the State

❖ Mangaluru	- 1 <sup>st</sup> rank (0.736)
❖ Mysuru	- 2 <sup>nd</sup> rank (0.707)
❖ Bengaluru East	- 3 <sup>rd</sup> rank (0.693)
❖ Shivamogga	- 4 <sup>th</sup> rank (0.682)
❖ Hubballi	- 5 <sup>th</sup> rank (0.675)

Bottom five or poor performing  
taluks in CTDI in the State

❖ Devadurga	- 172 <sup>nd</sup> rank (0.351)
❖ Shahpur	- 173 <sup>rd</sup> rank (0.338)
❖ Afzalpur	- 174 <sup>th</sup> rank (0.336)
❖ Shorapur	- 175 <sup>th</sup> rank (0.323)
❖ Sindagi	- 176 <sup>th</sup> rank (0.286)

### 12.3.9 Urban Development Index (UDI) of Urban Local Bodies (ULBs)

India's urban population was 380 million (31.16 per cent of the total population) as per 2011 census. Karnataka's urban population is 38.63 per cent of the total population, which is a significant indicator of the growing trend of urbanization. Between 2001 and 2011, the decadal growth of urban population was 31.27 per cent. Within the State, highest decadal growth of urban population was seen in Udupi (61.90 percent) followed by Bengaluru (U) district (51.30 per cent) and Bengaluru (R) district (39.18 per cent). The lowest decadal growth of urban population has been noticed in Kodagu district (7.59 per cent) followed by Chikkamagaluru district (7.61 per cent) and Uttara Kannada district (7.92 per cent). At this rate, in the coming decade, around 50 per cent of the total population in the State will live in urban centres.

The quality and level of infrastructure as well as access to services vary significantly in urban Karnataka. Cities and towns are centres of affluence as well as of poverty. The objective of Urban Development Index (UDI) is to use uniform set of indicators to compare and contrast development of urban areas across the State.

### 1 Urban Local Bodies (ULBs) in Karnataka

Urban Local Bodies in Karnataka have been classified based on the population size and the revenue generated by the ULBs. The criteria have been included in the Karnataka Municipal Corporation Act, 1976 and the Karnataka Municipalities Act, 1964. Bengaluru Metropolitan City which recorded more than 8.5 million population as per 2011 census has been classified as Bruhat Bengaluru Mahanagar Palike (BBMP) in 2007 on the line of Mumbai Mahanagar Palike. The criteria to classify the city as City/Municipal Corporation is 3 lac+ population. As per this, there are 11 Municipal Corporations, which have been separately considered for computing UDI. ULBs with a population of 50001 – 300000 are classified as City Municipal Councils (CMC), towns with a population 20001-50000 as Town Municipal Councils (TMC) and urban centres with a population of 10001-20000 as Town Panchayats. Few urban centres are also called as Notified Area Committees (NAC) without an elected body. In Karnataka, there are 219 ULBs comprising 11 MCs, 41 CMCs, 94 TMCs, 68 TPs and 05 NACs. Except five NACs, all other 214 urban centres have been taken for UDI calculation based on 11 indicators given in Flow chart 12.6

#### Flow Chart 12.6 Indicators used for measuring Urban Development Index (UDI)

1. Percentage of ULB population to total population in the Taluk
2. Percentage of HHs without own houses
3. Percentage of slum population to total ULB population
4. Water supply- percentage of HHs with tap water connection
5. Sewerage / drainage- percentage of HHs with sewerage and drainage facilities (both close and open)
6. No. of hospital beds per 1000 population in urban area
7. Percentage of own resources mobilization to total receipts
8. Per-capita expenditure on development works
9. Length of roads in kilometers per square kilometers of geographical area
10. Crime rate per 10000 population
11. Road accidents per 10000 population

## 2 Analysis of Top and Bottom most ranking ULBs

**Table 12.85** presents the UDI values of top and bottom most ranking ULBs under each category of ULB.

**Table 12.85: UDI Values for the Top most & Bottom most ranking ULBs under each category of ULBs in Karnataka, 2011**

Category of ULBs	Districts	Name of ULBs	UDI	
			Value	Rank
Municipal Corporation (MC)	Mysuru	Mysuru	0.696	1 (first)
	Belagavi	Belagavi	0.294	11 (last)
City Municipal Council (CMC)	Mandya	Mandya	0.718	1 (first)
	Chamarajnaragar	Chamarajnaragar	0.334	41 (last)
Town Municipal Council (TMC)	Bengaluru Urban	Anekal	0.657	1 (first)
	Tumakuru	Pavagada	0.407	94 (last)
Town Panchayat (TP)	Mysuru	T Narasipur	0.685	1 (first)
	Chamarajnaragar	Hanur	0.327	68 (last)

Source: DHDRs, 2014.

Among the 11 Municipal Corporations, Mysuru ranks first in UDI with a value of 0.696. Mysuru city performs well in majority of the indicators of urban development index. Besides, the city also has access to better health care and higher educational institutions. Further, the service delivery related indicators perform well compared to other city corporations. All these account for higher UDI and also higher HDI in the State. Belagavi occupies the lowest position among the city corporations with an index value of 0.294.

Among the City Municipal Councils, Mandya ranks the list with an index value of 0.718 where as Chamarajnaragar with an index value of 0.334 is at the bottom among the CMCs.

Among the middle size ULBs, namely Town Municipal Councils, Anekal in Bengaluru Urban district has come out with the highest UDI of 0.657 because of its performance in own resources mobilization and also better infrastructure, being a Taluk Headquarters for a long time. Pavagada town in Tumakuru district with an index value of 0.407 is at the bottom and the taluk is also one of the backward taluks in the State.

The last category of ULBs – small towns called Town Panchayats which are mainly rural based but with some urban amenities. In this category, T.Narasipur in Mysuru district stands out first with a UDI of 0.685. Hanur in Chamarajnaragar district is the lowest ranked among the Town Panchayats in the State with an Index value of 0.327.

### 12.3.10 Gram Panchayat Human Development Index Report, 2015

For the first time in the country, Human Development Index for all the 5898 Grama Panchayats in Karnataka has been computed and brought out in a report titled '**Human**

**Development : Performance of Grama Panchayats in Karnataka – 2015'**, published by ANSIRD and Planning Dept., GoK, and it was released by the Hon. Chief Minister on 19<sup>th</sup> October 2015. The eleven indicators under three dimensions of Health, Education and Standard of Living, used for computing HDI are same for both DHDRs, 2014 and GPHDI Report, 2015. The HDI values, both Grama Panchayath wise (5898 GPs) and Village wise (27,075 villages) in the State, are put on the web site: [www.sirdmysore.gov.in](http://www.sirdmysore.gov.in)

#### Some key findings:

Out of 5898 Grama Panchayats in the State, almost equal number of Grama Panchayats are performing above (2958 GPs, i.e., 50.15%) and below (2940 GPs, i.e., 49.85%) the State average GPHDI of 0.4392. All the Grama Panchayats in the districts of Bengaluru Urban, Dakshina Kannada and Udupi are above the State average GPHDI figure, while all the Grama Panchayats of Yadgir district are below the State average GPHDI figure. The other districts that are poorly performing in GPHDI are Bagalkot, Bidar, Gadag, Kalaburagi, Raichur and Vijayapura where more than 90 per cent of Grama Panchayats have below the State average GPHDI. There are 27 taluks with all Grama Panchayats performing above the State average GPHDI, where as 19 taluks with all Grama Panchayats perform below the State average GPHDI. The details of all 5898 Grama Panchayats with respect to GPHDI, district-wise number of Grama Panchayats spread against State average GPHDI of 0.4392 may be found in the document. However, Table 12.3.9 gives a cursory look about the Top 10 and Bottom 10 Ranking Grama Panchayats in the State with respect to GPHDI, 2015.

**Table 12.86 Top 10 and Bottom 10 Ranking Grama Panchayats in the State according to Grama Panchayat Human Development Index (GPHDI), 2015**

District	Taluk	Grama Panchayat	Standard of Living Index		Health Index		Education Index		Human Development Index (HDI)	
			Value	Rank	Value	Rank	Value	Rank	Value	Rank
<b>Top TEN Grama Panchayats of the State as per Human Development Index (HDI)</b>										
Bengaluru Urban	Bengaluru North	Srikantapura	0.4731	1	0.9758	2796	0.6922	2006	0.6837	1
Uttara Kannada	Karwar	Amdalli	0.4039	12	1.0000	1	0.7872	47	0.6825	2
Dakshina Kannada	Mangaluru	Haleyangady	0.4098	8	1.0000	1	0.7677	133	0.6801	3
Dakshina Kannada	Mangaluru	Mennabettu	0.3848	27	1.0000	1	0.7769	87	0.6686	4
Bengaluru Urban	Bengaluru North	Gopalapura	0.4044	10	1.0000	1	0.7336	612	0.6670	5
Dakshina Kannada	Mangaluru	Ambalamogru	0.4166	6	0.9758	2796	0.728	782	0.6664	6
Bengaluru Urban	Bengaluru North	Arekere	0.4285	3	0.9758	2796	0.7055	1511	0.6657	7
Bengaluru Urban	Bengaluru North	Shivakotte	0.4186	5	1.0000	1	0.6813	2399	0.6582	8
Bengaluru Urban	Bengaluru North	Kasagattapura	0.3901	24	0.9758	2796	0.7486	330	0.6581	9
Bengaluru Urban	Bengaluru North	Kodigehalli	0.4333	2	0.9758	2796	0.673	2691	0.6577	10
<b>Bottom TEN Grama Panchayats of the State as per Human Development Index (HDI)</b>										
Uttara Kannada	Supa	Kateli	0.0064	5890	1.0000	1	0.6634	3005	0.1620	5889
Davanagere	Channagiri	Doddabbaigere	0.0096	5888	1.0000	1	0.3986	5826	0.1564	5890
Uttara Kannada	Supa	Jagalbate	0.0054	5893	1.0000	1	0.7026	1611	0.1563	5891
Uttara Kannada	Haliyal	Modalagera	0.0062	5891	1.0000	1	0.5583	5185	0.1509	5892
Tumakuru	Tumakuru	Maidala	0.0048	5894	1.0000	1	0.6736	2671	0.1475	5893
Uttara Kannada	Kumta	Mirjan	0.0010	5895	0.9758	2796	0.5812	4923	0.0825	5894
Belagavi	Bailhongal	Dastikoppa	0.1279	3281	1.0000	1	0.0024	5898	0.0675	5895
Uttara Kannada	Mundgod	Hungund	0.0005	5896	1.0000	1	0.6102	4455	0.0655	5896
Uttara Kannada	Supa	Pradhani	0.0001	5897	0.9758	2796	0.7890	3	0.0426	5897
Uttara Kannada	Supa	Ulvi	0.0000	5898	0.9758	2796	0.7890	3	0.0249	5898

State Average GPHDI 0.4392. For further details, please refer to "Human Development: Performance of Grama Panchayats in Karnataka - 2015", published by ANSIRD & Planning Dept., GoK

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## GENDER AND SOCIAL EQUALITY

# 13

### 13. 1 WOMEN AND CHILD DEVELOPMENT

#### 13.1.1 Women Population:

Women comprise nearly half the population in Karnataka. According to the recent 2011 Census, women comprise 49.31 % of the total state population. The pattern is more or less same in the southern States of India. However, the percentage of SC women to total population is more in Tamil Nadu (10.03%) compared to Karnataka (8.53%) and All India (8.08%). But percentage of ST women to total population is more in Andhra Pradesh (3.49%) compared to other Southern States.

#### 13.1.2 Women Empowerment Schemes:

It is in the recent years that the issue of women's empowerment as a development objective has moved centre stage. With this objective in mind, the Department of Women and Child Development, Government of Karnataka, has designed the following schemes that aims, not only on empowering women, but also for their well-being in various spheres.

##### A. Stree Shakthi:

For economic empowerment it is necessary for a woman to have access to and control over productive resources to ensure financial autonomy. SHG is a good medium to congregate women. Stree Shakthi programme was launched in 2000-01 and is implemented throughout the State. Each group comprises of about 15 to 20 women members who come from below the poverty line families. Women belonging to families that are landless or agricultural labourers, and largely SC/ST women who have come together to form 1.40 lakhs Streeshakthi Groups. At present there are 1.40 lakh self help groups, comprising 20 lakh women members.

Upto December 2015 the groups had saved Rs.1738.26 crore since inception. Bank loans have been availed by 129736 groups to

the extent of Rs.2745.67 crore and there has been internal loan circulation to the tune of Rs.4864.79 crore and used for taking up various Income Generating Activities.

Several programmes like revolving fund, financial incentives, loans at the subsidized interest rate of 6%, providing marketing facilities for the products produced by SHGs etc. are taken up by the department.

#### The budgetary allocations for various activities under Stree Shakthi are

- Rs.7500 lakhs for Strengthening of SHGs, of which an expenditure of Rs.3431.67 lakhs was incurred as on December - 2015.
- With focus on the backward areas, under the Special Development Programme an amount of Rs.100 lakhs is allocated towards incentives to groups which are involved in income generating activities. Upto December 2015 an expenditure of Rs.45.55 lakhs was incurred.
- An amount of Rs.100 lakhs is allocated for the continuation programme of the construction of 4 Divisional Level Training centers. Of which Rs.75.00.00 lakhs has been released by the government. Rs.26.42 lakhs has been released to the Divisional level Training centre at Gadaga. An expenditure of Rs. 26.42 lakhs is incurred as on December -2015.
- In view of the large number of groups taking up income generating activities it was proposed to provide marketing facilities at the taluk level in a phased manner from the year 2007-08. During 2015-16 Rs.200.00 lakhs is allocated for construction of 6 new taluk bhavans and to complete 4 incomplete buildings, of which Rs.150.00.00 lakhs has been released by the government. Out of which Rs.75.00 lakhs is released for the construction of 3 new Taluk Bhavans



and Rs.3.50 lakhs to complete one incomplete building. An expenditure of Rs. 50.00 lakhs is incurred as on December -2015.

#### B. Santhwana:

Santhwana is a scheme aimed at rehabilitation of women who have been subjected to atrocities like rape, domestic

violence, dowry, sexual harassment, etc. In addition to provision of legal assistance, support is also provided in the form of financial aid, temporary shelter and training/ education to equip them with skills needed to get back into the normal course of life through 187 Santhwana Centers, which are run with assistance from various NGOs.

**Table 13.1 Progress under Santhwana Scheme**

Year	Expenditure (Rs. lakh)	Physical Progress (Centers)
2012-13	468.85	173
2013-14	442.50	169
2014-15	350.46	177
2015-16 *	550.00	187

\*(upto Dec. 2015)

**Table 13.2: District-wise Women Population in Karnataka**

Name of the District	As per 2001 census	As per 2011 census	Percentage of women population (Census 2011)
Bangalore (Urban)	3100313	4563412	15.2
Bangalore (Rural)	916081	479743	1.6
Chitradurga	737578	816967	2.7
Kolar	1242253	760830	2.6
Shimoga	810230	875695	2.9
Tumkur	1267575	1326679	4.4
Davangere	872373	957303	3.2
Ramanagar	..	534679	1.8
Chikkaballapur	..	616873	2.1
Mysore	1289070	1483538	4.9
Chikkamagalur	564829	570270	1.9
Dakshina Kannada	958752	1051048	3.5
Hassan	862696	890414	3.0
Kodagu	272112	280037	0.9
Mandya	874411	899239	3.0
Chamarajanagar	474380	507603	1.7
Udupi	587953	615012	2.0
Belgaum	2059518	2351335	7.8
Bijapur	880313	1062149	3.5
Dharwad	780379	907866	3.0
Karwar	666273	709423	2.4
Bagalkote	816548	937924	3.1
Gadag	478160	526758	1.7
Haveri	697553	779211	2.6
Gulbarga	1533479	1257831	4.2
Bellary	996761	1251981	4.2
Bidar	730695	829168	2.8
Raichur	815860	958280	3.2
Koppal	591470	689813	2.2
Yadgiri	..	581881	1.9
Total	25877615	30072962	100

Note: Ramanagar, Chikkaballapur and Yadgiri are new districts

**Table 13.3: Progress under Stree shakthi Scheme**

Years	Expenditure (Rs.in lakhs)	Achievement (No.)
2012-13	1040.48	20904 groups
2013-14	1458.80	41980 groups
2014-15	6443.52	117860 groups
2015-2016 December -2015	3431.67	57537 groups

**Table 13.4: Stree Shakthi Programme**

Programmes/ scheme		Unit	Achivement		Target	Achivement
			2013-14	2014-15	2015-16	Upto December 2015
No. of Groups taken loans from Banks		with Nos.	2119	2397	11721	1497
Loan Amount		Rs. in Crores	83.96	87.82	-	113.93
Revolving Fund released by Government	No. of Groups	with Nos.	3917	117699	118212	93270
	Amount	(Rs. lakh)	195.85	5884.95	5910.60	4663.50

### 13.1.3 Women Component Plans (KMAY and Gender Budget):

#### a) Karnataka Mahila Abhivrudhi Yojane (KMAY):

Karnataka Mahila Abhivrudhi Yojane (KMAY) functions under the aegis of the Department of Women and Child Development. Karnataka is the first State in the Country to introduce KMAY by earmarking 1/3<sup>rd</sup> resources for women in individual beneficiary-oriented schemes and labour intensive schemes across various sectors. Since its introduction in 1995-96, 25 departments have been identifying schemes to benefit women. During 2015-16, 239 schemes are involved in the Yojane across Central, State and District sectors. Allocation towards KMAY for the current financial year is Rs.17554.35 crore, of which 1/3 allocation for women is Rs.6089.95 crore. An amount of Rs. 2904.26 crore was spent upto December 2015.

#### b) Gender based Budget:

Karnataka has taken major steps towards promoting gender equality and Gender based budgeting is yet another development in the

direction. Making a beginning in 2006-07, gender based budgeting helps to prioritize and orient public expenditure to reflect the concerns of women. Subsequently, the Finance Department also established a Gender Budget Cell (GBC) to identify the quantum of resource allocation and expenditure for women and proper translation of policy commitments. Karnataka is one of the 3 States in India that has implemented Gender based budgeting.

The GBC has been regularly bringing out a Gender budget document reflecting allocation of funds under various schemes cutting across various departments. The schemes are presented in two parts; Category-A and Category-B. The classification is broadly on the lines adopted by GOI in the Expenditure Budget Vol-II. The categorization of schemes is based on;

- Category –A that presents women specific budget provisions in which 100% budget provisions are meant for women.
- Category-B present women –specific budget provisions wherein atleast 30% provisions are meant for women. Details of allocation are given in **Table 13.5**

**Table 13.5: Allocation under Gender based Budget**

Year	No. of Depts.	Category A			Category B		
		No. of schemes	Allocation (Rs. lakh)		No. of schemes	Allocation (Rs. lakh)	
			Plan	Non-Plan		Plan	Non-Plan
2012-13	39	39	105448	532	773	1861815	1916746
2013-14*	39	40	155962	35568	760	2641377	2865344
2014-15*	39	59	319988	45003	798	3273692	3355467
2015-16#	39	54	455501	95619	720	3361007	3074131

\* Budget Estimates, # Dec -2015

#### **13.1.4 Protection of Women from Domestic Violence:**

With the objective of checking violence against women, achieving gender equality and saving women from oppression Karnataka is implementing the protection of women from Domestic Violence Act, from the year 2007. To provide shelter and counseling to victims of domestic violence, 116 Service provider have been notified. In addition to this, 32 Swadhar Centers (Out of 34 centers 2 centers are abolished due to improper functioning), 30 Short Stay Homes and 187 Santhwana Centers have been notified as Shelter Homes in the State. Free legal aid is provided to the victims. One protection officer is notified in each taluk, under this scheme, 3826 cases are registered and Rs.307.31 lakhs expenditure is incurred upto the end of December 2015.

#### **13.1.5 Special Gram Sabhas:**

General Gram Sabhas are being conducted in all the Gram Panchayats of the State. Government will facilitate holding of Special Gram Sabhas for women to get their facilities and also to select suitable women beneficiaries under various schemes of development departments. During 2015-16 total 3624 Special Grama Sabhas are conducted upto the end of December-2015.

#### **13.1.6 Special Treatment Units for Women and Children:**

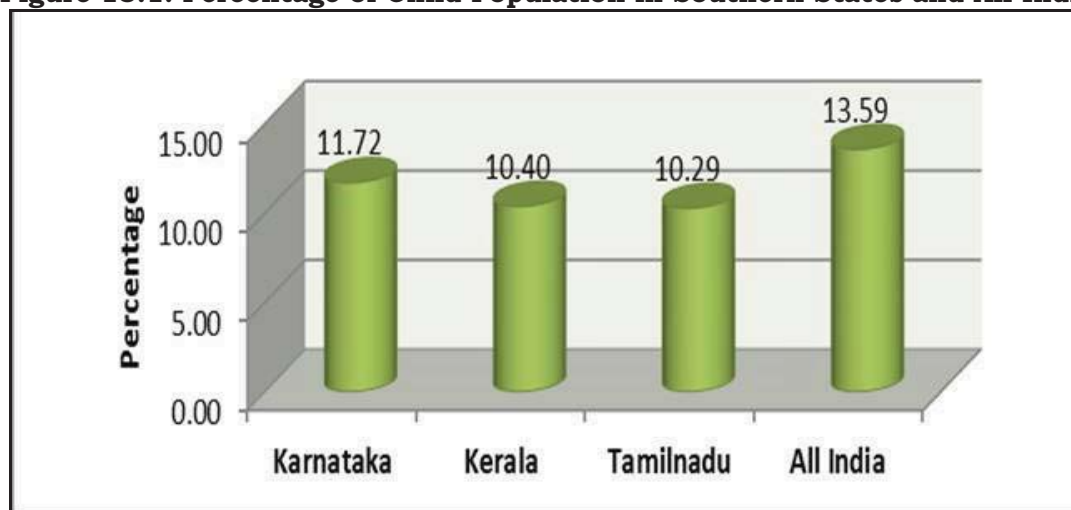
Special treatment Units for Women have been set up where in assistance for medical treatment, consultation for police and legal help are provided under a single roof to women victims of atrocities. These units have been set up, one each in all district hospitals of the State and in Bowring and Lady Curzon Hospital, KC General Hospital and Bangalore Medical College and Vani Vilas Hospital. These units function round the clock and services of Toll free Women's Helpline 181 is available. Under this scheme Rs.225.75 lakhs has been released to these centres.

#### **13.1.7 Child Population in Karnataka:**

Though the child population of Karnataka is less than all India level, when compared to other southern states of India, it is at the higher side as represented in the chart 13.1.

#### **13.1.8 Child Development Programmes:**

In Karnataka Children constitute 11.21% of the total population as per 2011 Census The department of Women and Child Development is concentrating on implementation of welfare schemes for the overall development of the children.

**Figure 13.1: Percentage of Child Population in Southern States and All-India****Table 13.6: District Wise Child Population in Karnataka 2001-2011 (0-6 years)**

Name of the District	As per 2001 census		As per 2011 census	
	Male	Female	Male	Female
Bangalore (Urban)	397648	374892	541656	511181
Bangalore (Rural)	116172	109446	54908	52154
Ramanagar	..	..	54963	52878
Chitradurga	102512	97023	94629	89651
Davanagere	123496	116779	111793	105938
Kolar	171728	164741	86845	83578
Chikballapur	..	..	67734	64552
Shimoga	106423	101740	93221	89530
Tumkur	158079	150083	135671	130071
Chikkamagalur	70779	67865	53493	51835
Dakshina Kannada	116854	111206	106985	101312
Udupi	58509	56072	52689	50471
Hassan	101971	97694	83971	81666
Kodagu	35192	34382	27676	27057
Mandya	106058	99089	89063	83622
Mysore	164934	158621	155807	149754
Chamarajanagar	58511	56426	51529	49119
Belgaum	324816	299215	323761	302508
Bijapur	148750	138081	164856	153550
Bagalkote	136564	128308	140551	131357
Dharwad	112335	105927	113127	106815
Gadag	70627	67208	68025	64417
Haveri	104119	99593	100369	94948
Karwar	89149	84354	76794	73321
Bellary	163892	155194	175543	168609
Bidar	124401	117116	115550	108892
Gulbarga	276843	259611	188076	177296
Yadgir	..	..	97522	92757
Raichur	144097	138971	145468	138265
Koppal	106499	101505	103016	98638
Total	3690958	3491142	3675291	3485742

Note: Ramanagar, Chikkaballapur and Yadgiri are new districts

**A. Bhagyalakshmi:**

Bhagyalakshmi a flagship programme implemented by Government of Karnataka aimed at improving the sex ratio in the State by encouraging the birth of girl child in the BPL families. The programme also aims to eradicate social evils such as child labour, female foeticide, child marriage, and child trafficking. 2 girl children born in a BPL family are eligible to enroll under the scheme.

A fixed amount will be deposited with the selected financial partner institution. Maturity amount will be paid to the girl child after completing 18 years of age only after fulfilling Bhagyalakshmi scheme conditions.

The period of the 11<sup>th</sup> five year plan saw an expenditure of Rs. 1686.85 crores against

allocation of Rs. 1612.38 crores including additional allocation with benefits accruing to 11,07,788 girl Children. Details of achievements under the Bhagyalakshmi scheme are given in **Table 13.7**.

During 2015-16 an amount of Rs.473.35 crores budget has been earmarked. So far RS.350.01 crores has been released and 183351 beneficiaries have been covered up to the end of December2015.

**Child Tracking System under Bhagyalakshmi Scheme:** A software is being developed with the assistance from NIC to track Bhagyalakshmi beneficiaries till 18 years. All information such as health education and migration pertaining to the beneficiaries will tracked in the software.

**Table 13.7: Progress of Bhagyalakshmi Scheme through the 11th Five year plan:**

Year	Physical		Financial (Rs. In crore)		Percentage of achievement	
	Target	Achievement	Target	Achievement	Physical	Financial
2007-08	150000	123789	150	132	83	88
2008-09	200000	299764	267	317	150	119
2009-10	200000	144999	230	230	72	100
2010-11	185493	284763	558	522	154	94
2011-12	211316	254473	408	486	120	119
Total	946809	1107788	1612	1687	117	105

**Table 13.8: Progress of Bhagyalakshmi Scheme through the 12th Five year plan:**

Year	Physical		Financial (Rs. In crore)		Percentage of achievement	
	Target	Achievement	Target	Achievement	Physical	Financial
2012-13	242575	401370	755.40	755.39	165	100
2013-14	205403	187982	396.43	359.47	92	91
2014-15	176223	171892	340.11	339.86	98	100
2015-16	245258	183351	473.35	350.01	75	74
Total	869459	944595	1965.29	1804.73	109	92

**B. Prohibition of Child Marriage:**

Child Marriage is a social evil. To eradicate child marriage from the society, to create awareness among the general public and to stop child marriages, child marriage prohibition cell has been established in the department of Women and Child Development. During the year 2015-16 (from April-2015 to December-2015) 484 child marriages has been prevented in the State.

**C. Integrated Child Development Services (ICDS):**

ICDS is a centrally sponsored scheme, which provides a package of six services i.e., supplementary nutrition, immunization, health check-up, referral services, nutrition and health education for mothers and non-formal pre-school education for children between the ages of 3-6, This scheme is running since 1975. Under this scheme, 61187 AWCs and 3331 mini AWCs were functioning. Under Supplementary Nutrition Programme, supplementary nutrition will be provided (per day).

**Health and Nutrition Education:**

All Anganwadi Centers are provided with a Hand book and flip chart on Health and Nutrition which is used for educating the mothers of the Anganwadi Centers

**Table 13.9: Progress of Supplementary Nutrition Programme under ICDS**

Year	Expenditure (Rs. lakh)	(No. of beneficiaries)
2012-13	67708.24	5415895
2013-14	84632.89	5472021
2014-15	60160.53	5479064
2015-16*	68513.23	5483158

\*(upto December 2015)

**Pre-school Education:** For effective Pre School Education, Activity Bank called "Chili Pili" a book has been developed and distributed to 64558 Anganwadi centers.

**Improvements in the monitoring system:**

- Government of Karnataka has taken up a new initiative- '**sakala**' under Karnataka Guarantee of Services to Citizen Act- 2011. Up to the end of December-15 423704 applications were received out of which 423621

applications disposed, 21 application are pending for disposal.

- Toll free help line has been started from April 2012 to receive complaints and suggestions in implementing ICDS scheme. **The Toll free help line no is 1800-425-25250.**
- Supply of revised MIS Registers (11+1) to all AWCs.

**D. Sabala:**

With the objective of empowering adolescent girls in the age group of 11-18 years, Rajiv Gandhi Scheme for Empowerment of Adolescent Girls (RGSEAG)-SABALA is being implemented in 9 districts of the State on a pilot basis. The scheme aims at improving nutritional and health status and upgrading various skills like home skills, life skills and vocational skills of adolescent girls'. GOI has released Rs. 57.88 lakhs for the implementation of Non-nutrition component and GOK is to release 50% of its share, hence the amount is not re distributed to districts.

**E. Kishori Shakthi Yojana (KSY):**

KSY is being implemented excluding 9 SABALA districts (Kalaburagi, Kolar, Bengaluru, Ballari, Vijayapura, Dharwad, Chikkamagaluru, Uttara Kannada & Kodagu) in rest of the 143 ICDS projects of 21 districts. Under KSY, 180 adolescent girls in each project are given 5 days residential training every year and supplementary nutrition is being provided to 2 adolescent girls in each anganwadi centre. Under this scheme 93974 beneficiaries are covered up to the end of December-2015.

**F. Balasanjivini:**

To focus on rehabilitation and treatment of severely malnourished children Balasanjivini scheme introduced. An amount of Rs.750 is being given to meet therapeutic and medical needs of malnourished children. Children requiring tertiary care receive a maximum of Rs.35000 and in cases of neonatal care, the amount goes up to Rs.50000. In 2015-16 an allocation of Rs. 2000 lakhs is earmarked. Rs. 1098.13 lakh has been incurred to treat

5550 children under Balasanjeevini till December 2015.

**G. Indira Gandhi Matrutwa SahayogaYojana (IGMSY):**

To improve the health and nutrition status of pregnant and lactating women and their young infants, IGMSY a Centrally Sponsored Scheme has been introduced in Dharwad and Kolar districts from 2011. This Scheme envisages providing cash directly to pregnant and lactating women during pregnancy and lactation. It would address short term income support objectives with long term objective of behavior and attitudinal change. An amount of Rs. 730.06 lakhs is released from GOI and GOK the expenditure is Rs. 212.44 lakhs incurred up to the end of December-2015. Physical achievement is 6869 beneficiaries. During 2015-16, Rs. 2370.00 lakhs budgetary provision has been made.

**H. Sneha Shivir:**

This is a new scheme for the year 2014-15, in which 4-5 anganwadi centers in a cluster are selected and parents and care-givers of severely and moderately malnourished children are given training for 12 days in preparation of nutrition food, feeding practices, health and hygiene. Further, follow up action is undertaken for 18 days to support to implement the new practices learnt during training. Administrative sanction has been given to implement this scheme in 4 high burdened districts of Bagalkote, Kolar, Ballari and Kalaburagi. Rs. 106.00 lakhs is provided during 2015-16. Amount is not released from GOI.

**I. Multi - Sectoral Nutrition Programme:**

To address the problem of under nutrition in maternal and child health 4 high burden districts of Kolar, Bagalkote, Ballari and Kalaburagi districts multi-sectoral nutrition programme is being implemented from 2014-15 with the financial assistance from Central and State Government in the ratio of 60:40 . During 2014-15, GOI has decided to address the maternal and child under nutrition issue. Under this programme, IEC activities, strengthening training programmes, meeting/workshop with related departments, programmes with community

interventions will be organized and District nutrition councils will be established in the leadership of District Commissioner. During 2015-16, Rs. 39.00 lakhs is provided. Amount is not released from GOI.

**J. Integrated Child Protection Scheme (ICPS):**

For comprehensive development of children who are in need of care and protection and in conflict with the law, ICPS was launched in 2010-11, with the objective of providing a safe and secure environment in the State. ICPS provides preventive and statutory care and rehabilitation services to any vulnerable child in the society. For the current financial year an expenditure of Rs. 3437.76 lakhs has been incurred out of an allocation of Rs.8316.00 lakhs [Till the end of December-2015].

33 Child Welfare Committees and 30 Juveniles Justice Boards have been formed & 3513 and 2756 children cases have been brought before the committee & board respectively at the end of December-2015.

There are 56 Government run children homes and 2497 children have been housed in this homes. 40 NGO run Fit-institutions, to provide Shelter & Rehabilitation along with 30 Specialized Adoption Agencies (SAA). During the current year, 127 children were placed in In-country adoption and 6 placed in Inter-country adoption.

16 Observation homes have been sanctioned to house children in conflict with law and 60 were remained in institutions at the end of December -2015.

Financial assistance is provided to children in the form of sponsorship to enable the child to remain in the family environment. This is an effort towards preventing children from becoming destitute or vulnerable, run away from home, forced into child marriage, child labour etc. The District Child Protection Unit (DCPU) will identify vulnerable families or children for sponsorship support. During 2015-16, 4165 children are to be benefited under this programme and amount of Rs.250.00 lakhs

have been released up to end of December - 2015.

District child protection units have been formed in all districts of Karnataka. The Juvenile Justice Act envisages an after care programme for children who needs support after attaining the age of 18 years with an objective of rehabilitating such children and help them to bring them to the main stream of the society.

#### **K . Registration of Child Care Institutions (CCI):**

State Child Care Institutions (CCI) should be registered as per Section 34(3) of the J.J. Act. During the current year 34 CCIs are registered up to the end of December-2015, and 551 CCIs were registered in the State.

#### **L. Track the missing child.gov.in / track child:**

To track the progress of children of every Child Care Institute in the country, the Ministry of Women and Child Development, Government of India has developed a portal called Track the missing child.gov.in / track child. Karnataka is implementing this programme from June 2013 and so far information of about 2107 (up to end of December 2015) children is entered in this portal.

#### **M. Need Assessment Survey:**

Need assessment survey is taken in all 30 district of Karnataka to identify children in need care and protection and to prepare a child protection plan. Survey has been completed in 24 districts. (Excluding 6 districts - Uttar Kannada, Kodagu, Chikkaballapura, Belgaum, Raichur and Bengaluru (Urban)

#### **N. Child Adoption Resource Information and Guidance System-CARINGS:**

Child Adoption Resource Information and Guidance System is GOI's dynamic response for a systematic, transparent and friendly adoption process. CARINGS is an on line platform, building bridges, creating links through a web based management system which facilitates expeditious and smooth adoption and ensures transparency and

accountability of the implementing agency with a national data base. Adoption process in Karnataka is done through online using the software - CARINGS developed by CARA. New Adoption guidelines have been implemented from 01.08.2015.

#### **O. Open shelters:**

Out of 42 open shelters 39 are functioning in urban and semi urban areas to provide care and protecting, 1103 children.

#### **P. Constitution of High Level Committee for the effective implementation of the guidelines issued to look into the safety of children in schools:**

Government had constituted a High Level Committee for the effective implementation of the guidelines issued to look into the safety of children in schools. The committee headed by the Additional Chief Secretary consists of 13 members and Commissioner for Public Instructions is the Member Secretary.

#### **13.1.9 Nutrition Scenario in Karnataka - Child Malnutrition:**

The Nutritional status of children in the State showed that about 75.29% (3165771) of children were normal, 24.07% (1012135) were moderately malnourished and 0.64% (26940) were severely malnourished as at the end of March 2015. However there is a marginal increase in the proportion of normal children which stands at 76.54 % (3119939) and marginal decrease in moderately and severely malnourished children with 22.88%(932745)and 0.58% (23452) respectively.

#### **13.1.10 Way Forward:**

Though the State has taken many initiatives for empowerment of women and protection of children through the five year plans, the results are muted. The Census of India 2011 has shown a marginal improvement in the sex ratio(973) from 965 in 2001. Notwithstanding the achievements, Karnataka is much behind other southern states. The sex ratio at 0-6 years range in 948 which is a marginal increase from 946 in 2001 (**Table 13.10**)



### **New Initiatives for the year 2015-16:**

1. During 2015-16 budget speech Hon'ble Chief Minister has announced development of EMIS to Women and Child Development Department. For this Rs.2.00 crores has been allocated for online monitoring of all schemes. For developing software, (EMIS) Keonics has submitted Rs.1.97 crores proposal which include AWC beneficiaries, severely malnourished children information, food distribution, Bhagyalaxmi scheme, child tracking system etc. To review the proposal TAP meeting was held on 11.01.2016 at Government level.
2. During 2015-16 budget speech, Rs.5.00crores budget is announced to provide Solar Lamps and Fans to Anganwadi buildings. It was intimated that, the amount Rs.5.00 crores is included in the budget earmarked to Energy Department. Hence a proposal is sent to KREDL dept requesting to take action to provide Solar lamps and Fans to 1225 Anganwadi centers.
3. Child Protection Policy-2015 for the safety of Children in educational Institutions in Karnataka has been drafted.
4. As announced in 2015-16 Budget speech at the cost of Rs. 5.00 crores Sthyrya Nidhi (fund) has been established at State level. Vide order No.MAMAEE:27:RAMAA:2015 Dated:20-11-2015. Under this scheme financial assistance up to maximum of Rs.2.00 lakhs will be provided for women of various atrocities for each case and in case of death of the victim due to acid attack or various atrocities Rs.1.00 lakhs will be provided as death relief to the family. Rs.25,000/- will be provided as immediate medical aid within 24 hours after the case has been registered. Under this scheme Rs.150.00 lakhs has been released to Districts to establish styrya fund at Rs.5.00 lakhs.

**Stree Shakthi** For strong sustainability of the groups it is proposed to establish District Federation so as to delink hand holding by SHGs and make them self reliant and independent.

### **Integrated Child Development Services:**

- Restructuring of the programme team management; creation of post, upgradation of existing posts
- Addressing the nutritional issues-eradicating malnutrition
- Strengthening training and capacity building
- Encouraging public private partnership
- Strengthening partnership with PRI, NGO and voluntary sector.
- Lack of basic infrastructure, toilets, stores, kitchen, drinking

water, play ground, compound, electricity and fan etc.,

- As per GOI guidelines on ICDS Mission Mode, the functions under the State ICDS Mission would be carried through a State Child Development Society under the Department of Women & Child Development and will be headed by a State Mission Director of the rank of Senior IAS Officer.
- Government of Karnataka called for a General Body meeting and Karnataka State Development Society was formed and registered under the Karnataka Child Societies Registration Act 1960 on 05.09.2015

**Table 13.10: Comparison of sex ratios among South Indian States**

States	2001		2011	
	Total Population	0-6 years Population	Total Population	0-6 years Population
Karnataka	965	946	973	948
Andhra Pradesh	978	961	993	943
Tamil Nadu	987	942	996	943
Kerala	1058	960	1084	964
India	933	927	943	919

**Future Outlook:**

The ICDS Scheme has the potential to give satisfactory nutritional and child development outcomes. The strengthening and restructuring of the scheme in the "Mission Mode" will address these concerns. The focus is on supervision and capacity building of ICDS functionaries from grass root level to state level by decentralizing the control system.

**Integrated Child Protection Scheme:**

- To bring all children below age 18 years in a safety net and to address children in vulnerable situation in short duration by providing child protection services.
- To improve the quality of services and efficiency at all levels.
- Awareness to public on child rights and protection services.
- Reduce the number of children depending on institutional services by increasing non-institutional programmes like Adoption, Sponsorship and Foster care and after care services.
- Create mechanism for Child Protection Management system including MIS for effective implementation and monitoring of child protection services.

**Analytical Note:**

- Balasanjeevini Scheme is focusing on Rehabilitation and treatment of

severely malnourished children, it is proposed to provide more budget under this scheme.

- In the state out of 64558 anganwadi centers 40235 anganwadi's are having own buildings. To provide own buildings to all anganwadi centers more budget has to be provided.

**13.1.11 Karnataka State Women's Development Corporation (KSWDC):**

The Karnataka State Women's Development Corporation was established in 1987 for social and economic upliftment of women and has, since then, been implementing various schemes benefitting women.

**A. Udyogini:**

Udyogini is designed to promote income generating activities by women and the same is encouraged through loans from banks and subsidies from KSWDC. For special category women, a subsidy of 30% of the project cost subject to a maximum of Rs. 10000 and for general category women, a subsidy of 20% of the project cost subject to a maximum of Rs. 7500 is provided. During 2015-16, Rs.1100.00 lakhs has been provided in the budget and Rs.825.00 lakhs has been spent covering 9057 beneficiaries' upto December 2015. It is proposed to cover 15000 beneficiaries under this scheme (**Table 13.11**).

**Table 13.11: Progress of Udyogini scheme, (Rs. lakh)**

Year	Target		Achievement	
	Physical	Financial	Physical	Financial
2011-12	15518	1500	14488	1269.06
2012-13	9332	835	9742	941.18
2013-14	10500	935	10259	636.54
2014-15	11598	1030	11994	1030.00
2015-16	15000	1100	9057	825.00

\* Upto December 2015.

An evaluation of the scheme by the Institute for Social & Economic Change has revealed that the scheme has been highly useful to women across different castes, classes, regions and demographic backgrounds. It is particularly true for women who were deserted by their husbands, for widows and physically handicapped women by providing them a source of independent livelihood.

#### **B. Women Training Programme:**

Under this scheme, various job oriented and skill training programme such as Dress Designing, Embroidery, Hospitality, Food Processing, Beautician, Media Security, Computer Training are provided to women aiding their self employment, with a special focus on widows, physically handicapped and the destitute. The training programmes are organized through Karnataka Vocational Training & Skill Development Corporation.

During 2015-16, Rs. 360.00 lakhs has been provided in the budget. The scheme proposes to cover 5650 beneficiaries. (Table 13.12)

#### **C. Devadasi Rehabilitation Programme**

This scheme is being implemented in 14 districts viz. Belagavi, Vijayapur, Bagalkot, Raichur, Koppal, Dharwad, Haveri, Gadag, Ballari, Kalaburagi, Davangere, Yadgir, Chitradurga and Shivamogga of North

Karnataka. Under this scheme, Devadasis are provided with financial assistance of Rs.20,000/- by the Corporation for taking up income generating activities such as Animal Husbandry, Petty Shop etc., In addition, awareness campaigns against this evil system, health camps are also being conducted. Self Help Groups are formed and interest free Micro credit of Rs.2.00 lakhs per group is also being implemented.

During 2015-16, Rs.200.00 lakhs has been provided in the budget. Rs.150.00 lakh has been spent covering 515 beneficiaries upto December 2015 and it is proposed to cover 515 beneficiaries under this scheme during 2015-16 (Table 13.13).

#### **D. Devadasi Pension Scheme:**

The Corporation also runs schemes that provide pension to support to ex-devadasis. Devadasis above the age of 45 years are given a pension of Rs.1000/- per month to maintain themselves. This pension amount is credited directly to the Bank account of the beneficiaries. As per the survey conducted during the year 2007-08, 46,660 Devadasis were identified. Among them, those who have crossed 45 years of age numbering to 27,889 are provided with a monthly pension of Rs.1,000/- and are directly credited to their Bank accounts.

**Table 13.12: Progress of Women Training Programme, (Rs. lakh)**

Year	Target		Achievement	
	Physical	Financial	Physical	Financial
2011-12	5430	300.00	7192	277.70
2012-13	6080	300.00	3360	139.44
2013-14	6080	300.00	-	-
2014-15	7200	360.00	3000	-
2015-16*	5650	360.00	-	71.98

\* Upto December 2015.

During 2015-16 a grant of Rs.2000.00 lakhs has been provided and an amount of Rs.2091.68 lakhs have been spent upto December 2015.

**E. Housing to ex-Devadasis:**

The scheme is implemented from the financial year 2009-10. Ex-Devadasis who own a site and who do not have a house is provided with financial assistance of Rs.120000.00 as unit cost to construct houses. The financial assistance is routed through Rajiv Gandhi Rural Housing Corporation Ltd., During the year 2014-15 a budget allocation of Rs.1100.00 lakhs was provided to cover 917 beneficiaries. During 2015-16 a budget allocation of Rs.1200.00 lakhs has been provided to cover 1000 beneficiaries, out of which 950 beneficiaries have covered under the scheme with an expenditure of Rs.900.00 lakhs upto December 2015.

**F. Marketing Assistance Scheme:** (includes Marketing Assistance (Rs.86.40 lakhs) & State Resource Centre – (Rs.88.60 lakhs) totaling to Rs.175.00 lakhs)

This scheme provides a marketing platform to sell products produced by women entrepreneurs and Stree *Shakthi* Groups. During 2015-16, Rs.86.40 lakhs has been provided in the budget to cover 3150 women of which Rs.61.30 lakhs has been spent covering 2026 beneficiaries upto December 2015. (**Table 13.16**).

**G. State Resource Centre:**

Under this scheme, KSWDC has established 30 Women's self employment counseling centers in Karnataka, to provide information /counseling about self employment, training, market assistance, economic activities etc., to women.

During 2015-16, Rs.88.60 lakhs has been provided in the budget to cover 9250 women

of which Rs.37.37 lakhs has been spent covering 5540 beneficiaries upto December 2015. (**Table 13.17**).

**H. Micro Credit Scheme:**

This scheme is introduced in 2011-12 which provides interest free loans to the 2015-16 members of Self Help Groups to improve their economic status. Each eligible group will be provided Rs.2.00 lakhs as interest free loan by KSWDC to engage in group activities. During 2015-16 Rs.500.00 lakhs has been provided in the budget. It is proposed to cover 3765 women.

**I. Rehabilitation of Transgenders Scheme:**

This scheme is introduced in 2012-13 which provides incentive of Rs.20,000/- and training programmes to transgenders (Hijidas, Kotis, Jogappas, F to M, M to F, Mangala Mukhi) in Karnataka. During 2014-15 Rs.110.00 lakh was provided in the budget and has covered 550 beneficiaries. During 2015-16 Rs.175.00 lakhs has been provided in the budget. It is proposed to cover 1000 beneficiaries. Rs.87.60 lakhs has been spent covering 438 beneficiaries upto December 2015.

**J. Rehabilitation of Sex Workers:**

This scheme is introduced in 2012-13, to improve the situation of the sex workers to lead honorable life in the society. The Corporation provides self employment training and also incentive of Rs.20,000/- to take up income generating activities.

During 2014-15 the Government has provided Rs.110.00 lakhs out of which Rs.83.85 lakhs has been spent covering 299 beneficiaries. During 2015-16 Rs.201.00 lakhs has been provided in the budget, to cover 1005 women. Rs.40.00 lakhs has been spent covering 200 beneficiaries upto December 2015 to cover 1005 women.

**Table 13.13: Progress under Devadasi Rehabilitation Scheme, (Rs. lakh)**

Year	Target		Achievement	
	Physical	Financial	Physical	Financial
2012-13	4000	400.00	3089	541.93
2013-14	2135	450.00	2069	366.70
2014-15	2565	500.00	2361	500.00
2015-16*	515	200.00	515	150.00

\* Upto December 2015

**Table 13.14 Progress under Devadasi Pension scheme, (Rs. lakh)**

Year	Target		Achievement	
	Physical	Financial	Physical	Financial
2012-13	25810	1000	25810	1165.00
2013-14	28125	1350	26664	1012.50
2014-15	28125	1688	27527	1652.00
2015-16*	28125	2000	27889	2091.68

\* Upto December 2015.

**Table 13.15 Progress under Housing to ex-Devadasis, (Rs. lakh)**

Year	Target		Achievement	
	Physical	Financial	Physical	Financial
2012-13	1250	500.00	-	500.00
2013-14	833	1000.00	833	625.30
2014-15	917	1100.00	917	1100.00
2015-16*	1000	1200.00*	950	900.00

\* Upto December 2015.

**Table 13.16: Progress of marketing assistance scheme, (Rs. lakh)**

Year	Target		Achievement	
	Physical	Financial	Physical	Financial
2011-12	1520	65.00	1426	28.40
2012-13	1520	100.00	1367	32.98
2013-14	1520	100.00	1728	32.75
2014-15	3975	110.00	2908	86.67
2015-16	3150	86.40	2026	61.30

\* Upto December 2015

**Table 13.17: Progress of the Resource Centre Scheme, (Rs. lakh)**

Year	Target		Achievement	
	Physical	Financial	Physical	Financial
2011-12	8340	91.00	4583	50.00
2012-13	9000	100.00	6921	50.69
2013-14	9000	100.00	3808	27.19
2014-15	7500	110.00	3760	29.51
2015-16	9250	88.60	5540	37.37

\* Upto December 2015.

**Table 13.18: Progress under Micro Credit Scheme, (Rs. lakh)**

Year	Target		Achievement	
	Physical	Financial	Physical	Financial
2011-12	5600	300.00	2772	154.00
2012-13	4500	300.00	3210	190.00
2013-14	4500	300.00	2195	131.00
2014-15	4960	330.00	5263	336.00
2015-16	3765	500.00	31	62.00

\* Upto December 2015.

### 13.2 Welfare Programmes for Scheduled Castes

In its endeavor towards ensuring “faster, sustainable and more inclusive growth”, the Government of Karnataka has committed itself to improving capabilities and productive endowments among the economically disadvantaged and socially marginalized sections of the State. In this direction, the welfare departments and development corporations of the State are implementing several multi-faceted and multi-pronged programs for welfare of SCs, STs, BCs, minorities, the disabled and senior citizens and thereby placing them on the path of mainstream development. A brief account of

progress of the schemes implemented by the Social Welfare Departments and Development Corporations during the last three years for the benefit of the weaker sections of the society is summarized in this section. District wise population of SC/ST as per the census 2001 and 2011 is given in Table 13.19.

As SCs continue to be deprived of adequate access to education, health care facilities, housing, sanitation, productive assets like land, etc., the Department of Social Welfare and the Development Corporations are implementing various schemes for their socio-economic uplift.

**Table 13.19: Population of SC/ST**

Name	2001		2011	
	SC	ST	SC	ST
Bagalkot	250604	80181	319149	97203
Bengaluru	851047	86018	1198385	190239
Bengaluru Rural	377679	61555	213700	52903
Belgaum	462020	243451	577418	297198
Ballari	374218	364638	517409	451406
Bidar	298812	182219	399785	235822
Bijapur	334254	30051	442773	39314
Chamarajanagar	237624	106111	259445	120219
Chikkaballapura			312565	156487
Chikmagalur	233134	41019	253651	44970
Chitradurga	336487	266235	389117	302554
Dakshina Kannada	131160	62936	148178	82268
Davanagere	333227	209701	392595	233112
Dharwad	131969	70442	177855	87548
Gadag	137414	54410	174196	61654
Gulbarga	717595	154195	648782	65259
Hassan	311726	26451	345031	32329
Haveri	175360	127163	219976	141380
Kodagu	67422	46115	73584	58054
Kolar	671692	205711	465867	78875
Koppal	185209	138588	258608	164271
Mandya	247213	17193	265294	22402
Mysore	467640	271351	536643	334547
Raichur	317276	303042	400933	367071
Ramanagara			203819	22946
Shimoga	269519	55997	308158	65412
Tumkur	474044	193819	506901	209559
Udupi	67689	41613	75429	52897
Uttara Kannada	101896	23781	116431	34239
Yadgir			273315	146849
KARNATAKA	8563930	3463986	10474992	4248987

### 13.2.1 Department of Social Welfare

As education is considered to be an engine of inclusive growth, improvement of educational status among the SC community has been effected through implementing several schemes like providing admission to meritorious students in prestigious schools, pre- matric and post-matric scholarships, prize money to meritorious students, hostel facilities, grants-in-aid for hostels, running special schools, etc. The progress of schemes implemented during the last three years to encourage the students of SCs for continuing their education from school Level to higher education level is indicated below.

#### i. Admission of Meritorious Students in Prestigious Schools

In order to provide quality education, meritorious SC students are being admitted to 5th to 10th standards in reputed institutions in the State. For the year 2015-16, an amount of Rs. 1000.00 lakhs has been earmarked under SCSP fund & an amount of Rs.500.00 lakhs has been released from Government upto December 2015 (Table 13.20).

#### ii. Pre-matric Scholarships

In order to encourage children belonging to SC households, whose annual income is less than Rs. 2.00 lakhs, a Pre-Matric scholarship is being sanctioned annually at the rates mentioned in Table 13.20A:

**Table 13.20: Progress of the Scheme for Admission of Meritorious Students, Rs. In lakhs**

Year	Budget allocation	Funds released	Expenditure	% of expenditure	Physical achievement (Students)
2012-13	1200.00	1200.00	1000.00	83.33	2761
2013-14	1000.00	1000.00	986.52	98.65	1977
2014-15	1500.00	1500.00	700.00	46.67	1472
2015-16*	1000.00	500.00	356	-	996

\*upto December 2015

**Table 13.20A Sanction of Pre-matric Scholarships (Amount in Rs.)**

Sl.No.	Class / Standard	Boys	Girls
1	1 - 5	750.00	850.00
2	6 - 7	900.00	1000.00
3	8	1000.00	1100.00

The scholarship for 9<sup>th</sup> to 10<sup>th</sup> standard students is sanctioned by Central Government as mentioned below:

**Table 13.20B scholarship for 9th to 10th standard students. sanctioned by Central Government**

Particulars	Day Scholars	Hostellers
Maintenance Allowance	Monthly Rs. 150 for 10 months	Monthly Rs. 350 for 10 months
Adhoc Grants	Annually Rs. 750	Annually Rs. 1000

The progress of the scheme during the last three years is given in Table 13.21.

**Table 13.21: Progress of the Scheme for Pre-Matric Scholarships**

Year	Budget Allocation (Rs. lakhs)	Funds released (Rs. lakhs)	Expenditure (Rs. lakhs)	% of expenditure	Physical achievement (Students)
2012-13	3541.41 (RE)	3118.62	2534.92	71.57	781312
2013-14	4435.93	4126.94	3939.09	95.44	650423
2014-15	8160.55	8474.68	5577.76	65.82	842548
2015-16*	8774.52	6002.38	1469.80	24.49	139593

upto December 2015

**iii. Post-matric Scholarships**

Post-matric scholarship is sanctioned for children whose parents' household annual income is less than Rs. 2.5 lakhs. Maintenance allowance of day scholars will be credited directly to the student's bank account. The maintenance allowance of hostelries will be credited directly to the concerned bank account of the hostel warden. The course fee fixed by the competent authority will be credited to the bank account of the college principal. The progress of the scheme during the last three years is given in Table 13.22.

**iv. Prize Money to Meritorious Students**

In order to encourage the SC students to score higher marks and secure ranks, various incentive schemes such as prize money to SSLC students, prize money to college students, one-time financial assistance to students who secure admission in prestigious institutions like IITs/IIMs & IISc, prize money to rank holders and financial assistance to SC students who study in foreign universities are sanctioned, as per the criteria set by the department. The progress of the scheme is given in Table 13.23.

**v. Pre-matric Hostels**

Pre-matric hostel facilities such as boarding and lodging with free textbooks and notebooks, toothpaste, hair oil, uniform dress, bedding, shoes, etc are being provided to SC students who are studying from 5<sup>th</sup> to 10<sup>th</sup> standards. The progress of the scheme is given in Table 13.24.

**vi. Post-Matric Hostels**

In order to encourage SC students to pursue their higher education in college level, the Government is running 566 post-matric hostels by accommodating 55552 students who are eligible for the Government of India scholarship. For the maintenance of these hostels, the Government has incurred expenditure as shown in Table 13.25.

**vii. Construction of Hostel Buildings**

Pre-matric and Post-matric hostel buildings for

students belonging to the SC community are constructed. Progress of the Scheme for the last three years detailed in Table 13.26.

**viii. Assistance to Grant-in-aid Hostels**

Providing financial assistance to voluntary organizations for maintenance of 241 grant-in-aid hostels in the State to meet boarding charges of the students is another scheme that is being implemented by the department. The detailed progress achieved is presented in Table 13.27

**ix. Residential schools****(a) Residential schools**

In order to encourage the SC children studying from 1<sup>st</sup> to 5<sup>th</sup> standards, the social welfare department is running 68 residential schools. Food, books, uniforms, beds, oil, soap, medical facility etc., are being provided to the children.

**(b) Morarji Desai Residential Schools**

The Department of Social Welfare is running 181 Morarji Desai Residential schools and 2 Atal Bihari Vajapayi Residential schools for Boys and Girls studying from 6<sup>th</sup> to 10<sup>th</sup> standards. The department is also running 82 Kittur Rani Chennamma residential schools exclusively for SC Girls studying from 6<sup>th</sup> to 10<sup>th</sup> standards. Besides that 12 PU Colleges in science subject were also started for the welfare of schedule castes. The Department is providing basic requirement to the students such as Food, Uniforms, Beds, Hair oil, Soaps, Medical facility etc. The details of progress of the Morarji Desai Residential Schools is given in the Table 13.28

**x. Compensation to SC/ST Atrocity Victims**

Atrocity cases against SC/ST members by the non-SC/ST members are registered under the Prevention of Atrocity Act 1989. The district administrator is in-charge of initiating measures for immediate relief under rehabilitation of victims of atrocity apart from giving them security under law and order. The progress of the scheme is presented in Table 13.29



**Table 13.22 Progress of Post-Matric Scholarship Scheme**

Year	Budget allocation (Rs. Lakhs)	Expenditure (Rs. Lakhs)	% of Expenditure	Physical achievement (Students)
2012-13	22982.14	18628.15	81.05	249441
2013-14	25244.14	25098.21	99.42	258370
2014-15	37069.25	34657.15	93.49	313031
2015-16*	39393.00	11647.21	-	150308

\*upto December 2015

**Table 13. 23 Progress of the Scheme for Prize Money to Meritorious Students**

Year	Budget allocation (Rs. Lakhs)	Expenditure (Rs. Lakhs)	% of expenditure	Physical target and achievement
2012-13	2200.00	2066.75	93.95	31583
2013-14	2930.00	2900.40	98.99	34146
2014-15	3900.50	3900.50	100.00	41229
2015-16*	6400.00	6400.00	100.00	66571

\*upto December 2015

**Table 13.24: Progress of Pre-matric Hostel Scheme**

Year	Budget Allocation (Rs. Lakhs)	Expenditure (Rs. Lakhs)	% of Expenditure	Physical achievement (Student)
2012-13	16414.68	15614.65	95.12	75554
2013-14	17980.92	17125.19	95.24	74007
2014-15	20830.12	11145.77	53.50	79183
2015-16*	23721.43	13449.44	56.91	82676

\*upto December 2015

**Table 13.25: Progress of Post-matric Hostel Scheme**

Year	Budget allocation (Rs. Lakhs)	Expenditure (Rs. Lakhs)	% of expenditure	Number of beneficiaries (Students)
2012-13	4625.12	4042.90	87.41	62368
2013-14	5199.77	2207.54	42.45	54800
2014-15	5937.38	3597.97	60.60	56366
2015-16*	7350.69	4456.35	60.63	55552

\*upto December 2015

**Table 13.26: Progress of the Scheme for Construction of Hostel Buildings, (Rs. Lakhs)**

Year	Budget Allocation	Funds released	Expenditure	% of expenditure	Physical Target	Physical achievement
2012-13	12732.00	11332.00	8711.72	76.88	69	69
2013-14	10732.00	9332.00	9332.00	100.00	59	96
2014-15	19875.00	11784.13	11784.13	100.00	61	21
2015-16*	10000.00	10000.00	10000.00	100.00	28	58

\*upto December 2015.

**Table 13.27: Progress of the Scheme for Assistance to Grant-in-aid Hostels (Rs. Lakhs)**

Year	Budget allocation	Funds released	Expenditure	% of expenditure	Number of students
2012-13	644.33	641.36	362.29	56.22	13030
2013-14	663.20	435.00	39.98	6.02	2569
2014-15	635.39	624.77	476.69	76.30	1945
2015-16*	782.55	573.26	87.95	15.34	1578

\*upto December 2015.

### xi. Ambedkar Housing Scheme under Scheduled Caste Sub-Plan

Towards providing housing facilities to SC households living below the poverty line, the Ambedkar housing scheme is being implemented by the Rajiv Gandhi Rural Housing Corporation. The scheme is being implemented from 2015-16 by construction of 100000 houses in Urban areas and 50000 houses in Rural areas, at the unit cost of Rs. 1.50 lakhs, the entire cost of which shall be incurred by the Government. The allocation and expenditure detailed in Table 13.30.

### xii. Scheduled Caste Sub-Plan (SCSP)

In order to ensure overall development of the

SC community, the scheduled caste sub-plan (SCSP) is being implemented through various departments in the State. A specific budgetary provision under all sectors of the State Annual Plan is made by the State Government for socio-economic development of SCs. THE KARNATAKA SCHEDULED CASTES SUB-PLAN AND TRIBAL SUB-PLAN (PLANNING, ALLOCATION AND UTILISATION OF FINANCIAL RESOURCES) ACT, 2013 came into effect from 20.03.2014. Accordingly, the funds are earmarked under SCSP as per SC population percentage (17.15%) of 2011 Census. The progress of the Scheduled Caste Sub Plan during the last three years is illustrated in Table 13.31

**Table 13.28: Progress of the Scheme for Morarji Desai Residential Schools (Rs. Lakhs)**

Year	Budget Allocation	Expenditure	% of expenditure	No of Beneficiaries
2012-13	12400.00	13464.28	108.58	51179
2013-14	24304.00	19876.83	81.78	58028
2014-15	25834.00	18192.87	70.42	58666
2015-16*	31699.00	7637.70	24.09	59681

\*upto December 2015

**Table 13.29: Progress of the Scheme for Compensation to SC/ST Victims (Rs. lakhs)**

Year	Budget Allocation	Expenditure	% of expenditure	No of beneficiaries
2012-13	400.00	400.00	100.00	1968
2013-14	400.00	400.00	100.00	2277
2014-15	1000.00	1000.00	100.00	1719
2015-16*	1000.00	750.00	75.00	884

\*upto December 2015

**Table 13.30: Progress under the Ambedkar Housing Schem, (Rs. lakhs)**

Year	Budget Allocation	Expenditure	% of expenditure	No of beneficiaries
2015-16*	30000.00	-	-	150000

\*upto December 2015

**Table 13.31: Progress of Scheduled Caste Sub-Plan, (Rs. lakhs)**

Year	Allocation			Expenditure			% of expenditure		
	State	District	All	State	District	All	State	District	All
2012-13	446810	65691	512501	365248	52929	418177	81.74	80.57	81.59
2013-14	533235	80322	613557	455338	69993	525331	85.39	87.14	85.62
2014-15	990347	206253	1196600	976790		976790	81.63		81.63
2015-16*	965552	211803	1177355	376542	106808	483350	40.00	40.52	2.92

\*upto December 2015

**xiii. SCSP Pooled Funds**

The Pooling of funds under SCSP allocation is also another strategic approach adopted by the department for socio-economic upliftment of SCs. The funds were pooled from the departments which fail to submit their action plan under the SCSP and are unable to formulate scheme/ programmes that directly benefit the SC community. The progress of the scheme during the last three years is presented in Table 13.32

**13.2.2. Dr. B.R. Ambedkar Development Corporation (BRADC)**

The Government of Karnataka is implementing several programmes for economic upliftment of SC communities through Dr. B.R. Ambedkar Development Corporation. The Progress of important programmes implemented by the Corporation is described below.

**I. Self-employment Programme:**

The basic aim of the programme is to enable unemployed, underemployed SC persons to take up income generating activities and thereby improving their economic status in the Society. The Corporation provides

financial assistance through Banks and financial institutions for setting up of self-employment activities. Details are presented in Table 13.33. The important features of the scheme are illustrated below:

- For project cost upto Rs.100,000/-, the Corporation sanctioning a maximum subsidy of Rs.35,000/- and the remaining amount will be the loan from financial institutions.
- For project cost above Rs.1,00,000/-, the Corporation is providing 33% as Subsidy (Maximum of Rs.2.00 lakh), 62% as loan from Banks/ financial institutions.
- For a few selected schemes, Direct Loan is sanctioned by the Corporation after availing loan from National Scheduled Castes Finance and Development Corporation and National Safai Karmachari Finance Development Corporation (NSCFDC & NSKFDC), 5% beneficiary contribution, 20% margin money from the Corporation and the remaining 75% is loan from the NSFDC & NSKFDC.

**Table 13.32: Progress of SCSP Pooled funds Scheme, (Rs. crores)**

Year	Pooled fund Allocation	Expenditure	% of expenditure
2012-13	930.00	930.00	100.00
2013-14	1050.00	1050.00	100.00
2014-15	555.00	555.00	100.00

**Table 13.33: Progress of Self-employment Programme (Rs. in lakhs)**

Year	Budget Allocated	Funds Released	Expenditure				No. of beneficiaries
			Subsidy (State)	Margin Money	Term Loan (NSCFDC)	Total	
2012-13	2200	2200	2268.33	596.86	1365.87	4231.06	9834
2013-14	1254	1254.5	4551.71	166.09	741.26	5459.06	10657
2014-15	2000	2000	3818.76	263.92	112.52	4195.2	10292
2015-16*	4000	2000	1710.34	347.65	0	2057.99	6177

upto Dec 2015.

Note: Margin Money component spent out of Share Capital funds. Funds released includes pooled

**II. Land Purchase Scheme:**

The scheme has been launched during 1990-91 to make the landless agricultural labourers land holders by purchasing lands from non-SC/ST land holders. Under this scheme, 2 acres of dryland or 1 acre of wetland will be distributed to the beneficiaries. Under this scheme, 50% will be subsidy and 50% as term loan with 6% interest rate which has to be repaid in 10 annual equal installments. The lands will be registered in the name of women beneficiary of the family. The detailed progress of the programmes is presented in Table 13.34

**III. Gangakalyana Scheme****A. Community Irrigation/Lift Irrigation Scheme:**

Under this scheme, a group of 8 to 15 acres of land belonging to SC landholders will be provided irrigation facility at free of cost by

lifting water from the perennial rivers, streams, etc. The unit cost fixed provide irrigation for 8 acres and 15 acres of land is Rs.4.00 lakhs and Rs.6.00 lakhs respectively.

**B. Individual Irrigation Borewell Scheme:**

Individual Irrigation borewells along with pumpsets will be provided to small and marginal SC farmers. The unit cost of the scheme is Rs.2.00 lakhs, Rs.1.50 lakh will be subsidy and remaining Rs.50,000/- will be term loan from NSCFDC. The Progress details of the scheme are provided in Table 13.35

**C. Energisation of Irrigation Borewells:**

Rs.50,000/- for each borewell will be provided under the SCSP pooled funds to ESCOMS for energisation of irrigation borewells drilled by the Corporation. The status of the scheme is provided in Table 13.36

**Table 13.34: Progress of Land Purchase Scheme, (Rs. in lakhs)**

Year	Budget Allocated	Funds Released (Subsidy)	Expenditure			No. of beneficiaries	Land Purchase (Acres)
			Subsidy (State)	Term Loan (NSCFDC)	Total		
2012-13	1300 (Pooled funds)	1300	728.81	728.81	1457.62	647	955.36
2013-14	0	0	1526.71	1526	3052.71	733	978.06
2014-15	0	0	85.15	85.15	170.3	35	40.08
2015-16*	7500	7500	1017.99	1017.99	2035.98	341	483.08

upto Dec 2015.

**Table 13.35: Progress of Individual Irrigation Borewell Scheme, (Rs. in lakhs)**

Year	Budget Allocated	Funds Released (Subsidy)	Expenditure			No. of beneficiaries
			Subsidy (State)	Term Loan (NSCFDC)	Total	
2012-13	8584.00	2298.10	1715.34	351.00	2066.34	655
2013-14	8584.00	8584.00	3048.76	495.34	3544.10	1924
2014-15	19485.00	19485.00	5011.80	563.18	5574.98	5665
2015-16*	20000.00	10000.00	6609.87	728.15	7338.02	7198

upto Dec 2015

Note: Budget Allocation and funds released includes Pooled Funds

**Table 13.36: Status of Energisation of Irrigation Borewells, (Rs. in lakhs)**

Year	Budget Allocated	Funds Released	Expenditure	No. of wells energized
2012-13	4000.00	4000.00	3000.00	8992
2013-14	3000.00	3000.00	1750.00	8353
2014-15	3860.00	3860.00	3860.00	4575
2015-16*	832.50	832.50	832.50	1665

upto Dec 2015.

#### IV. Micro Credit Finance Scheme (Small Loan)

Under this scheme, the beneficiaries of semi-urban and urban areas will be assisted to start their own petty business activities. The unit cost is Rs.15,000/-, Rs.10,000 will be subsidy and Rs.5,000 in loan. The details of budget allocation, expenditure and number of beneficiaries covered are provided in Table 13.37

#### V. Micro Credit Scheme (NSCFDC)

Under this scheme, financial assistance will be provided to better performing Self-Help Groups and groups constituted under the three Shakthi Scheme. The unit cost is Rs.25000, Rs.15000 is term loan from NSCFDC and the remaining amount of Rs.10000 is subsidy received from Zilla Panchayath, Urban Development

Department, Social Welfare Department and other departments. 5% interest rate is charged on the term loan. Details are furnished in Table 13.38

#### VI. Safai Karmachari Rehabilitation Programme:

This is a national Scheme, to promote socio economic upliftment of Safai Karmacharies and their dependents by providing financial assistance for income generation activities. For the project cost upto Rs.1.00 lakh, 50% is subsidy subject to a maximum limit of Rs.25,000 and the remaining amount is NSCFDC/Bank loan. For project cost above Rs.1.00 lakh, 90% is loan from NSCFDC, 5% is margin money from BRADCL and 5% is promoter's contribution. The details of the programme are provided in Table 13.39

**Table 13.37: Progress of Micro Credit Finance Scheme, (Rs. in lakhs)**

Year	Budget Allocated	Funds Released	Expenditure	No. of beneficiaries
2012-13	1550.00	1550.00	2477.34	24773
2013-14	1632.00	1632.00	2081.02	14958
2014-15	2020.00	20.20.00	2254.35	15029
2015-16*	3000.00	1000.00	1771.65	11811

upto Dec 2015.

**Table 13.38: Progress of Micro Credit Scheme (NSCFDC), Rs.in lakhs)**

Year	Term Loan from NSCFDC	Expenditure (Rs. in lakhs)				No. of beneficiaries
		Subsidy	Margin Money	Term Loan (NSCFDC)	Total	
2012-13	150.00	9.60	3.10	618.20	630.90	2390
2013-14	0.00	279.00	111.60	327.00	717.60	2932
2014-15	0.00	43.20	0.10	64.95	108.25	432
2015-16*	0.00	216.00	0	323.85	539.85	2160

upto Dec 2015

**Table 13.39: Progress of Safai Karmachari Rehabilitation Programme, (Rs.in lakhs)**

Year	Term Loan from NSKFDC	Expenditure (Rs. in lakhs)				No. of beneficiaries
		Subsidy	Margin Money	Term Loan (NSKFDC)	Total	
2012-13	4186.90	170.40	13.65	1545.79	1729.84	2397
2013-14	2822.50	171.40	2.48	1352.86	1526.74	1733
2014-15	0.00	205.50	14.45	1790.41	2010.36	2137
2015-16*	0.00	20.80	0.40	165.35	186.55	208

upto Dec 2015.

Note: Margin money spent out of Share Capital funds. Subsidy spent out of Govt. of India funds.

#### **Initiative taken by the Corporation:**

To improve the efficiency in implementation of its schemes effectively, the Corporation has developed online software in collaboration with NIC for all the schemes. The NIC has developed comprehensive software wherein the beneficiary can apply for loan on online and even he can visit our website till disposal of his application.

#### **Best practices and success stories:**

The Corporation has adopted RTGS payments system to the beneficiary account directly in all the schemes in order to avoid delay and misuse of schemes funds.

The Corporation has taken initiative to launch its own website wherein the public can avail information about the benefits of the corporation without intervention of the middlemen. Instructions are given to all districts offices to maintain transparency during the implementation of the schemes.

#### **Identifying gaps and constraints:**

In all the years the corporation has not evaluated the outcome of the schemes. Hence the end result is not known to the corporation. Now the corporation has decided to evaluate all the schemes in order to know the end result.

The corporation is facing staff shortage and the available staff will be given professional training and trained them to adapt to the new system and to implement effectively and timely.

#### **Specifying challenges and the future outlook:**

All the schemes implementing by the Corporation are funded through the budgetary support by Government of

Karnataka. The fund allocated by the Government is not adequate compare to the SC population in the state. The Corporation an average giving benefits to 40000 to 50000 SCs per annum. There is a huge gap when compare to the population. The corporation is receiving large number of application and selection process is a difficult tasks which results criticism and opposition from the general public. Corporation is expecting more funds from Government to cover major chunk of population which is uncovered.

#### **13.2.3 Welfare Programmes for Scheduled Tribes**

In order to improve productive endowments and exchange entitlements among the ST households, the State Government has been implementing various programmes in social and economic domains. It has been attempted through a) Department of Scheduled Tribes Welfare and b) Karnataka Scheduled Tribes Development Corporation. The progress of important schemes is summarized as follows.

##### **i. Admission of Meritorious ST Students in Prestigious Schools**

To provide quality of education, the meritorious ST students studying at 5th standard and above are given admission in reputed residential or non-residential schools. All fees and maintenance charges are borne by the department. For the year 2015-16, out of Rs.652.00 lakh, an amount of Rs.602.00 lakh has been spent for the benefit of 1614 students in the State till the end of December 2015. The detailed progress of the scheme is provided in Table 13.40.

##### **ii. Pre-metric Scholarships**

For educational advancement and reduction

of dropouts from the schools, pre-matric scholarship for ST boys and girls students will be provided. An amount of Rs.750 for ST students studying from 1st to 5th standard, Rs.900 studying from 6<sup>th</sup> to 7<sup>th</sup> Standard and Rs.1000/- for students studying 8th standard will be provided annually. Rs.850/- for girl students studying from 1st to 5th standard, Rs. 1000/- studying from 6th to 7th standard and Rs.1100/- studying 8th standard is being sanctioned annually (Table 13.41).

### iii. Post-matric Scholarships

Financial assistance is being provided to ST students whose family income is less than Rs. 2.50 lakhs per annum, and are pursuing post-matric education including professional courses,. This is a Central Sector Scheme (CSS) implemented to encourage the ST students to pursue college education in the State (Table 13.42).

### iv. Provision of Cash Incentives

For continuation of the college education, a cash incentives schemes to ST students is being implemented since 2009-10. A cash incentive of Rs.7,000 will be provided to ST students who secure more than 60% and Rs.15,000 will be awarded to those who secure more than 75% in the SSLC examination.(Table 13.43)

### v. Incentive Scholarship to ST Meritorious Students:

In order to encourage the meritorious ST students, an incentive scholarship of Rs.10000 per student is awarded to the first 5 meritorious ST students in each district who have passed II PUC annual examination in the first attempt itself. The progress of the scheme during the last three years is provided in Table 13.44

### vi. Construction of Residential School Buildings

Towards providing residential school buildings and other infrastructural facilities, financial assistance is provided for construction of residential schools such as Morarji Desai residential school and Kittur Rani Chennamma residential school. It intends to promote educational development among the ST community. The progress of

the scheme during the last three years is provided in Table 13.45

### vii. Construction of Hostels and residential schools (Ashrama Schools)

For provision of basic amenities to ST inmates of hostels and ashrama schools, buildings are being constructed for the institutions which are housed in rented buildings. This has been implemented by the department and financially assisted by the Central Government under the Central Sector Scheme (CSS). The detailed progress of the scheme during the last three years is shown in Table 13.46.

### viii. Maintenance of Morarji Desai Residential Schools

Morarji Desai Residential Schools, which provide basic school facilities, have been provided maintenance expenditure during the first year of their establishment. The detailed progress of the scheme during the last three years is given in Table 13.47

### ix. Book Banks Scheme

Book banks for accessing expensive books of professional courses such as medical, engineering, agriculture, veterinary, law etc., are established for the benefit of ST students who cannot afford such books prescribed for their courses. It is implemented by the zilla Panchayat at the district level. The progress of the scheme during the last three years is given in Table 13.48.

### x. Construction of Valmiki Bhavans

The Valmiki Bhavans are being constructed at the cost of Rs. 3.50 crores at District level, Rs. 1.50 crore at Taluk level and Rs.50.00 lakhs at Hobli level for the benefit of Scheduled Tribe people. The grants for the construction of the Bhavans at different levels is being released to the Deputy Commissioners of the concerned districts. The details of Valmiki Bhavans sanctioned for the last three years are shown in Table 13.49.

### xi. Financial Incentives to PVTG Students:

Financial assistance of Rs.2500 and Rs.5000 will be provided for the PVTG students who completed 7th standard and

10<sup>th</sup> Standard Examination respectively in the first attempt itself. (Table 13.50)

### xii. Tribal Sub-Plan

In an effort to promote overall development of STs, the tribal sub-plan (TSP) has been implemented by the department. As per the plan, the due share of funds and benefits from all developmental sectors in the State's

annual plans are channelized exclusively for the welfare of the ST community in proportion to their population. The grant-in-aid under Article 275 (1) is also being provided to take up such special development programmes which are otherwise not included in the plan programmes. The progress of TSP is given in Table 13.51

**Table 13.40: Progress of Admission of Meritorious Students in Prestigious Schools (Rs. Lakhs)**

Year	Target		Amount released	Achievement		% of achievement	
	Financial	Physical		Financial	Physical	Financial	Physical
2012-13	450.00	1413	450.00	450.00	1413	100.00	100.00
2013-14	350.00	1200	350.00	350.00	1200	100.00	100.00
2014-15	500.00	1422	450.00	450.00	1422	90.00	100.00
2015-16*	652.00	1614	602.00	602.00	1614	92.33	100.00

Note: \*Upto December 2015

**Table 13.41: Progress of Pre-metric Scholarship, (Rs. Lakhs)**

Year	Target		Amount released	Achievement		% of achievement	
	Financial	Physical		Financial	Physical	Financial	Physical
2012-13	641.45	185928	613.85	547.20	185019	85.30	99.59
2013-14	1085.57	310163	1043.46	753.29	163803	69.39	52.81
2014-15	1639.84	310163	1513.10	1006.88	96891	61.40	31.23
2015-16*	1696.27	210163	1468.70	507.60	47174	29.92	22.44

Note: \*Upto December 2015

**Table 13.42: Progress of Post-metric Scholarship Scheme, (Rs. Lakhs)**

Year	Target		Amount released	Achievement		% of achievement	
	Financial	Physical		Financial	Physical	Financial	Physical
2012-13	5756.92	71972	5756.83	3895.57	52732	67.66	73.26
2013-14	5576.22	79660	4404.05	2780.79	33174	49.86	41.64
2014-15	6123.02	81660	3271.64	3116.87	16499	50.90	20.20
2015-16*	6106.52	81660	53.62	16.12	60	0.26	0.07

Note: \*Upto December 2015

**Table 13.43: Progress of Provision of Cash incentives Scheme, (Rs. Lakhs)**

Year	Achievement	
	Financial	Physical
2012-13	669.90	10569
2013-14	1300.00	11381
2014-15	1300.80	14579
2015-16	1949.40	20754

Note: \*Upto December 2015

**Table 13.44: Progress of Incentive Scholarship Scheme, (Rs. Lakhs)**

Year	Target		Amount released	Achievement		% of achievement	
	Financial	Physical		Financial	Physical	Financial	Physical
2012-13	15.00	150	15.00	15.00	150	100	100
2013-14	15.00	150	15.00	15.00	150	100	100
2014-15	15.00	150	15.00	15.00	150	100	100
2015-16*	15.00	150	15.00	15.00	150	100	100

Note: \*Upto December 2015



**Table 13.45 Progress of the Scheme for Construction of Residential School Buildings (Rs. Lakhs)**

Year	Target		Amount released	Achievement		% of achievement	
	Financial	Physical		Financial	Physical	Financial	Physical
2012-13	400.00	10	400.00	400.00	10	100.00	100.00
2013-14	400.00	10	400.00	400.00	10	100.00	100.00
2014-15	5952.00	34	5952.00	5952.00	24	100.00	70.58
2015-16*	3400.00	34	2550.00	1700.00	17	50.00	50.00

Note: \*Upto December 2015

**Table 13.46 Progress of the Scheme for Construction of Hostels and Residential Schools, (Rs. Lakhs)**

Year	Target		Amount released	Achievement		% of achievement	
	Financial	Physical		Financial	Physical	Financial	Physical
2012-13	1500.00	15	500.00	500.00	02	33.00	13.00
2013-14	1600.00	15	600.00	600.00	03	37.50	20.00
2014-15	2000.00	14	2000.00	2000.00	09	100.00	64.28
2015-16*	1000.00	10	750.00	500.00	10	50.00	100.00

Note: \*Upto December 2015.

**Table 13.47: Progress of the Scheme for Maintenance of Morarji Desai Residential School, (Rs. Lakhs)**

Year	Target		Amount Released	Achievement		% of achievement	
	Financial	Physical		Financial	Physical	Financial	Physical
2012-13	100.00	4	100.00	100.00	0	100.00	0
2013-14	185.00	06	185.00	185.00	0	100.00	0
2014-15	1050.00	10	1050.00	1050.00	2	100.00	20.00
2015-16*	788.00	10	591.00	394.00	0	50.00	0

Note: \*Upto December 2015.

**Table 13.48: Progress of Book Banks Scheme, (Rs. Lakhs)**

Year	Target		Amount Released	Achievement		% of achievement	
	Financial	Physical		Financial	Physical	Financial	Physical
2012-13	69.32	2528	66.62	66.62	1052	96.00	41.62
2013-14	72.54	2800	72.31	59.80	817	82.43	29.17
2014-15	76.34	900	6.00	-	-	-	-
2015-16*	102.00	1200	1.52	-	-	-	-

Note \*Upto December 2015.

**Table 13.49: Details of Valmiki Bhavans, (Rs. Lakhs)**

Year	Number of Valmiki Bhavans	Amount Allocation	Amount Released	Expenditure
2012-13	47	2000.00	2000.00	2000.00
2013-14	213	2500.00	2500.00	2500.00
2014-15	23	3000.00	3000.00	3000.00
2015-16	646	5000.00	3750.00	-

Note \*Upto December 2015.

**Table 13.50: Progress of financial Incentives to PVTG students, (Rs. Lakh)**

Year	Achievements	
	Financial	Physical
2012-13	29.06	995
2013-14	15.00	628
2014-15	16.25	487
2015-16	10.02	298

Note: \* December 2015

**Table 13.51: Progress of Scheduled Tribal-Sub Plan (Rs. lakh)**

Year	Allocation	Expenditure	% of expenditure
2012-13	207560.00	167978.91	80.93
2013-14	248073.53	195026.06	78.62
2014-15	435693.00	353760.00	81.19
2015-16*	457816.00	202560.00	44.24

Note: \*Upto December 2015.

### 13.2.4 Karnataka Maharshi Valmiki Scheduled Tribes Development Corporation Ltd

A large number of ST households continue to be deprived of productive assets and income earning avenues. Therefore, Karnataka Maharshi Valmiki Scheduled Tribes Development Corporation has been set up by the Government of Karnataka to implement several developmental schemes such as Self-Employment Scheme, Land Purchase Scheme, Ganga Kalyana Scheme & Micro Credit Scheme for the economic development of Scheduled Tribes households in the State. A brief progress of the schemes implemented by the Corporation is presented below.

#### i. Self Employment Scheme.

**a. Self Employment Scheme** for unemployed youths - Unemployed Scheduled Tribe beneficiaries are assisted up to Rs.1.00 lakh to start small business activities like petty shop, vegetable vending, cycle shop, dairy, etc., through their service area bank. The Corporation is releasing 50% of the unit cost or maximum of Rs.35,000 whichever is less, as subsidy and the remaining portion will be the bank loan. The detailed progress of the scheme is shown in Table 13.52

**b. Industries, Service and Business (ISB)** – Under the scheme, financial assistance is provided to the projects having unit cost ranging from Rs.1.00 lakh to Rs.10.00 lakhs to start small scale industry/to purchase passenger or goods transport vehicles, tractor etc,. The corporation releases 33% of

the unit cost subject to a maximum Rs. 2 .00 lakh as subsidy and the remaining portion of the unit cost is Bank Loan. Progress of the scheme is provided in Table 13.53

**c. Micro Credit Finance (Small Loan) Scheme** - Financial assistance will be extended to skilled and unskilled Scheduled Tribe women members of the Self Help Groups (SHGs) in rural, semi urban and urban areas. The unit cost is Rs.15,000/- per member, out of which subsidy is Rs.10,000/- and loan is Rs.5,000/- . The loan carries interest at the rate of 4% per annum. The progress of the scheme is furnished in Table 13.54

**d. Land Purchase Scheme** - Under this Scheme, the landless agricultural women labourers will be the beneficiary. The beneficiary will be made land owners by providing agricultural lands purchased from the non-SC/ST land owners. 2-00 acres of dry land or 1-00 acre of wet land / ½ acre of garden land will be provided to each selected beneficiary. The unit cost is Rs.10 lakhs. out of unit cost 50% is subsidized and 50% is term loan from NSTFDC/from state government. The value of land to be purchased under this scheme will be determined and fixed by the Scheme Implementation Committee headed by the Deputy Commissioner of the district. Progress of the Scheme is furnished in Table 13.55

**Table 13.52: Progress of Self-employment Scheme**

Year	No of beneficiaries	Subsidy (Rs. lakh)	Bank Loan (Rs. lakh)	Total (Rs. lakh)
2012-13	3661	765.54	1094.93	1860.47
2013-14	6085	1420.20	293.58	3433.78
2014-15	5447	1000.12	1490.18	2490.30
2015-16*	3011	964.67	1502.14	2466.81

\*(up to Dec-2015)

**Table 13.53: Progress of Self-employment Scheme for Industries Service and Business**

Year	No of beneficiaries	Subsidy (Rs. lakh)	Margin Money (Rs.Lakh)	Bank Loan (Rs. lakh)	Total (Rs. lakh)
2012-13	230	134.30	61.32	628.93	824.55
2013-14	556	463.25	0.00	1529.99	1993.24
2014-15	509	603.09	0.00	1742.67	2345.76
2015-16 (up to Dec-2015)	235	369.64	0.00	944.15	1313.79

**Table 13.54: Progress of Micro Credit Scheme.**

Year	No of beneficiaries	Subsidy (Rs. lakh)	Margin money (Rs. lakh)	Total (Rs. lakh)
2012-13	11365	568.25	568.25	113.65
2013-14	7498	401.20	401.20	802.40
2014-15	8260	756.05	378.03	1134.08
2015-16 (upto Dec-2015)	3474	347.40	173.70	521.10

**Table 13.55: Progress of Land Purchase Scheme.**

Year	No of beneficiaries	Subsidy (Rs. lakh)	Term loan (Rs. lakh)	Total (Rs. lakh)
2012-13	218	243.74	243.74	487.48
2013-14	276	622.93	622.93	1245.86
2014-15	112	288.24	288.24	576.48
2015-16 (up to Dec-2015)	142	479.09	479.09	958.08

**Table 13.56: Progress of Ganga Kalyana - Individual Irrigation Borewell Scheme**

Year	No of beneficiaries	Subsidy (Rs. lakh)	Term loan (Rs. lakh)	Total (Rs. lakh)
2012-13	3756	5047.77	973.49	6021.26
2013-14	1485	1839.42	309.00	2148.42
2014-15	2630	2063.22	322.70	2385.92
2015-16 (up to Dec-2015)	3618	2940.34	403.90	3344.24

## ii. Ganga Kalyana Scheme

**Individual Irrigation Borewell Scheme:** Irrigation facility will be provided to the agricultural lands of the small and marginal farmers belonging to the Scheduled Tribes by drilling borewells, installing pumpset and accessories and energization. The unit cost under the Scheme is Rs.2.00 lakh, out of which Rs.1.50 lacs is subsidy and the remaining Rs.50,000/- will be the NSTFDC term loan. Another RS.50000 will be released out of SCA to TSP found to the respective ESCOMS for energization. The progress of the scheme is furnished in Table 13.56

### 13.3.1 Developmental programmes implemented in Backward Classes Welfare Department:

The Backward classes (BCs) constitute major a chunk of population who are also deprived of educational and economic advancement in the state. Therefore, the Department of Backward Classes Welfare and the D Devaraj Urs Backward Classes Development Corporation (DBCDC) have been implementing various development programmes for socio-economic welfare of the Backward Classes in the state. Some of them are summarised as follows.

#### A. Department of Backward Classes Welfare:

##### 1. Pre-matric and Post-matric scholarships:

Pre-matric and post-matric scholarships are being sanctioned to the post matric and pre matric backward class students whose annual family income is not more than Rs. 44500. A scholarship will be granted for the backward class students studying from 5th to 7th and 8th to 10th class,. Similarly students studying in PUC and degree education & students studying in post-graduation courses and students studying in technical and professional courses will be sanctioned annually. The progress of the scheme is presented in Table 13.57

## **2. Maintenance of Morarji Desai Residential Schools.**

In order to provide qualitative education to the poor and meritorious students of BC, whose annual family income is less than Rs. 100000/-, 133 morarji desai residential schools have been established . The students of Morarji school have been provided with free education from class VI to XII with boarding, lodging facilities. The progress of the scheme is illustrated in Table 13.58.

## **3. Ashrama School**

In order to encourage the students of Backward Classes especially category – I to avail formal education. 78 ashrama schools have been established. The students get primary education from class 1st to 4th with free boarding and lodging facilities in ashrama school. The progress of the scheme during the last 3 years in provided in Table 13.59

## **4. Maintenance of Pre and post matric Hostels.**

Under the scheme, students of backward classes ( with annual family income is for cat-1 R.1.00 lakh and Cat-2a, 2b, 3a and 3b is Rs.44,500/-) studying in pre matric and post matric courses are provided with free boarding, lodging and academic facilities in the hostels run by the Department of Backward Classes Welfare. The progress of

the scheme during the last 3 years is provided in Table 13.60

## **5. Fee concession.**

In order to encourage the poor backward classes students to avail higher education fee concession is sanctioned. (This facility is being given to the Backward classes students, whose annual family income of Cat-1 is Rs.2.50 lakhs and other Categories is Rs.1.00 lakh) . Table 13.61 provides the detailed progress of the scheme.

## **6. Reimbursement of Extra Boarding and Lodging Charges**

Under this scheme, the college students of Cat-1, who are not getting hostel facilities, are given extra boarding and lodging charges. The nominal financial assistance of Rs. 1500 per month helps the students to make their own boarding and lodging facilities. Table 13.62 presents the detailed progress of the scheme during the last three years.

## **7. Financial Assistance of Foreign Studies (New Scheme)**

In order to encourage the students of backward classes (with annual household income limit of Rs.1,44,000) to study in foreign universities financial assistance is being given . Under the scheme, students of backward classes are provided with aid for higher studies like Post-doctoral, Ph.D. and Master degrees in Foreign universities at a maximum allowance of Rs.3.5 lakh per annum to an extent of Rs.10 Lakh for entire course. The progress of the scheme is shown in Table 13.63

## **8. Stipend to Law Graduates**

Under the scheme, unemployed law graduates are provided with monthly stipend of Rs.1000 till their 4 years training under a Senior Advocate/Government Pleader. The progress of the scheme is shown in Table 13.64.

### 9. Koushalya (Skill) Training Programme

Under Koushalya scheme un employed women is being impacted training in various computer courses and plastic proceeding technology, aimed at enabling the women to seek employment. The progress of the scheme is presented in Table 13.65

### 10. Tailoring Training Centres

Under this scheme, unemployed women of backward classes are provided with tailoring training in the training centers run by the Department and paid stipendiary of Rs.300 for 12 months for each trainee. They are also given sewing machine after they complete the training successfully . The detailed progress of the scheme is illustrated in Table 13.66

### 11. Nursing Training

Under this scheme the students of Backward classes with less than Rs. 1 lakh family income are provided free education in

reputed and recognised nursing institutes getting the opportunity to GNM/ BSc nursing training with boarding and lodging facilities . The detailed progress of the scheme is shown in Table 13.67

### 12. Scheme for Nomadic and Non-nomadic Tribes

With a view to uplift the socio-economic status of NT/SNTS, a scheme has been launched in the year 2007. The basic objectives of this scheme is-

- Providing educational facilities and financial assistance for education
- Infrastructural development in NT/SNT colonies
- Providing housing facilities
- Providing self employment training and subsidy.
- Irrigational facilities through Ganga kalyana.

The detailed progress of the scheme during the last 3 years is shown in Table 13.68

**Table 13.57: Progress of Pre-matric and post matric scholarships, (Rs. In lakhs )**

Year	Targets		Amount released	Achievements		% of achievements	
	Fin	Phy		Fin	Phy	Fin	Phy
2012-13	3996	338617	5632	5622	504645	100	151
2013-14	14367	771487	14427	14072	570591	98	74
2014-15	18321	891487	19670	18626	697070	95	78
2015-16*	26207	1313487	18378	15417	523781	83	40

\*upto Dec. 2015

**Table 13.58: Progress of Morarji Desai Residential Schools, (Rs. In lakhs)**

Year	Targets		Amount released	Achievements		% of achievements	
	Fin	Phy		Fin	Phy	Fin	Phy
2012-13	6000.00	30250	5060.19	5060.19	28500	100	99
2013-14	11682	30250	11682.00	11682.00	30130	100	97
2014-15	12000	30250	12000.00	12000.00	28000	100	100
2015-16*	15451.00	33820	11588.25	11588.25	31650	100	94

\* upto Dec. 2015

**Table 13.59: Progress of Ashrama Schools, (Rs. Lakhs)**

Year	Targets		Amount released	Achievements		% of achievements	
	Fin.	Phy.		Fin.	Phy.	Fin.	Phy.
2012-13	716.44	2910	683.14	614.96	1286	90	44
2013-14	320.51	2910	320.51	306.44	2515	96	86
2014-15	319.30	2910	341.18	295.65	2645	87	91
2015-16*	315.31	2910	157.66	149.37	2307	95	79

\*upto Dec. 2015.

**Table 13.60: Progress of Pre and post matric Hostels scheme, (Rs. In lakhs )**

Year	Targets		Amount released	Achievements		% of achievements	
	Fin.	Phy.		Fin.	Phy.	Fin.	Phy.
2012-13	25933.07	140338	27786.43	27585.45	120809	99	86
2013-14	35967.09	149000	37817.09	37243.28	148522	98	99
2014-15	46596.81	174058	46318.49	44863.31	159735	97	92
2015-16*	65693.07	324058	37456.54	29984.13	225695	80	70

\*upto Dec. 2015

**Table 13.61: Progress of the Scheme for Free Concession, (Rs. In lakhs)**

Year	Targets		Amount released	Achievements		% of achievements	
	Fin.	Phy.		Fin.	Phy.	Fin.	Phy.
2012-13	5000.00	374581	10000.00	9814.00	217537	98	58
2013-14	23500	374581	23500.00	23500.00	337123	100	90
2014-15	13999.96	374581	13887.06	13599.01	289564	98	77
2015-16*	18000.00	374581	9000.00	3469.78	124860	39	33

\*upto Dec. 2015

**Table 13.62: Details of Reimbursement of Extra Boarding and Lodging Charges, (Rs. In lakhs)**

Year	Targets		Amount released	Achievements		% of achievements	
	Fin.	Phy.		Fin.	Phy.	Fin.	Phy.
2012-13	312.79	21679	312.77	295.07	12982	94	60
2013-14	222.09	11028	222.09	192.90	7617	87	69
2014-15	585.77	21679	439.33	417.52	18726	95	86
2015-16*	675.03	21679	336.02	31.56	4317	9	20

\*upto Dec. 2015

**Table 13.63: Progress of Financial Assistance to Foreign Studies, (Rs. In lakhs)**

Year	Targets		Amount released	Achievements		% of achievements	
	Fin.	Phy.		Fin.	Phy.	Fin.	Phy.
2015-16*	1000	100	750.00	723.26	80	95	80

\*upto Dec. 2015

**Table 13.64: Progress of the Scheme for Stipend to Law Gradates, (Rs. In lakhs)**

Year	Targets		Amount released	Achievements		% of achievements	
	Fin.	Phy.		Fin.	Phy.	Fin.	Phy.
2012-13	183.57	1067	183.57	174.11	940	95	88
2013-14	160.97	1067	160.97	123.46	917	77	86
2014-15	145.19	1067	134.88	72.87	897	54	84
2015-16*	146.92	1067	73.46	69.26	918	94	91

\*upto Dec. 2015

**Table 13.65: Progress of Skill Training Programme, (Rs. In lakhs)**

Year	Targets		Amount released	Achievements		% of achievements	
	Fin.	Phy.		Fin.	Phy.	Fin.	Phy.
2012-13	300.00	500	300.00	0	0	0	0
2013-14	100.00	500	27.00	27.00	71	100	14
2014-15	254.00	1000	254.00	237.43	853	93	85
2015-16*	This scheme merged with another HOA						

**Table 13.66: Financial and Physical Progress of Tailoring Training Centers**  
(Rs. In lakhs)

Year	Targets		Amount released	Achievements		% of achievements	
	Fin.	Phy.		Fin.	Phy.	Fin.	Phy.
2012-13	170.01	1206	178.10	164.92	759	93	63
2013-14	187.40	1206	187.40	149.93	945	89	78
2014-15	210.77	1181	202.15	161.47	1000	80	85
2015-16*	242.32	1206	121.16	91.16	1087	75	90

\*upto Dec. 2015

**Table 13.67: Financial and physical progress of Nursing Training (Rs. In lakhs)**

Year	Targets		Amount released	Achievements		% of achievements	
	Fin.	Phy.		Fin.	Phy.	Fin.	Phy.
2012-13	380.00	3810	380.00	367.00	2147	97	56
2013-14	400.00	3810	400.00	389.50	3336	99	88
2014-15	500.00	4000	400.00	399.03	3255	100	81
2015-16*	This scheme merged with another HOA						

**Table 13.68: Progress of scheme for Nomadic and Non-nomadic Tribes, (Rs. In lakhs)**

Year	Targets		Amount released	Achievements		% of achievements	
	Fin.	Phy.		Fin.	Phy.	Fin.	Phy.
2012-13	5000.00	10979	4000.00	4000.00	15705	100	143
2013-14	5000.00	12000	5000.00	5000.00	11719	100	98
2014-15	4781.56	12000	4781.56	4781.56	11921	100	100
2015-16*	5000.00	12000	3750.00	3249.56	11150	87	95

(\*upto Dec. 2015)

### 13.3.2. D.Devaraj Urs Backward Classes Development Corporation (DBCDC)

In order to improve economic status of the backward classes, various schemes sponsored by the State Government and the National Backward Classes Finance and Development Corporation (NBCFDC) have been implemented in the State by D.Devaraj Urs Backward Classes Development Corporation (DBCDC). A brief progress of important schemes being implemented by the Corporation during the last three years is described below.

#### 1. Chaitanya Subsidy cum Soft Loan Scheme:

To take up ISB activities like industry, service, business, and agriculture and allied activities etc., subsidy and margin money starting from Rs.25000/-to Rs.5.00lakh is being sanctioned in collaboration with the banks to the Backward Classes.

The Corporation releases 30% subsidy for the project cost upto Rs.25,000 and remaining is banks share of loan. For the project cost of Rs. 25,001 to Rs. 1.00 lakh, the Corporation releases 20% margin money and 30% subsidy or maximum of Rs.10,000/- per beneficiary and remaining is bank share of loan. For the projects above Rs.1.00 lakh, the Corporation releases 20% Margin Money and remaining is bank share of loan. The Corporation charges interest at 4% p.a. on margin money. The Bank charges interest at the prevailing lending rates for their portion of loan.

During the year 2015-16 an amount of Rs.534.53 lakh against the target amount of Rs.1700.00 lakh has been spent benefitting 1833people as against the target of 4250 till the end of December-2015 (Table .13.69)

#### 2. Chaitanya Self employment Direct loan:-

This scheme is being implemented from 2011-12. A financial assistance upto Rs. 50000/- per beneficiary is being sanctioned to the members of backward classes whose annual family income is below Rs.40000/- in rural and Rs.55000/- in urban area to enable them to take up self-employment activities such as petty business, service and agricultural and allied activities. The maximum subsidy under this scheme is Rs.10000/- or 30% of the project cost and the rest is loan at 4% interest rate per annum.

During the year 2015-16, an amount of Rs.1115.93lakh against the target of Rs.2000.00 lakh has been spent benefitting 3217 people against the target of 5000 upto the end of December-2015. (Table 13.70)

### 3. Micro Credit Scheme:-

To take up small economic activities, this scheme is being implemented by the Corporation. Loan and subsidy to skilled/unskilled backward classes families, who are below the poverty line are being assisted. A financial assistance of Rs.15000/- which includes Rs.5000/- subsidy and Rs.10000/- loan at 4% interest rate per annum is being sanctioned per beneficiary.

During the year 2015-16, , an amount of Rs.151.35lakh against the target of Rs.495.00 lakh has been spent benefitting 1009 people against the target of 3300 upto the end of December-2015. (Table 13.71)

**4. Arivu-Education Loan Scheme:** The Corporation extends educational loan to the students who are studying in the field of Medical and Engineering and other professional courses. The corporation releases an amount of Rs.1.00 lakh per year or actual cost incurred by the student towards admission fees, tuition fee, laboratory fee, examination fee etc. for his/her education. The rate of interest is 2% per annum.

During the year 2015-16, an amount of Rs.599.00 lakh against the target of Rs.250.00 lakh has been spent benefitting

1172 students against the target of 500 upto the end of December-2015. (Table 13.72)

### 5. Ganga Kalyana Irrigation Scheme:

**Individual irrigation:** In order to provide irrigation facilities to the farmers of backward classes this scheme is being implemented by the Corporation. The eligibility conditions are that the farmer should belong to small and marginal farmer and his family income should not exceed Rs.40000/- per annum. The maximum unit cost fixed is Rs.2.00 lakh. Out of that Rs.1.50 is subsidy and Rs.0.50lakh is loan at 4% rate of interest. The Corporation is drilling the borewell in the land of eligible farmers, supply pump sets and accessories, assist the farmers in getting energisation to the borewells from the Electricity Supply Companies.

**Community Irrigation:** A group of small and marginal backward classes farmers with 8 to 15 acres of land will be provided community irrigation facilities. The eligibility conditions are that the farmers should belongs to small and marginal farmers and their family income should not exceed Rs.40,000/- per annum. The unit cost fixed is Rs. 2.53 lakh to irrigate 8 acres of dry land and above land and Rs.3.59 lakhs to irrigate 15 acres and above dry land. The cost includes drilling of borewells, supply of pumps sets and accessories. The Corporation is releasing Rs.50000/- per borewell to the Electricity Supply Companies towards energisation of borewells.

During the year 2015-16, an amount of Rs.4362.45 lakh against the target amount of Rs.7200.00.00lakh has been spent benefitting 3871beneficiaries against the target of 3459 till the end of December-2015, under Individual and Community Irrigation schemes. The progress of the scheme during the last three years is provided in Table 13.73.



### 6. Assistance to Traditional Artisans & Occupational Groups

With a view to upgrade the professional skill and technology of the traditional artisans and occupational groups belonging to backward classes, financial assistance of upto Rs.45000/- as loan and Rs.5000/-as subsidy per artisan is being sanctioned.

During the year 2015-16, an amount of Rs.2059.72lakh against the target of Rs.3210.00 lakh has been spent benefitting 5749 people against the target of 8342 upto the end of December-2015. The details of progress of the scheme is given in Table 13.74.

### 7. Schemes with the Financial assistance of National Backward Classes Finance & Development Corporation (NBCFDC):

For the economic upliftment of the backward classes, the Government of India has established the National Backward Classes Finance and Development Corporation (NBCFDC). This Corporation is also providing funds to the State Corporation as loan with 4 to 6% rate of interest. The Corporation is implementing several schemes such as Term loan scheme, Mahila Samrudhi, Education loan, Micro Finance scheme, Krushi Sampada, Shilpa Sampada, New Swarnima for women etc.,

During the year 2015-16, an amount of Rs.856.32 lakh has been spent as against the target of Rs. 3000.00 lakh, benefitting of 3328 backward class beneficiaries against the target of 10763 beneficiaries till the end of December-2015. (Table 13.75)

**Table 13.69: Progress of Chaitanya Subsidy cum Soft Loan Scheme, (Rs. in lakh)**

Year	Target		Achievement		Percentage	
	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.
2012-13 *	850.00	5000	670.07	2649	78.83	52.98
2013-14	1500.00	6000	1144.70	4541	76.31	69.01
2014-15	1500.00	4000	1156.72	4210	77.11	105.25
2015-16 (upto Dec.-15)	1700.00	4250	534.53	1833	31.44	43.13

Note: \* Because of the Model code of conduct the beneficiary oriented program have been stopped during March-2013. Hence, progress could not be achieved in full.

\*\* Excess achievement made during 2011-12 is out of the recovery amount of the Corporation.

**Table 13.70: Progress of Chaitanya Self employment direct loan, (Rs. in lakh)**

Year	Target		Achievement		Percentage	
	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.
2012-13	2650.00	10000	2507.93	9435	94.63	94.35
2013-14	1800.00	4757	2581.66	8761	143.42	184.17
2014-15	1814.00	4880	2256.91	7036	124.42	144.18
2015-16 (upto Dec.-15)	2000.00	5000	1115.93	3217	55.80	64.34

Note: \* Because of the Model code of conduct the beneficiary oriented program have been stopped during March-2013. Hence, progress could not be achieved in full.

**Table 13.71: Progress of Micro Credit Scheme, (Rs. in lakh)**

Year	Target		Achievement		Percentage	
	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.
2012-13*	500.00	5000	293.90	2939	58.79	58.78
2013-14	600.00	4000	653.95	4637	109.00	116.00
2014-15	356.00	2240	338.85	2259	95.18	100.85
2015-16 (upto Dec.-15)	495.00	3300	151.35	1009	30.58	30.58

Note: \* Because of the Model code of conduct the beneficiary oriented program have been stopped during March-2013. Hence, progress could not be achieved in full..

**Table 13.72: Progress of Arivu-Education Scheme, (Rs. in lakh)**

Year	Target		Achievement		Percentage	
	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.
2012-13*	-	-	13.6	132	-	-
2013-14	100	200	109.76	325	109.76	162.5
2014-15	80	160	107.88	297	134.85	185.63
2015-16 (upto Dec.-15)	250	500	599	1172	239.6	234.4

**Table 13.73: Progress of Ganga Kalyana Irrigation Scheme, (Rs. in lakh)**

Year	Target		Achievement		Percentage	
	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.
2012-13*	9500.00	7490	4111.60	4665	43.28	62.28
2013-14**	6500.00	4442	6421.32	3695	98.79	83.18
2014-15	6500.00	4445	6243.99	4261	96.06	95.86
2015-16 (upto Dec.-15)	7200.00	3459	4362.45	3871	60.59	111.91

Note: \* Because of the Model code of conduct the beneficiary oriented program have been stopped during March-2013. Hence, progress could not be achieved in full.

\*\* For technical reasons beneficiaries are not selected in Kudligi, Vijayanagr and Kampli legislative constituency of Ballary District.

**Table 13.74: Progress of Assistance to Traditional Artisans & Occupational Groups, (Rs. in lakh)**

Year	Target		Achievement		Percentage	
	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.
2012-13*	5500.00	22000	5070.99	20755	92.19	93.34
2013-14 **	2930.87	6527	5088.40	15272	173.61	233.98
2014-15	2930.87	7620	2918.06	8894	99.56	116.72
2015-16 (upto Dec.-15)	3210.00	8342	2059.72	5749	64.17	68.92

Note: \* Because of the Model code of conduct the beneficiary oriented program have been stopped during March-2013. Hence, progress could not be achieved in full.

**Table: 13.75: Progress of National Backward Classes Finance & Development Corporation (NBCFDC), (Rs. in lakh)**

Year	Target		Achievement		Percentage	
	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.
2012-13*	2000.00	9298	1578.59	7683	78.93	82.63
2013-14 **	2600.00	9332	2629.42	11923	101.13	127.76
2014-15	2600.00	9332	2558.42	10528	98.40	112.82
2015-16 (upto Dec.15)	3000.00	10763	856.37	3328	28.55	30.92

Note: \* Because of the Election Model code of conduct the beneficiary oriented program have been stopped during March-2013. Hence, progress could not be achieved in full.

\*\* Excess achievement made during 2013-14 is out of the recovery of loan and unspent amount of the previous year programmes.

### 13.4: Minority Department Schemes

In order to Promote and uplift Minority Communities of Muslims, Christians, Jains, Sikhs, Buddhist and Parses on par with other Communities Government of Karnataka has introduced various

developmental Schemes. These Schemes are being implemented through Directorate of Minorities. Brief note of some of the Schemes are noted below.

#### I. Incentives Scheme for Minority Students:

A cash incentive of Rs. 3000, Rs. 4000 and Rs. 5000 is being provided per annum to the meritorious minority students (whose annual household income is not more than Rs. 2.00 lakh) studying in SSLC, PUC and Degree courses respectively. During 2015-16, an amount of Rs. 500.00 lakh has been earmarked for this purpose, of which Rs.375.00 lakhs has been spent benefiting 9375 students till the end of December 2015. Progress report for the last 3 years is mentioned as under. (Table 13.76)

## II- Skill Development Scheme

To enable unemployed boys/girls of minorities to take up self-employment activities, skill development programmes in nursing Training, Call Centre, Animation, BPO and Tally Training are being conducted during 2015-16, Rs. 400.00 lakhs has been allocated, of which, a sum of Rs. 300.00 lakhs has been spent till the end of December 2015. Progress report for the last 3 Years is mentioned as under (Table 13.77)

## III. Shaadimahal/Community Hall

In order to promote social and cultural activities including marriages of minority communities, a scheme to construct shaadimahal/community hall has been implemented by the department since 2000-01. The financial and physical progresses of the scheme are given in Table 13.78.

Government of Karnataka vide its order No. MWD 357 MDC 2013 Bengaluru Dated: 06.09.2013 (has introduced a provide financial assistance scheme of for construction of Shadimahal/Samudaya Bhavan) has introduced a scheme of providing financial assistance for this construction of Shadimahal/Samudaya Bhavan by Minority Communities of Karnataka Intrested Government Recognized Boards and corporations/private institutions/Trusts can apply for financial assistance for the construction of Shadimahal/Community halls.

A maximum amount of Rs. 1.00 Crore for District Head Quarters and upto Rs. 50.00 Lakhs in other places will be provided. Progress report for the last 3 Years is mentioned as under.

### Conditions to apply:-

- 1) The trust must have been registered at least 3 Years before.
- 2) The Plan and estimate must have been prepared and attested by a qualified Engineer.
- 3) The site records should be in the name of the Institutions.
- 4) The Proposal should be submitted through the Deputy Commissioner of the District.
- 5) An Inspection report from the District officer of Minorities /Backward Classes.

**Table 13.76: Progress of Incentives Scheme for Minority Students, (Rs in Lakhs)**

Year	Targets		Achievements		% of achievement	
	Financial	Physical	Financial	Physical	Financial	Physical
2013-14	800.00	25000	800.00	20650	100%	82.60%
2014-15	500.00	12500	500.00	12645	100%	101.16%
2015-16	500.00	12500	375.00	9375	75%	75%

Note: \*Upto December-2015.

**Table 13.77: Progress of Skill Development Scheme (Rs.In Lakhs)**

Year	Targets		Achievements		% of achievement	
	Financial	Physical	Financial	Physical	Financial	Physical
2013-14	700.00	10300	700.00	6754	100%	65.67%
2014-15	350.00	2500	350.00	1585	100%	63.40%
2015-16	400.00	2450	300.00	1655	74.23	66.32

Note: \*Upto December 2015.

**Table 13.78: Progress of the Scheme for Construction of Shadimahall /Community Hall, (Rs.In Lakhs)**

Year	Targets		Achievements		% of achievement	
	Financial	Physical	Financial	Physical	Financial	Physical
2013-14	2500.00	100	1911.75	120	76.47%	120%
2014-15	2500.00	100	1992.14	104	96.15%	79.60
2015-16	400.00	20	391.19	17	85%	97.79

Note: \*Upto December 2015.

### 13.4.1 The Karnataka Minorities

#### Development Corporation Ltd., Bengaluru.

The following Schemes are being implemented through The Karnataka Minorities Development Corporation Ltd., Bengaluru.

#### 1. Swavalambana Margin Money Loan Scheme

Under the scheme, margin money loan facilities are provided through various Nationalized Banks/Financial Institutions for business, services, industries and agriculture based activities. For a maximum project cost upto Rs.5,00,000, 20% of the project cost will be sanctioned by the Corporation as margin money loan @ 6% interest. (The balance is provided by the Banks/Financial Institutions). A subsidy upto Rs.25,000 is also provided by the Corporation.

#### 2. Subsidy Scheme

The scheme is linked with the Swavalambana Margin Money Loan Scheme, under this scheme, a subsidy element of 5% of the unit cost or maximum amount of Rs.25,000/- will be released to the beneficiaries of the religious minorities. The financial and physical progress of the margin money with subsidy is as under (Table 13.79).

#### 3. Arivu (Education Loan) Scheme

The Government of Karnataka has introduced "Arivu" (Education loan) Scheme to help the minority students with financial assistance of Rs.5,000/- to Rs.50,000/- per year till completion of professional courses like Medical, Engineering, Dental, MBA, MCA and other Master Degree Courses, Diploma Courses, Nursing, B.Ed, D.Ed ITI Under the scheme. Financial assistance is also provided to the employment attached

training programmes through NIIT. The loan has to be repaid after completion of the course @ 2% interest. Are Detailed in Table 13.80.

#### 4.Ganga Kalyana Scheme(Community Irrigation Scheme)

This scheme is applicable for only small and marginal farmers with 8 acres of land consisting of 3 beneficiaries who are eligible to get 2 borewells and with 15 acres of land consisting of 5 beneficiaries who are eligible to get 3 borewells (the unit cost per borewell increased from Rs.1.00 lakh to Rs.1.50 lakh). Each beneficiary should have 2 to 3 acres of land. Borewells are drilled underground, submersible pump sets will be installed and energisation for the borewells will be done by the Corporation. This Scheme is entirely a subsidy scheme.

#### Individual Borewell or Open Well

Under individual borewell scheme, for the beneficiary 2 to 5 acres of land, one borewell will be drilled and pumpset will be supplied. The total cost is Rs. 1.50 lakh this also includes energisation charges. where ever drilling of individual borewells is difficult Open wells are dug and provided along with pumpsets in the areas. The total expenditure upto Rs.1,50,000 will be extended as subsidy which includes energisation. This scheme is entirely subsidy scheme(Table 13.81).

#### 5. Shramashakthi Scheme

Under this scheme, the artisans belonging to religious minorities to encourage the artistic and technical skills, maximum loan of Rs.25,000 will be provided @ 4% interest rate per annum to improve and setup their business. Out of the unit cost, 75% as loan

and 25% will be considered as back-end subsidy(Table 13.82).

### 6. Micro Loan and Micro Subsidy Scheme

In order to improve the existing petty business and regular income for their livelihood in city and rural areas, the religious minorities will be provided with a micro loan of Rs.10,000/- @ 5% interest per annum including Rs.5,000/- subsidy(Table 13.83).

### 7. Christian Development Programme

During 2011-12, Karnataka Christian Development Parishath was established on 05.11.2011 for over all development of Christian Community with a Budget allocation of Rs.50.00 Crores to Directorate of Minorities. Out of this 40% has been provided to KMDC for implementing the ongoing schemes of the Corporation viz., Arivu (Educational) Loan Scheme(Table 13.84), Shrama Shakthi Scheme(Table 13.85), Micro Loan with subsidy Scheme(Table 13.68) and Interest subsidy Scheme(Table 13.87) for housing loans, as

per the existing guidelines for the development of the Christian community.

### 8. NMDFC's Term Loan Schemes

With a view to uplift the poor religious minorities in the country by providing term loans to take up self-employment pursuits, the NMDFC (National Minorities Development and Finance Corporation) was setup at the national level in 1994. The term loan is provided through the State Channelising Agency viz., KMDC for the benefits of religious minorities in the State. The Corporation is releasing 90% of the project cost as NMDFC share, 05% share of the project cost will be released from KMDC and balance 5% of the project cost has to be borne by the beneficiary, and 6% interest rate per annum is being charged by the Corporation for the loan released. There are different schemes implemented by the Corporation. In the case of micro credit for self-employment, the unit cost is Rs.10,000 to Rs.50,000 of which 90% is from NMDFC and 10% is from KMDC and there is no beneficiary contribution.

**Table 13.79: The performance under the scheme, (Rs.in lakhs)**

Year	Targets		Achievement		% of achievements	
	Financial	Physical	Financial	Physical	Financial	Physical
2012-13	600.00	4000	552.35	2867	92.06	71.68
2013-14	600.00	4000	604.41	3263	100.73	81.57
2014-15	900.00	4400	1393.71	4918	154.86	111.72
2015-16*	1300.00	5000	1184.77	2686	93.14	53.72

\*Upto December'2015

**Table 13.80: The financial and physical progress of the scheme (Rs.in lakhs)**

Year	Targets		Achievement		% of achievements	
	Financial	Physical	Financial	Physical	Financial	Physical
2012-13	3300	16500	3028.37	13071	91.77	79.22
2013-14	3600	14400	4158.15	15963	115.50	110.85
2014-15	5000	16667	5982.49	22273	119.65	133.63
2015-16*	5300	17667	5300.78	17564	100.01	99.42

\*Upto December'2015

**Table 13.81: The performance under the scheme, (Rs.in lakhs)**

Year	Targets		Achievement		% of achievements	
	Financial	Physical	Financial	Physical	Financial	Physical
2012-13	1900.00	1900	1409.00	1409	74.16	74.16
2013-14	4446.00	2300	2799.00	1866	62.95	81.13
2014-15	2700.00	1800	2544.00	1696	94.22	94.22
2015-16*	3000.00	2000	Tender work is in progress			

\*Upto December'2015

**Table 13.82: The progress of the scheme, (Rs.in lakhs)**

Year	Targets		Achievement		% of achievements	
	Financial	Physical	Financial	Physical	Financial	Physical
2012-13	1800.00	9000	1598.23	11137	88.79	123.74
2013-14	1800.00	9000	2324.05	13497	129.11	149.97
2014-15	2221.00	11105	4779.80	25504	215.21	229.66
2015-16*	2500.00	10000	2365.50	11007	94.62	110.07

\*Upto December'2015

**Table 13.83: The financial and physical progress of the scheme, (Rs.in lakhs)**

Year	Targets		Achievement		% of achievements	
	Financial	Physical	Financial	Physical	Financial	Physical
2012-13	2400	24000	1766.75	17814	73.61	74.22
2013-14	2400	24000	1554.22	15584	64.76	64.93
2014-15	2400	24000	3300.20	33002	137.51	137.51
2015-16*	2400	24000	1462.20	14622	60.92	60.92

\*Upto December'2015

**Table 13.84: Progress of Christian Development Programme (Arivu), (Rs.in lakhs)**

Year	Targets		Achievement		% of achievements	
	Financial	Physical	Financial	Physical	Financial	Physical
2012-13	500.00	2500	212.93	732	42.59	29.28
2013-14	1000.00	4000	340.42	1122	34.04	28.05
2014-15	1000.00	3333	409.87	1252	40.99	37.56
2015-16	1000.00	3333	294.01	834	29.40	25.02

\*Upto December'2015

**Table 13.85: Progress of Christian Development Programme (Shrama Shakthi), (Rs.in lakhs)**

Year	Targets		Achievement		% of achievements	
	Financial	Physical	Financial	Physical	Financial	Physical
2012-13	500.00	2500	496.30	3531	99.26	141.24
2013-14	1000.00	5000	563.70	3352	56.37	64.04
2014-15	1000.00	5000	1505.15	7219	150.51	144.38
2015-16*	1000.00	5000	1191.45	5157	119.14	103.14

\*Upto December'2015

**Table 13.86: Progress of Christian Development Programme (Micro Loan), Rs.in lakhs)**

Year	Targets		Achievement		% of achievements	
	Financial	Physical	Financial	Physical	Financial	Physical
2012-13	500.00	5000	209.20	2092	41.84	41.84
2013-14	1000.00	10000	131.40	1314	13.14	13.14
2014-15	1000.00	10000	638.40	6384	63.84	63.84
2015-16*	1000.00	10000	329.70	3297	32.97	32.97

\*Upto December'2015

**Table 13.87: Progress of Christian Development Programme (Interest Subsidy Scheme for Housing Loan), (Rs.in lakhs)**

Year	Targets		Achievement		% of achievements	
	Financial	Physical	Financial	Physical	Financial	Physical
2012-13	500.00	667	106.80	148	21.36	22.19
2013-14	1000.00	1334	64.12	88	6.41	6.60
2014-15	1000.00	1334	51.28	72	5.13	5.40
2015-16	1000.00	1334	18.92	26	1.89	1.95

\*Upto December'2015

**Table 13.88: Progress of NMDFC's Term Loan Schemes, (Rs.in lakhs)**

Year	Amount Received from NMDFC	Total loan sanctioned and spent under NMDFC schemes				No.of Beneficiaries
		Beneficiary amount	KMDC amounts	NMDFC Amounts	Total	
2013-14	1850.00	-	6.26	112.59	118.85	42
2014-15	2000.00	-	177.31	3191.53	3368.84	951
2015-16*	1000.00	-	94.19	1695.50	1789.69	314

Note \*Upto December'2015

### 13.5 Programmes for the Empowerment of Differently Abled & Senior Citizens

#### INTRODUCTION:

The Dept. for Empowerment of Differently Abled & Senior Citizens, has been established in the year 1988. Department is facilitating Disabled Persons to get the benefits of the different schemes implemented by the department in order to bring them to the mainstream of the society. The disabled persons are categorized as under:

1. Orthopedically Handicapped
2. Visually Impaired
3. Hearing Impaired
4. Mentally Retarded
5. Multiple Disabilities
6. Leprosy cured handicapped
7. Mentally Ill.

As per 2011 Census there are 13,24,205 various categories of PwD's details are as under:

**Table 13.89: Details of various categories of PwD's**

various categories	No of Persons
Visually Impaired	2,64,170
Hearing Impaired	2,35,691
Speech	90,741
Movement	2,71,982
Mentally Retarded	93,974
Mentally Ill.	20,913
Others	2,46,721
Multiple Disabilities	1,00,013
Total	13,24,205

A comprehensive Act called the Persons with Disabilities (Equal Opportunities, Protection of Rights & Full Participation) Act - 1995 has come into force from 07-02-1996. The State Govt. has constituted the State Co-ordination Committee as per the Sec.13 of the Act. The State Govt. also appointed the Commissioner for persons with disabilities

as per Section 60 of the Act, and State Executive Committee as per the Sec.19 of the Act has been constituted.

#### DEPARTMENTAL PROGRAMMES:

The programmes of the department are broadly classified into three categories

1. Programmes for Development of Person with Disabilities.
2. Programmes for Senior Citizens.
3. Social Security and Defence programmes.

#### Specific challenges and future strategy of the Department.

- To undertake survey of Persons with Disabilities based on types of disabilities in all Districts of Karnataka.
- To establish Hostels in all the District Headquarters to provide subsidized/free boarding and lodging facilities for working men & students with disabilities.
- To provide Medical Treatment/Rehabilitation Services under NIRAMAYA scheme for all the persons with mental retardation.
- To take action to start District Disabled Rehabilitation Centers (DDRC) in the Districts head-quarters, wherever they are not existing

#### Funding:

The activities of the department are supported by financial outlays under both Plan and Non-plan from the state Government under state sector and District sector through the ministry of Women and Child Development Government of Karnataka. Govt. of India also funds NGOs directly for some programmes undertaken for the Welfare/Development of Differently

Abled and Senior Citizens, based on the recommendations of the State Government.

During 2015-16 an amount of Rs.14115.80 lakhs provided under plan and an amount of Rs.79858.00 lakhs provided under non-plan. Totally Rs.93973.80 lakhs is earmarked Rs.25122.75 lakhs expenditure incurred under plan an amount of Rs. 39628.61lakhs, expenditure incurred under non-plan. Totally Rs.64751.36lakhs Expenditure incurred up to end of December-2015.

### **1. Maintenance Allowance to the Disabled:**

Disabled persons whose family income is less than Rs.17,000/- in urban and Rs.12,000/- per annum in rural areas with disability percentage 40 and above are entitled for maintenance allowance of Rs.500/- per month. As per the Government order dated: 23.9.2013 the sum is enhanced to Rs.1200/- per month for the disabled having disability of 75% and above. The Tahasildar of respective Taluks are the sanctioning authorities. The detailed progress at the end of December 2015 and previous 3 years of the Scheme is given below (Table 13.89).

### **2. Aids and Appliances to the Disabled:**

Various Aids & Appliances are provided to the persons with disabilities having 40% above disability at free of cost up to a maximum of Rs.10,000/- and for Motorized Tricycle 50% of the cost of Tricycle is subsidized. During 2015-16 an amount of Rs.100.00 lakhs has been earmarked for the purpose. The detailed progress at the end of December 2015 and of the previous 3 years is given below (Table 13.90).

### **3. Medical Relief Fund:**

Under the scheme financial assistance is provided to Persons with Disabilities to undergo corrective surgery (Hospitalization, Bed Charge, Medicines, Therapy) up to maximum of Rs.1,00,000/-. During 2015-16 an amount of Rs.50.70 lakhs is earmarked. The detailed progress for the last 3 years is given below (Table 13.92).

### **4. Financial Assistance to NGO's to run the Special School:**

Under District Sector Scheme NGO's are given grants to run Special Schools and vocational training centers. Grants are given towards salary to the teaching and non teaching staffs as well as Rs.1000/-per month per child as maintenance charges, The detailed progress for last 3 years is given below (Table 13.93).

### **5. Sadhane and Prathibe:**

Under the scheme, persons with disabilities are given financial assistance for Sports and Cultural activities maximum up to Rs.10,000/- and 30,000/- respectively. During 2015-16 an amount of Rs.10.00 lakhs is earmarked. The detailed progress for last 3 years is given below (Table 13.94).

### **6. Scholarship and incentives to the disabled**

In order to encourage disabled students for continuation of their Education, a Scholarship scheme is implemented for disabled students studying from 1<sup>st</sup> Std., to Post Graduate Courses. During 2015-16 an amount of Rs.961.00 lakhs is earmarked. The detailed progress for last 3 years is given below (Table 13.95).

### **7. Grameena Punarvasathi Yojane:**

Grameena Punarvasathi Yojane is implemented to provide services like rehabilitation, awareness, Social Security, Educational, Training and Employment and other Government schemes reserved for disabled in various departments at the door step of persons with disabilities through Village Rehabilitation Worker (VRW) and taluk level Multipurpose Rehabilitation Worker (MRW) who are PwD's appointed at Grama Panchayathi and Taluka level. They are provided monthly honorarium Rs.2000/- and Rs.5000/- respectively. During 2015-16 an amount of Rs.1243.00 lakhs is earmarked. The detailed progress for last 3 years is given below (Table 13.96).

### **8. Self Employment Scheme for the Disabled (ADHARA):**

Under the scheme a Kiosk of Rs.15000/- will be provided at free of cost and Rs.20000/- interest free loan as working capital to the disabled to make them economically independent by undertaking self



employment programme such as Petty Shop or any other such business.

During 2015-16 in the budget speech Hon'ble Chief Minister has announced to waive off the loan amount along with interest due till 31.03.2014 from approximately 5200 disabled persons. An amount of Rs.100.00 lakhs is earmarked. The detailed progress for last 3 years is given below (Table 13.97).

### 9. Job portal

Job portal scheme is framed to provide employment opportunities to persons with disabilities. The Government has accorded administrative approval to M/S Enable India, Koramangala, in 2013-14. The same will be established at Bengaluru to carryout the task. During 2015-16 an amount of Rs.52.00 lakhs is earmarked. The detailed progress upto December 2015 of the Scheme is given below (Table 13.98).

### 10. Incentive Scheme for normal persons those who marry Disabled Men and Women:

In the prevailing circumstances men or women are hesitant or reluctant to marry persons with disabilities, as they feel that they would face difficulties in the married life due to social stigma. It is essential to encourage integrated marriages among persons with disabilities and the able bodied individuals. In this context under the scheme financial incentive of Rs.50,000/- is paid to such eligible couple. This amount is deposited in Joint Account for 05 years (F.D.) Interest accrued can be utilized by the couple. On completion of lock in period of 05 years they can withdraw or continue the Fixed Deposit. During 2015-16 an amount of Rs.540.00 lakhs is earmarked, year wise progress achieved is given below (Table 13.99).

**Table 13.90: Progress of Maintenance Allowance to the Disabled, (Rs.in Lakhs)**

Year	Targets		Achievements		% of Achievements	
	Financial	Physical	Financial	Physical	Financial	Physical
2012-13	42240.00	700000	43290.58	641000	102.48	91.57
2013-14	56809.00	750000	55474.17	672934	97.65	89.72
2014-15	62870.00	750000	52393.27	751324	92.22	95.79
2015-16*	80405.00	750000	58817.34	771548	81.00	73.00

\* Up to Dec.-2015

**Table 13.91: Progress of Maintenance Allowance to the Disabled, (Rs.in Lakhs)**

Year	Targets		Achievements		% of Achievements	
	Financial	Physical	Financial	Physical	Financial	Physical
2012-13	100.00	1500	95.60	1332	95.60	88.8
2013-14	100.00	4200	96.64	3047	96.54	72.54
2014-15	100.00	4200	26.17	3500	26.17	83.33
2015-16*	100.00	4000	7.06	150	7.06	3.75

\* Up to Dec-2015

**Table 13.92: Progress of Medical Relief Fund, (Rs.in Lakhs)**

Year	Targets		Achievements		% of Achievements	
	Financial	Physical	Financial	Physical	Financial	Physical
2012-13	25.00	50	16.38	45	65.52	90.00
2013-14	33.65	100	26.21	99	77.00	99.00
2014-15	20.00	100	4.73	13	23.65	13
2015-16*	43.33	100	11.39	23	26.30	57.50

\* Up to Dec.-2015

**Table 13.93: Progress of Financial Assistance to NGO's, (Rs.in Lakhs)**

Year	Targets		Achievements		% of Achievements	
	Financial	Physical	Financial	Physical	Financial	Physical
2012-13	343.10	3000	298.38	2030	86.96	67.66
2013-14	1223.39	9000	1185.76	8680	96.90	96.04
2014-15	1188.00	10000	1188.00	10000	100.00	100.00
2015-16*	1302.86	10000	1302.86	10000	100.00	100.00

\* Up to Dec-2015

**Table 13.94: Progress of Sadhane and Prathibe, (Rs.in Lakhs)**

Year	Targets		Achievements		% of Achievements	
	Financial	Physical	Financial	Physical	Financial	Physical
2012-13	25.00	150	14.89	93	59.56	62.00
2013-14	25.00	150	25.00	75	100.00	50.00
2014-15	5.00	75	2.85	25	20.05	30.00
2015-16*	10.00	75	8.10	61	81.00	81.30

\* Up to Dec-2015

**Table 13.95: Progress of Scholarship and incentives to the disabled, (Rs.in Lakhs)**

Year	Targets		Achievements		% of Achievements	
	Financial	Physical	Financial	Physical	Financial	Physical
2012-13	251.00	35000	247.22	29983	98.49	85.66
2013-14	260.00	35000	244.18	25757	93.90	73.59
2014-15	540.00	50000	506.96	26002	60.10	52.24
2015-16*	961.00	70000	399.75	1621	41.60	53.40

\* Up to Dec.-2015

**Table 13.96: Progress of Grameena Punarvasathi Yojane, (Rs.in Lakhs)**

Year	Targets		Achievements		% of Achievements	
	Financial	Physical	Financial	Physical	Financial	Physical
2012-13	540.00	5803	499.91	4560	78.58	92.57
2013-14	1031.72	5803	834.30	4657	80.86	80.25
2014-15	498.00	5803	397.86	4657	79.89	80.25
2015-16*	1243.00	5350	556.15	4773	45.00	89.20

\* Up to Dec-2015

**Table 13.97: Progress of Self Employment Scheme for the Disabled (ADHARA), (Rs.in Lakhs)**

Year	Targets		Achievements		% of Achievements	
	Financial	Physical	Financial	Physical	Financial	Physical
2012-13	100.00	285	99.75	285	99.75	100.00
2013-14	100.00	285	19.45	285	99.75	100.00
2014-15	100.00	285	38.39	100	38.39	35.08
2015-16*	100.00	285	68.67	206	68.67	72.30

\* Up to Dec-2015

**Table 13.98: Progress of Job Portal, (Rs.in Lakhs)**

Year	Targets		Achievements		% of Achievements	
	Financial	Physical	Financial	Physical	Financial	Physical
2013-14	69.00	600	55.50	248	80.40	41.33
2014-15	74.00	700	46.90	638	63.30	91.14
2015-16*	52.00	650	5.92	415	11.88	64.0

\* Up to Dec.-2015

**Table 13.99: Progress of Incentive Scheme (Rs.in Lakhs)**

Year	Targets		Achievements		% of Achievements	
	Financial	Physical	Financial	Physical	Financial	Physical
2013-14	150.00	300	143.50	287	95.66	95.66
2014-15	150.00	150	41.00	82	37.33	27.33
2015-16*	540.00	1080	209.00	418	46.44	38.70

\* Up to Dec-2015

### **11.Reimbursement of fees for Disabled students for Higher and Technical Education:**

Due to economical condition students with disabilities are unable to bear the high cost in pursuing their Higher/Technical Education, Vocational Education, Master Degrees hence the scheme has been introduced to reimburse the Exam/Tuition / Lab/ Sports and Library fees. In order to avail this benefits no income limit is prescribed and those who have availed ID cards, through Medical boards are eligible under the scheme. During 2015-16 an amount of Rs.125.00 lakhs is earmarked. The detailed progress at the end of December 2015 of the Scheme is given below (Table 13.100).

### **12. Child Care Allowances towards the Health and Nutritional Care of the new born baby of Visually Impaired Women:**

It is observed that the women with visual impairment experiences greater hardship in upbringing the newly born child. In this context under the scheme a sum of Rs 2,000/- per month for two years for two deliveries is paid to the beneficiary towards the services of ayah, health care, nutritional food, medical treatments, for maximum of two children. The detailed progress at the end of December 2015 of the Scheme is given below (Table 13.101).

### **13. Establishment of Day Care Centers for Children with Autism and Multiple Disabilities:**

Children between the age of 6 to 18 years who are suffering from mental retardation, cerebral palsy, autism and multiple disability requires day care services such as protection, shelter, education and food. The parents of these children are usually found to be engaged in some occupation for their livelihood. In this context under the scheme

2 Day Care Centers are being established to provide such services in the urban areas. During 2015-16 an amount of Rs.50.00 lakhs is earmarked. The detailed progress at the end of December 2015 of the Scheme is given below (Table 13.102).

### **14. NIRAMAYA (Health Insurance Scheme):**

NIRAMAYA Health Insurance Scheme for the children belonging to BPL families and suffering from autism, cerebral palsy, Mental retardation and multiple disabilities has been launched as per the requirement of National Trust Act 1999. The scheme provides the beneficiaries with medical insurance coverage up to Rs. 1 lakh per year based on one time payment of Rs.250 as premium. During 2015-16 an amount of Rs.12.00 lakhs is earmarked. The detailed progress at the end of December 2015 of the Scheme is given below (Table 13.103).

### **15. Laptop to Students with visual impairment:**

To enable visually challenged students to perceive higher education using latest technology taking laptops are being provided and the **Rs.400.00** lakhs has been allocated for this purpose. The Government issued administrative approval for this scheme on 03-07-2014. During 2015-16, 811 Visually Impaired Students provided Laptops (Table 13.104).

### **16. Providing Motorized two wheeler for Persons with Disabilities:**

Persons in the age group of 20-60 years with severe physical disabilities and hailing from families with income Rs. 2 lakhs per annum will be provided motorized two wheelers. During 2015-16 an amount of Rs.700.00 lakhs is earmarked. The detailed progress at the end of December 2015 of the Scheme is given below (Table 13.105).

**Table 13.100: Progress of Reimbursement of fees (Rs.in Lakh)**

Year	Targets		Achievements		% of Achievements	
	Financial	Physical	Financial	Physical	Financial	Physical
2013-14	99.95	1200	84.86	1103	84.90	91.91
2014-15	125.00	1800	111.78	1703	89.00	94.61
2015-16*	125.00	1800	50.48	934	40.20	51.90

\* Up to Dec.-2015

**Table 13.101: Progress of Child Care Allowances, (Rs.in Lakh)**

Year	Targets		Achievements		% of Achievements	
	Financial	Physical	Financial	Physical	Financial	Physical
2013-14	8.58	50	2.25	13	26.22	26.00
2014-15	10.00	50	6.19	25	61.90	50
2015-16*	20.00	100	7.13	43	35.65	43

\* Up to Dec-2015

**Table 13.102: Progress of Day Care Centers for Children with Autism and Multiple Disabilities, (Rs.in Lakh)**

Year	Targets		Achievements		% of Achievements	
	Financial	Physical	Financial	Physical	Financial	Physical
2014-15	50.00	02	2.27	1	5.00	50.00
2015-16*	50.00	02	22.00	1	44.00	50.00

\* Up to Dec-2015

**Table 13.103: Progress of NIRAMAYA, (Rs.in Lakhs)**

Year	Targets		Achievements		% of Achievements	
	Financial	Physical	Financial	Physical	Financial	Physical
2014-15	12.50	5000	8.99	3230	71.92	64.00
2015-16*	12.00	4800	5.80	2322	48.30	48.40

\* Up to Dec-2015

**Table 13.104: Progress of scheme, (Rs.in Lakhs,)**

Year	Targets		Achievements		% of Achievements	
	Financial	Physical	Financial	Physical	Financial	Physical
2015-16*	400.00	1000	399.82	811	99.9	81.10

\* Up to Dec.-2015

**Table 13.105: Progress of scheme, (Rs.in Lakhs,)**

Year	Targets		Achievements		% of Achievements	
	Financial	Physical	Financial	Physical	Financial	Physical
2015-16*	700.00	1000	86.00	850	12.30	85.00

\* Up to Dec.-2015

**13.5.2 Senior Citizen Cell:**

The Department for the Empowerment of Differently Abled & Senior Citizens, had organized Senior Citizens day on 01-10-2015 at Ravindra Kala Kshethra, Bengaluru.

Several Cultural Programmes like light music, Folk songs, Dance Drama, Entertainment Programme etc. was arranged on this occasion in which the senior Citizens took part. For the benefit of NGO,s for Senior Citizens and the Public Senior Citizens Maintenance and protection act 2007 and rule 2009 introductory book and **“Heriyare**

**Namma Siri”** for Senior Citizens was released on this accession.

**Specific Challenges and the future out look of the Department:**

- Distribution of Identity Cards to all the senior Citizens and to create awareness about these I.D. Cards at different levels and society.
- Creation of New Posts at district and Taluk levels.
- To Provide for a building for the office of Offices and Staff.

- To create awareness about Maintenance of Senior Citizens Act 2007
- To Train and Empower the Officers/Staff Working for the Senior Citizens.

### **I. Programme Formulated for the welfare of Senior Citizens**

According to the census report of 2011, out of total population of 611 Lakhs in Karnataka, approximately 7.72% population is of Senior citizens aged above 60 years which is around 47.18 Lakhs.

Govt. of Karnataka has formulated state policy for Senior citizens effected from 5-9-2003, has been evolved with the motto of ensuring better quality of life.

#### **Objective of the State Policy:**

1. To ensure safety of Senior Citizen.
2. To protect the Senior Citizens by providing economic security, Health Care and by protecting them against exploitation and ill treatment.
3. To formulate programme for Senior Citizens living in rural areas to ensure that they also get the benefits that their counter parts in Urban Areas.
4. To create opportunities for Senior Citizens to lead a constructive and satisfactory life.
5. The policy intends to have an objective of creating a society which includes people of all ages.
6. The state recognizes the fact that senior citizens were also resourceful persons and are contributing members of the society.
7. This policy has realized importance of allocating budget for the welfare of senior citizens who belong to economically weaker sections.

The state policy aims at providing Health Care, Social Security, Housing and protection of property and life. In order to implement this policy, a Task Force is constituted under the Chairmanship of the Hon'ble Chief Minister.

### **II. Senior Citizens Welfare Programmes**

**1. Financial Assistance to NGO's to run the Old Age Home:** For the Welfare of Senior Citizens, Old Age Homes are established in 30 districts through NGOs at the unit cost of Rs.8 Lakhs each per year for 25 beneficiaries where they are availing the benefit of food, Medicine, Entertainment and shelter. The detailed progress of the scheme is shown in Table 13.106.

#### **2. Helpline**

For the welfare of senior citizens 15 help lines are established in Bengaluru Urban, Kalaburagi, South Canara, Belagavi, Dharwad, Mysore, Raichur, Kolar, Ballari, Davangere, Shivamogga, Bagalkot, Vijayapura and Tumkuru districts through NGOs in coordination with District Police Commissioner /Superintendent of the police of the District NGO's running senior citizens Helpline are provided grants of Rs.7.15 lakhs per annum including recurring and non recurring expenditure.

#### **3. Day Care Centres for Senior Citizen's**

Senior Citizens to lead healthy and Comfortable life during day time with their friends sanction has been accorded to run senior citizens Day Care Centers one in each districts. At present 10 day care centers are functioning and action is being taken to start day care centers in remaining districts by the end of 2015-16. In these day care centers approximately 50 senior citizen are provided with light refreshment, entertainment, medical facility, reading facility etc. Each NGO is provided Rs.11.20 Lakhs per year.

**Table 13.106: Progress of scheme, (Rs.in Lakhs,)**

Year	Targets		Achievements		% of Achievements	
	Financial	Physical	Financial	Physical	Financial	Physical
2013-14	211.06	2000	211.06	2500	100.00	100.00
2014-15	189.09	1800	186.15	2000	98.44	100.00
2015-16*	206.14	1500	154.41	1000	75.00	67.00

\* Up to Dec-2015

**4. Senior Citizen ID Cards** Senior citizens in the age of 60+ are given Identity Cards charging Rs.50/- each through the recognized voluntary organizations working in the Districts. So far 12,95,858 number & Senior Citizens have been issued Identity cards.

**5. Old age Pension:**

Senior Citizens aged between 60 to 64 Rs.200/- is being paid as old age pension every month and for senior citizen aged between 65 and 79 are paid Rs.500/- per month.

**6. Sandhya Suraksha Yojane:**

Maintenance Allowance & Rs.500/- per month is given to Senior Citizens above 65

years of age. Senior citizens above 80 years of age Rs.750/- per month is paid as old age pension.

**7. Concession in Bus Fare:**

Senior Citizens aged 60 and above are provided 25% concession in bus fares. To avail the benefits senior citizens have produced ID cards issued to dept. Election Voter Card, Driving License or ID card Issued by KSRTC.

**8. Geriatric Centers:**

Through Health and Family Welfare dept. Govt. of Karnataka has established Separate Geriatric wards in districts hospitals of Kolar, Tumkur, Bijapur, Kodagu, Chickmagalur and Dharwad Districts.



## BALANCED REGIONAL DEVELOPMENT

# 14

### 14.1 SPECIAL DEVELOPMENT PLAN

Karnataka has always demonstrated vibrant potential for growth. Despite the natural resource constraints and unfavorable conditions, the State could maintain above average performance in basic development indicators. It is placed at the median level on most of the development indicators. During the last five decades, the State has made efforts to achieve rapid growth through investments in agriculture, industry, infrastructure and other sectors. But, this growth has not been inclusive with 25% of the State's population living below poverty line with the sharp North-South divide existing in the State. The regional gap emerged in the State on the eve of the reorganization of States in 1956. The new areas that joined the State from Hyderabad State and Bombay State were relatively less developed than the Old Mysore State. This area formed the Northern part of the State. In the absence of focused efforts in the past, the development gap increased over a period of time leading to marginalization and exclusion of the region and its people from the mainstream development process. Efforts have been made over a period of time to reduce the development gap. However, there has been a growing realization that investment and focus on the area especially on initiatives to improve the human development indicators must be further accelerated.

#### 14.1.1 High Power Committee on Redressal of Regional Imbalances (2000-2002)

The High Power Committee for Redressal of Regional Imbalances (HPCRRRI), popularly known as Dr. Nanjundappa Committee,

submitted its report in June 2002. The committee, on the basis of 35 socio-economic indicators, assessed the level of development of 175 taluks in the state. These indicators were spread over various sectors such as agriculture, industry, economic infrastructure, social infrastructure, financial and technical infrastructure. Taking the State average of development in these indicators as the benchmark (equal to 1), the Committee estimated Comprehensive Composite Development Index (CCDI) with appropriate weights and identified 114 taluks as backward taluks. These taluks were further classified into most backward, more backward and backward based on the value of CCDI. Taluks with CCDI of 0.53 - 0.79 were classified as most backward, those with CCDI of 0.80 - 0.88 as more backward and taluks with CCDI of 0.89 - 0.99 as backward. The distribution of the taluks in these various groups in the State is given in Table 14.1.

The Table indicates the extent of regional imbalances existing in the State which was identified by the Nanjundappa Committee. Out of the 39 most backward taluks in the State, 26 taluks are in North Karnataka, 21 in Kalaburagi Division and out of the total 61 relatively developed taluks, 40 are in South Karnataka. The Committee has recommended a policy mix of resource transfer, fiscal incentives and special programmes for development of the 114 backward taluks in the State.



### 14.1.2 Major Recommendations of the Committee

#### A) Institutional support to speed up development

The Committee has recommended establishing an appropriate institutional setup to accelerate the process of development in different sectors. Some of the specific recommendations by the Committee which are implemented are given below:

#### Important Recommendations Achieved

- Establishment of a Central University at Kalaburagi,
- A High Court Bench at Dharwad and Kalaburagi have been implemented.
- A Women's University has been established at Vijayapura.
- Established IT parks in Kalaburagi and Hubli
- Establishment of Food Park
- A Textile Park and an Airport are in process in Kalaburagi.
- 6 new Government Medical colleges are established at Hassan, Mandya, Shivamogga, Raichur, Belagavi and Bidar
- In Dharwad mental hospital has been upgraded.
- 38 Burns and dayalasis wards are newly opened.
- Horticulture University at Bagalkot and Horticulture College at Bidar has been established.
- Revolving fund established to support agricultural pricing.

- Karnataka Veterinary and Fisheries Science University at Bidar is Established.
- Dairy Science College at Kalaburagi is Established
- Established Kasturi ba Gandhi Girls Schools In all the 39 Most backward Taluks

#### B) Additional resource transfer to meet the development requirements

An eight-year Special Development Plan (SDP) has been recommended for implementation by investing Rs. 31000 crore which includes Rs. 15000 crore from Normal Plan and Rs. 16000 crore as additionality. The Committee has also stated that the amount allocated every year should be escalated by a factor to include rise in prices. The recommendations prescribe a participatory approach involving the people, voluntary organizations and Self Help Groups and adoption of a Decentralized planning approach to promote development and find long term solutions to the problems of regional development.

#### 14.1.3 Review of Recent Efforts towards Promoting Balanced Regional Development

The State Governments has initiated programme for development of backward regions. The Special Development Plan (SDP) is a major recommendation of the Dr. Nanjundappa Committee. The Committee has estimated the required resource flow in the 114 backward taluks to bring them at par with other taluks in the State.

**Table 14.1: Division wise Classification of Taluks in Karnataka (No. of Taluks)**

Division	Relatively Developed	Backward	More Backward	Most Backward	Total Taluks
Bengaluru	18	09	13	11	51
Mysore	22	10	10	02	44
Belagavi	18	14	12	05	49
Kalaburagi (HK Region)	03	02	05	21	31
North Karnataka	21	16	17	26	80
South Karnataka	40	19	23	13	95
Total (State)	61	35	40	39	175

## A) Objectives

### The objectives of the Special Development Plan are

- To give a thrust to the development programmes in the 114 backward taluks to move towards a more balanced development in the State as a whole.
- To accelerate growth in the backward taluks through the stimulus of additional investment in various sectors and areas.
- To build infrastructure to make good the identified sector backlog in backward taluks.
- To establish the needed institutions/ organizations to redress the imbalances in the concerned sectors in backward taluks.
- To provide location-specific sectoral schemes in backward taluks in order to raise the level of services in these sectors to the level of State average.
- To help the planning authorities in preparing action plans with three priorities: First, priority is for most backward taluks which are to be covered in the first two years. More backward taluks shall have the second priority for the allocation of funds during the next two years and, backward taluks shall have their allocation for the terminal period of the eight-year plan.

### B) Allocations under Special Development Plan

The Committee has estimated the financial resources required to promote development in various sectors, The focus of the SDP is on irrigation, rural development and social services. Sectors like energy and agriculture are also allotted additional financial assistance for development. The allocation to education, health and other social services is Rs. 8025 crore. The allocation to irrigation is Rs. 8000 crore and to rural development, Rs. 7100 crore. This allocation considers the rural character and agrarian conditions of most of the taluks among the 114 backward taluks. The allocations in SDP across the divisions were based on the Cumulative Deprivation Index (CDI). This is estimated on the basis of the distance of the CCDI Value from the State

average (CDI=1-CCDI). The allocations within the division and among the districts and taluks are again based on the respective CDI values. The share of Kalaburagi division is maximum i.e. Rs. 6400 crore (40%) out of proposed additional investment of Rs. 16000 crore and the share of North Karnataka is 60 % of the total allocation. This is because the extent of development deprivation is more in Kalaburagi Division i.e.  $8.06 (8.06/20.26 = 40\%)$  which is just equal to the total deprivation of entire South Karnataka. The Government started implementation of Special Development Plan from 2007-08. Budget provision was made from 2007-08 every year for implementation of these recommendations in the backward taluks by various departments.

#### 14.1.4 Implementation of Special Development Plan

The programmes under SDP are planned on the basis of the requirements sent by the taluks to the concerned departments. The progress of the works under SDP is reviewed at the State and district levels in KDP meetings every month and a MIS system has been developed for providing online information about the programmes undertaken under SDP and the physical and financial progress achieved. A special head of account with the object code 133 is allotted for schemes under SDP. A Special Cell has been established in the Planning Department to coordinate and monitor the implementation process. The amount allocated, releases made and expenditure incurred so far is given in Table 14.2. This information is furnished by the Implementing Departments. A state level monitoring committee is constituted under the chairmanship of Additional Chief Secretary and Development commissioner by Government Order No. PD 03 SDP 2014, Bengaluru, Dated: 30.12.2014. A High Power Committee is constituted on 23.01.2015 under the Chairmanship of Sri Venkatarao Ghorpade to implement the recommendations of Dr. D M.Nanjundappa report. Thirty-nine Nodal officers have been appointed to monitor the 39 most Backward Taluks as per the Government order is issued No P D 99 PSD 2015 dated 21.11.2015.

**Table 14.2: Allocations Releases and Expenditure under Special Development Plan**

Year	Allocation (Rs.crores)	Releases (Rs.crores)	Expenditure (Rs.crores)	% of exp.to allocation	% of exp.to releases
2007-08	1571.50	827.93	804.48	51.19	97.17
2008-09	2547.34	1369.26	1153.94	45.30	84.28
2009-10	2578.83	1731.12	1543.11	59.84	89.14
2010-11	2584.00	1924.47	1762.59	68.21	91.59
2011-12	2984.14	2529.99	2200.16	73.73	86.96
2012-13	2680.00	2464.83	2402.92	89.66	97.49
2013-14	2925.60	2053.65	2067.56	70.67	100.68
2014-15	2267.18	1370.54	1256.57	55.42	91.68
2015-16 (Dec 2015)	2300.02	1087.24	952.42	41.41	87.60
Total	22438.61	15359.02	14143.75	63.03	92.09

**Table 14.3: Distribution of Outlay Releases and Expenditure among various Sectors (2007-16), (Rs. Crores)**

Sectors	Total allocation	Amount Released (upto Dec 2015)	Expenditure (upto Oct 2015)	% release to allocation	%exp. to release
Agriculture & allied sectors (including forest)	1538.76	935.95	894.31	60.82	95.55
PWD	1302.75	979.93	851.61	75.22	86.91
Rural Development	3492.28	2578.44	2474.75	73.83	95.98
Housing	2468.01	2139.14	2047.08	86.67	95.70
Irrigation(Major& Minor)	4453.83	3122.36	3067.93	70.11	98.26
Power	1411.58	933.39	755.99	66.12	80.99
Industries	308.71	94.49	67.37	30.61	71.29
Infrastructure	1343.10	869.92	864.98	64.77	99.43
Transport	628.50	480.94	421.46	76.52	87.63
Home	143.20	120.51	108.90	84.15	90.37
Social Sectors (health & education)	2134.40	1375.33	1202.46	64.44	87.43
Labour & Social Welfare	1308.71	739.03	426.48	56.47	57.71
Women & Child Development	392.20	293.63	286.76	74.87	97.66
Tourism Development	512.58	398.19	388.65	77.68	97.60
Urban Development	938.00	246.65	246.65	26.30	100.00
Information & Technology	62.00	51.15	38.39	82.50	75.05
Total	22438.61	15359.02	14143.75	63.03	92.09

Source: Special Cell, Planning Department

As seen in Table 14.3, the amount released is 63.03% of the planned allocations but the utilization is 92.09%. The release of funds is slow under SDP due to the fact that the allocations are made from the provisions

under various schemes in Centre/State and District Sectors and further the release depends on the amount received under these schemes.

## Major Achievements under SDP

### A. Additional Resource Transfer to Most Backward Taluks

The allocations under SDP have helped the backward taluks in different categories to get additional resources to accelerate the development process. A comparison of distribution of allocation among three categories viz., most backward, more backward and backward taluks is presented in Table 14.4. It is observed that the share of most backward taluks in total allocations has increased from 23.93% in 2007-08 to 49.74% in 2015-16. These also include the allocations made under district sector schemes. However, this has to increase to 60% as per the recommendations of HPCRRI Committee. However, this additional resource transfer has promoted development activities in the backward areas.

### B. Major successful works undertaken under SDP

The SDP has concentrated on the following core sectors in which allocations are being made on priority basis so that outcomes are visible – (i) Agriculture and Allied Sectors; (ii) Health; (iii) Education; (iv) Housing; (v) Infrastructure; (vi) Irrigation and (vii) Tourism.

### 1. Agriculture and Allied Sectors

The major programmes being implemented under this sector include Rashtriya Krishi Vikas Yojane (Central Sector Scheme), **i). Rashtriya Krishi Vikas Yojane (RKVY):** Under RKVY, Total budget allocation is Rs 200.00 Crores, in this Agriculture – Rs. 50.00, Horticulture – Rs.20.00, Animal Husbandry Rs. 20.00, Sericulture – Rs. 4.00, Fisheries – Rs. 1.00 and Agriculture Marketing – Ra. 105.00 Crores Total – Rs 200.00 Crores. In Agriculture RKVY -Mechanization of agriculture is being promoted through supply of various agricultural implements at subsidized rates in 114 backward taluks. This is essential to overcome the growing labour costs and labour shortages and complete the agricultural operations in time. These implements include power tillers (50% subsidy - max. Rs. 50,000), high tech agricultural implements (50% subsidy -max Rs.70000), diesel pumpsets (50% subsidy – maximum Rs.20000) and agro processing units (50% subsidy - max Rs.65000). Total amount allocated during 2015-16 is Rs. 50 crore under this scheme.

**Table 14.4: Aggregate Additional Resource Transfer to Backward taluks in Different Categories, (Rs. crore)**

Year	Most Backward Taluks	More Backward Taluks	Backward Taluks	District Schemes in Backward Taluks	Total Allocation
2007-08	376.00 (23.93%)	161.66 (10.29%)	136.62 (8.69%)	897.22 (57.09%)	1571.50 (100)
2008-09	870.09 (34.16%)	615.05 (24.14%)	406.87 (15.97%)	655.34 (25.73%)	2547.35 (100)
2009-10	1270.18 (49.25%)	554.57 (21.50%)	384.40 (14.91%)	369.68 (14.34%)	2578.83 (100)
2010-11	908.89 (35.17%)	639.65 (24.75%)	382.05 (14.79%)	653.41 (25.29%)	2584.00 (100)
2011-12	1204.50 (40.36%)	793.39 (26.59%)	528.00 (17.69%)	458.25 (15.36%)	2984.14 (100)
2012-13	1182.09 (44.11%)	748.99 (27.95%)	377.30 (14.08%)	371.62 (13.87%)	2680.00 (100)
2013-14	1477.18 (50.49%)	916.75 (31.34%)	531.67 (18.17%)	-	2925.60 (100)
2014-15	1174.47 (51.80%)	701.54 (30.94%)	391.17 (17.26%)	-	2267.18 (100)
2015-16	1143.98 (49.74%)	678.08 (29.48%)	477.95 (20.78)	-	2300.02 (100)

## ii. Health

In the health sector, construction and upgradation of primary health centers have been taken up. Action has also been initiated for improvement of health facilities by establishing Suvarna Aarogya Suraksha Trust. And action has taken to establish 3 New Medical Institutions in Gadag, Koppal and Kalaburagi

## iii. Education

Dr. Nanjundappa Committee had recommended the establishment of top educational institutions in north Karnataka, more specifically in the Hyderabad - Karnataka region. The major institutions established in this sector include the Women's University at Vijayapura, Central University at Kalaburagi, University of Horticulture Sciences at Bagalkot, Karnataka Veterinary and Fisheries Sciences University at Bidar and Dairy Science College at Kalaburagi. To promote education in 39 most backward taluks, additional programmes have been introduced to strengthen the school infrastructure. Cluster complex is being established in 39 most backward taluks with a view to provide teachers' quarters in backward taluks/regions to enable the teachers to stay in rural areas and provide quality education to children. Opening of residential schools on Kasturba Gandhi Balika Vidyalaya (KGBV) model is also taken up in these taluks as female literacy rate is low. Higher Education: Acquisition of Land on Behalf of Educational Institutions Rs 5.00 Crores and Rs. 45.00 Crores has been allocated for First Grade Colleges Building.

## iv. Housing

Rural housing is one of the major sectors under SDP. The programmes that are being implemented in the backward taluks under SDP include the Ashraya-Basava Vasathi Rural housing scheme. The allocation for these scheme during the period 2015-16 is

Rs.300.00 crore.

## v. Infrastructure Development

One of the prime objectives of SDP is to fill up the gaps in infrastructure in the backward taluks and hasten the development process in these taluks. Under energy sector, the focus is on provision of electricity to villages, hamlets and tandas. Schemes of rural Load Management System (RLMS) are being implemented. The Minor airports at Bidar, Kalaburagi, Vijayapura, Belgaum and Hubli are provided with additional funds for completion. The Committee had identified 90 taluks (61 in north Karnataka and 29 in south Karnataka) out of 175 taluks which have road length less than the State average. Under SDP, road development programme is undertaken in rural areas under the schemes other district Roads. The Programmes are implemented by PWD. The allocation during the year 2015-16 is Rs. 50.00 crores. Under road transport sector, assistance is given to three divisions for construction of new depots, upgradation of existing bus stands, provision of toilet facilities, asphaltting within bus stands and construction of waiting rooms etc. The allocation for road transport is Rs. 45.00 crore and for railway projects, allocation has been Rs. 150.00 crore during 2015-16. The allocation for rural development during 2015-16 is Rs. 470.01 crore.

## vi. Irrigation

Assistance is provided for development of major irrigation in backward taluks. Dr. Nanjundappa Committee had recommended development of irrigation as a major strategy for increasing agricultural production and productivity in backward taluks. Assistance is provided under the programmes of Karnataka Neeravari Nigama Limited (KNNL) and Additional funds are being provided for early completion of major irrigation schemes to KNNL. Works such as promotion and modernization of tanks, rejuvenation of tanks, lift irrigation and construction of

barrages are taken up in most backward and more backward taluks. Expenditure for irrigation is around 20.1 % of total SDP expenditure during the 11<sup>th</sup> Five Year Plan. Assistance is given to complete the existing schemes soon so that benefits reach the farmers in time. This may thus help to expand the irrigation facilities and increase agricultural productivity and output. Allocation to major irrigation is Rs. 525 crore during 2015-16.

### **vii. Tourism**

Innovative works have been proposed and are in the process of implementation in tourism sector which is emerging as a high growth area in the service sector. Tourist infrastructure at various places in backward taluks has been taken up for development. An amount of Rs. 370.44 crore has been spent so far as against the earmarked outlay of Rs. 512.58 crore. Approach roads to tourist places have also been constructed at various tourist places

The implementation of recommendations of Dr. D M Nanjundappa Committee remains as an ongoing agenda. The Special Development Plan and the Backward Region Grant Fund are major programmes operating to reduce regional imbalances. These efforts have led to an increase in the levels of economic and human development in most backward and more backward taluks. This is evident from the growing enrolment of children in schools, decline in dropouts and out-of-school children etc. Road connectivity has increased and most villages are now covered by all-weather roads. Levels of employment and income are on the rise.

#### **14.1.5 Backward Region Grant Fund (BRGF) (2007-2012)**

The Backward Region Grant Fund, a more comprehensive programme with wide coverage, has been introduced to redress regional imbalances in development. Along with other objectives, the fund provides financial resources for supplementing and converging existing developmental inflows into identified districts so as to bridge critical gaps in local infrastructure and other development requirements that are not being adequately met through existing inflows.

#### **The basic objectives of the programme are as follows -**

- Provision of additional resource transfer to bridge the local infrastructure gap that is left unfilled due to shortage of resources and thus reduce the development gap across the regions.
- Involvement of people in Planning Process. Capacity building of local institutions in decision making process, plan preparation and implementation.
- Provision of expert assistance to local institutions in Plan formulation & implementation.
- Undertaking support activities required for Improving functional delivery of services through Panchayat institutions.

In Karnataka, the programme is being implemented in six backward districts of Kalaburgi, Yadgir, Bidar, Chitradurga, Raichur and Davanagere. Central assistance has been earmarked on the basis of share in population and share in geographical area. An amount of Rs. 550 Crores has been earmarked for this scheme as a whole for 11<sup>th</sup> Five year Plan. Similarly an amount of Rs.595.00Crores has been earmarked for this scheme for 12<sup>th</sup> Five year Plan. Table 5 provides details of the scheme's implementation in Karnataka.

**Table 14.5: Progress achieved under BRGF in Karnataka (Rs. In crore)**

Year	Details	Bidar	Kalaburagi/ Yadgir	Raichur	Davangere	Chitradurga	ANSIRD
2007-08	Allocation	17.14	28.25	19.56	18.18	20.21	5.00
	Release	17.11	25.34	7.50	16.33	20.21	10.00
	Expenditure	17.11	25.34	7.50	16.33	20.21	10.00
2008-09	Allocation	17.11	28.25	19.56	17.51	20.21	8.39
	Release	17.11	28.25	19.56	17.51	20.21	8.39
	Expenditure	17.11	28.25	19.56	17.51	20.21	8.39
2009-10	Allocation	17.11	28.15	19.56	18.14	20.21	5.00
	Release	17.11	28.15	19.56	18.14	20.21	5.00
	Expenditure	17.11	28.15	19.56	18.14	20.21	5.00
2010-11	Allocation	18.54	31.82	21.49	19.79	22.27	5.00
	Release	18.54	17.56	21.49	19.79	17.45	2.69
	Expenditure	18.54	17.56	21.49	19.79	17.45	2.69
2011-12	Allocation	18.54	31.82	21.49	19.79	22.27	5.00
	Release	18.54	17.56	21.49	19.79	17.45	2.69
	Expenditure	12.25	5.00	17.00	15.25	13.00	2.69
2012-13 (12 <sup>th</sup> Five year Plan)	Allocation	18.54	31.82	21.49	19.79	22.27	5.00
	Release	18.44	22.75	21.39	13.19	22.27	3.50
	Expenditure	38.06	30.89	21.12	8.74	22.05	-
2013-14	Allocation	22.75	52.70	26.36	24.27	27.33	6.00
	Release	13.04	13.66	-	20.74	-	-
	Expenditure	18.19	30.55	21.39	22.18	33.67	3.38
2014-15	Allocation	20.56	47.62	23.82	21.93	24.69	6.00
	Release	18.29	12.50	15.74	-	-	-
	Expenditure	11.40	24.55	13.69	13.48	33.83	3.59
2015-16	Allocation	18.15*	18.15*	18.15*	18.15*	18.15*	3.09*
	Release	2.27	9.54	4.77	3.53	4.77	3.09
	Expenditure	-	1.30	-	-	-	-

Source: RDPR Department

\* The 2015-16 allocations are tentative and will probably modify.

\*\* The plan outlay of 2015-16 reflects the compositional shift in the allocations for various Programmes and Schemes. Making his Budget Speech while presenting the General Budget 2015-16, the Finance Minister said that consequent to this substantially higher devolution; many schemes (like C-Category-Schemes BRGF, RGPSA etc) on the State subjects are to be delinked from Central support. Hence, the State Government has provided Rs.112.00Crores in budget for only works already under implementation to be completed. As such no new action plan or works can be taken under these schemes.

## 14.2. AREA DEVELOPMENT BOARDS

### Malnad Area Development Board, Shivamogga

Malnad Area Development Board came into existence by the Act Malnad Area Development Act, 1991 on 18.5.1993. The main objective of the board is to achieve overall development of the Malnad Area specifically.

The area under the jurisdiction of the board extends over 13 Districts of Malnad Area along the Western Ghats in 61 Taluks extending over 65 Assembly Constituencies.

#### Objectives:

- Development of infrastructure of road & bridges (foot bridges, hanging bridges)
- Development of Buildings of schools, colleges, hospital and hostels.
- Rural and Urban water supply schemes such as minor irrigation and rural electrification programmes.

The Board has incurred an expenditure of Rs. **51647.76** lakh completing **18698** works.

#### Initiatives taken up in 2015-16:

The Board has taken up many initiatives including the formation of concrete roads in the areas inhabited by the weaker sections, providing of safe drinking water in rural areas especially those affected by fluoride, construction of foot bridges and hanging bridges as well as formation of roads. The implementation of the safe drinking water is sought to be enhanced by involving the Srikshetra Dharmasthala Rural Development Project (R) Dharmasthala which

will share the cost of the installation of the unit.

#### Best practices and success stories.

The construction of 17 hanging bridges incurring a cost of about Rs.1063.37 lakh. This facilitates the children and others to cross the streams in the rainy season to access the schools and other facilities which otherwise would be circuitous or inaccessible during the rainy season.

Another success story is the involvement of Srikshetra Dharmasthala Rural Development Project (R), in the developmental programs. They have been involved in many different programs, notable as the programme of providing safe drinking water in which the board contributes Rs.5.00 lakhs and they contribute an equal amount. Similarly they have executed the solid waste disposal system in Kadaba and Ujire villages. The solid waste was getting into the river system during the rainy season affecting the drinking water supply during the summer which is the lean season.

In some locations depending upon the water level and pressure where naturally flowing water is available, in the remote areas, independent Hydro Electric Units have been established to provide electricity.

#### Challenges and the futures outlook of the Board:

The future challenge is in identification of the specific requirement in the hinterland and to supplement the various works carried out by different agencies.

Table 14.6 shows the details of expenditure incurred since inception of the Board. Table 14.7 shows the physical achievement made since inception of the Board.



**Table 14.6: Details of Financial Progress of MADB-since inception,  
(Rs. in lakh)**

Year	Budget	Releases	Expenditure
1993-94	3300	3300	1559
1994-95	3500	2400	3806
1995-96	3000	2250	2022
1996-97	3000	2100	1914
1997-98	1570	1570	2736
1998-99	3850	1875	2023
1999-00	3284	2463	2564
2000-01	3400	3256	3010
2001-02	1725	1135	1740
2002-03	1645	1534	1557
2003-04	1250	1350	1382
2004-05	707	707	668
2005-06	1400	1400	1345
2006-07	3355	3355	1433
2007-08	3450	2825	2712
2008-09	2300	1058	2697
2009-10	1600	1597	1052
2010-11	2000	2000	2158
2011-12	3400	3360	3048
2012-13	3400	3400	3233
2013-14	3430	2573	3111
2014-15	3800	3800	3609
2015-16	4000	3000	2267
<b>Total</b>	<b>62366</b>	<b>52306</b>	<b>51648</b>

Note: The expenditure incurred in a year includes unspent balance of previous year also.  
The expenditure incurred in the year 2015-16 includes administrative expenditure of Rs.121.34 lakh upto December-2015.

**Table 14.7: Details of Physical Progress of MADB, since inception**

Year	Approved Works				Total No. of work	Total completed work
	Roads and Bridges	Social Sector	MI & GWR	Soil Water		
1993-94	3039	264	0	90	3393	419
1994-95	1947	361	93	118	2519	631
1995-96	896	99	12	47	1054	1793
1996-97	845	196	18	33	1092	1803
1997-98	915	295	12	46	1268	1344
1998-99	1500	359	15	35	1909	927
1999-00	131	10	1	1	143	618
2000-01	605	143	11	4	763	1265
2001-02	226	60	0	0	286	862
2002-03	50	32	1	0	83	195
2003-04	53	9	2	0	64	195
2004-05	0	0	0	0	0	1290
2005-06	0	0	0	0	0	874
2006-07	399	247	63	41	750	658
2007-08	304	215	42	25	586	790
2008-09	282	210	9	1	502	438
2009-10	2	19	0	0	1621	1283
2010-11	316	200	24	9	549	429
2011-12	402	267	54	0	723	532
2012-13	529	266	12	19	826	575
2013-14	690	271	75	0	1036	636
2014-15	711	268	59	0	1038	748
2015-16	1085	202	61	0	1348	393 (Dec End)
Total	14927	3993	564	469	21553	18698

1. MI: Minor Irrigation
2. GWR: Ground Water Resources

**Objectives:**

- Development and conservation measures in rain fed agriculture system.
- Adopting soil and water conservation measures in rain fed agriculture system and Forest Development.
- Promoting Horticulture Development.
- To promote and support activities in the agriculture and allied sectors.
- To promote animal husbandry.

Out of total amount allocated to the Board 60% shall be utilized for water and soil conservation works and remaining 40% shall

**Bayaluseeme Area Development Board, Chitradurga**

The Bayaluseeme Area Development Board was established in the year 1995 under Karnataka Act No.38 BSDB Act 1994. Bayaluseeme (Maidan Area) comprises 57 Taluks of the State. Which have been recognized as drought prone taluks, and pose special Problems of development. This Board established to hasten the phase of development of this area for bringing it to the level of other parts of the State. There are 70 assembly constituencies spread over 14 districts. Since from the inception of the Board up to 2015-16 (till December-2015), the Board has incurred an expenditure of Rs. **16285.17** lakh completing **4896** works.

be for other developmental works in Bayaluseeme area.

**Challenges and the futures outlook of the Board:**

The future challenge is in identification of the specific requirement in the hinterland

and to supplement the various works carried out by different agencies. Table 14.8 shows the details of expenditure incurred since inception of the Board. Table 14.9 shows the physical achievement made since inception of the Board.

**Table 14.8: Details of Financial Progress of Bayaluseeme Development Board, Chitradurga Since Inception, (Rs. in lakh)**

Sl.No.	Year	Allotment	Actual Releases	Expenditure
1	1995-96	597.00	372.75	4.56
2	1996-97	474.00	418.00	346.20
3	1997-98	740.00	590.00	471.00
4	1998-99	850.00	637.50	704.30
5	1999-2000	1550.00	499.50	497.66
6	2000-01	900.00	660.00	518.25
7	2001-02	380.00	230.00	440.75
8	2002-03	1420.00	1200.00	603.87
9	2003-04	675.50	193.75	1132.50
10	2004-05	500.00	352.50	477.55
11	2005-06	630.00	630.00	373.09
12	2006-07	780.00	780.00	203.94
13	2007-08	1911.00	1669.50	1117.41
14	2008-09	1375.00	610.00	1165.39
15	2009-10	727.50	572.50	1048.91
16	2010-11	700.00	700.00	729.18
17	2011-12	1000.00	800.00	757.57
18	2012-13	1700.00	1275.00	1012.66
19	2013-14	1730.00	1297.50	1140.67
20	2014-15	2000.00	1999.55	1849.26
21	2015-16	3501.00	2625.75	1690.45
Total		24141.00	18113.80	16285.17

Note: The expenditure incurred in a year includes unspent balance of previous year also Up to the End of December 2015

**Table 14.9: Bayaluseeme Development Board, Chitradurga Statement showing Details of Physical Progress since inception**

Year	Approved Works					Completed Works						
	Roads Bridges	Social Sector	MI & GWR	Soil Water	Engineer works	Total	Roads Bridges	Social Sector	MI& GWR	Soil Water	Engineer Works	Total
1995-96	0	0	0	0	0	0	0	0	0	0	0	0
1996-97	119	64	105	77	3	368	119	64	105	77	3	368
1997-98	97	19	67	105	3	291	97	19	67	105	3	291
1998-99	156	48	112	162	16	494	156	48	112	162	16	494
1999-00	400	66	342	351	41	1200	400	66	342	351	41	1200
2000-01	..	..	..	..	..	..	..	..	..	..	..	..
2001-02	..	..	..	..	..	..	..	..	..	..	..	..
2002-03	..	..	..	..	..	..	..	..	..	..	..	..
2003-04	85	8	111	59	4	267	85	7	111	59	4	266
2004-05	..	..	..	..	..	..	..	..	..	..	..	..
2005-06	..	..	..	..	..	..	..	..	..	..	..	..
2006-07	70	37	45	103	1	256	70	36	45	103	1	255
2007-08	137	83	68	268	15	571	137	83	68	268	15	571
2008-09	46	55	53	197	4	355	46	49	53	197	4	349
2009-10	0	2	1	1	0	4	0	1	1	1	0	3
2010-11	24	10	22	75	0	131	24	8	22	73	0	127
2011-12	33	9	31	156	9	238	33	7	25	138	9	212
2012-13	71	18	41	223	38	391	55	14	31	167	25	292
2013-14	117	17	356	102	63	655	74	6	139	43	18	280
2014-15	117	55	160	244	22	598	39	18	68	24	8	157
2015-16	214	108	397	43	25	787	11	0	4	16	0	31
Total	1686	599	1911	2166	244	6606	1346	426	1193	1784	147	4896

up to the End of December 2015

**Coastal Development Authority,  
Mangaluru (Karavali Abhivruddhi  
Pradhikara)**

**The Project under taken for the welfare  
of Three Coastal Districts of Karnataka  
as well as economic and social  
development of the Coast.**

Coastal Development Authority was established vide G.O NO: ಸಅಇ 582 ಅಪ್ರಾ 2008, dated: 8.9.2008. The Coastal Development Authority is the Advisory Body/Nodal Agency to the Government of Karnataka on matters pertaining to the Comprehensive development of the three coastal districts of Karnataka, namely Dakshina Kannada, Udupi and Uttara Kannada.

**Functions:-**

- Identification of potential projects for promotion and development of basic infrastructure-Roads, Tourism, Ports, Industries, Technology Parks, Over-Bridges.
- Preparing of Project Reports of the identified potential projects in consultation with concerned administrative departments.
- Identifying projects for conservation and development of various coastal zones and recommending such works for inclusion in the state level planning.
- Taking measures for effective time bound supervision of implementation of projects for coastal conservation and development.
- CDA was empowered to carry-out projects such as construction of fish markets, bridges, commercial complexes, pubic amenities etc from this financial year (2015-16).

**Projects taken up in three Coastal  
Districts of Karnataka since inception**

**1. New Proposed High Speed Airport  
Road Between Manipal to Bajpe  
International Airport**

The present proposal of Athradi (Manipal) to Bajpe International Airport road is two lanes (Converting into four lane) is proposed to have direct axis for 80 K.M speed. Completely reformation of the road by avoiding all the curves, gradients etc. If this road is formed the reaching time is expected to be within one hour by the shortening the road distance to 55 K.M. and straight with flyovers etc. The preparation of the D.P.R has been completed and has already been submitted to the Government. (Apprx Project Cost Rs. 580 Crore)

**2. Proposed Connectivity Road  
Parallel to N.H 66 and Beach Side  
Through Out Passing In Three  
Coastal Districts Known as Fisheries  
Road**

The proposed road will be connected between Talapady (Mangaluru) to Majali (Uttara Kannada District) converting into two lane concrete road parallel to NH-66. Presently there is asphalted road in this area with less connectivity. Thick population of fishermen communities reside throughout the beach.

The main purpose of this project is overall development of fishermen communities. This being a parallel road to N.H 66, connects the Fishermen's habitations. The traffic congestion of National Highway will be greatly reduced.

The proposed road is on the bank of Arabian Sea. Hence, the road is strategically important in the national interest. The preparation of the D.P.R has been completed and has already submitted to the Government. (Apprx Project Cost Rs. 780 crore)

### 3. Construction of Modern Hi -Tech Fish Markets In Three Coastal Districts of Karnataka

The work is already taken up by the Coastal Development Authority funded by National Fisheries Development Hyderabad, Government of India (Providing 90% of the project cost) and Department of Fisheries, Government of Karnataka. (Providing 10% of the project cost) The construction work of Padubidri, Yedthare-Byndoor, Katapadi, Uppunda, Kota and Shirva in Udupi District and Ankola, Shirali Fish Markets in Uttara Kannada District and Kinnigoli and Panemangalore in Dakshina Kannada District has already been completed. The construction work of Udupi (Town).Kota and Shirva in Udupi District is under progress. During this financial year construction of four fish markets in Sirsi, Haldipur Karki and Mudarangadi is taken up.

### 4. Construction of Foot Bridges/Hanging Bridges in Coastal Districts.

**A)** As per the proposal submitted by the Coastal Development Authority, the Government has released Rs.3.00 Crore to Dakshina Kannada and Rs. 2.00 Crore to Udupi District for the construction foot bridges/ hanging bridges. The construction work has been taken up by Panchayath Raj Engineering Division. Coastal Development Authority out of its personal interest got funds sanctioned for implementing foot-bridges in remote villages of the three Coastal Districts of Karnataka. The Proposal submitted to the Government for the construction of foot bridges in Coastal Districts of Karnataka are as follows:

**Table 14.10 Details of proposal submitted to Government of the Construction of Foot Bridges in Coastal Districts, (Rs. in.Crore)**

Name/ Place of Work	District	Taluk	Grama Panchayath	Grama	Estim ated Cost	Date of Submission of Project Reports to the Govt of Karnataka
Badabagilu	Uttara Kannada	Bhatkal	Haduvalli		0.37	5.1.2011 (Project has been sanctioned)
Datasala River	Uttara Kannada	Honnavar	Chikkanagodu	Hirebailu	3.00	23.01.2012
Nethravath i River	Dakshina Kannada	Belthangadi	Bandharu	Illanthila Mogru	1.49	23.01.2012
Bolmanaru	Dakshina Kannada	Belthangadi	Pudhuvettu	Bolmanaru	4.50	2.2.2013 (Project has been sanctioned)
Madisalu	Udupi	Udupi	Udupi	Aroor	2.00	19.10.2011

## **B. Hanging Bridges**

This financial year taking-up two hanging bridges spanning length of 250m each, one in remote village of Kudragi in Honnavar Taluk of Uttara Kannada and the other at Muttur (Kuppepadavu) of Mangaluru Taluk, Dakshina Kannada District.

## **5. Multi Village Water Supply Project**

The preparation of Preliminary Scheme Report in regard to Multi Village Water Supply Scheme in Dakshina Kannada (25 Villages) and Udupi District (26 Villages) has been completed and report submitted to the Government. The main objective of this project is to support the Government's effort to increase access to safe drinking water for deprived villages in Udupi and Dakshina Kannada District.

## **6. Other Aspects.**

### **A) Seminar on Fisheries.**

One day seminar on Present Status and Future Prospects of Fisheries in Karnataka jointly organised by Coastal Development Authority and Central Marine Fisheries Research Institute at Karwar on 29.09.2015. The seminar turned out to be a great success, with the panel of members of the seminar coming out with series of recommendations to improve the fishing system by balancing the traditional fishing system with the controlled introduction/adoption of technology for reaping benefits from nature.

### **B) Training on Cage Fishing and Allied Activities.**

This financial year the Coastal Development Authority intends to conduct training programme on open Sea Cage farming and allied activities to traditional fishermen and other privileged candidates from the Coastal Districts of Karnataka. The open sea cage culture

provides an opportunity to increase the fish production from the coastal waters and also provide entrepreneurship and employment opportunity to the traditional fishermen and other privileged candidates facing acute shortage of resources from the coastal waters leading to unemployment and under employment. The CDA intends to spread the modern fishing technique across the borders of Coastal Karnataka. This modern technology in fishing will be useful for the fishermen's to take up cage fishing culture as a successful occupation.

## **C) Tourism**

The Coastal Karnataka does have all potentialities to attract tourists and become a most sought out tourist destination, but which has not materialised till to this date. The reason being lethargic approach of the concerned department and lack of knowledge in finding ways to improve the system. After consultation with the KSTDC, have chalked out an action plan to create tourist circuits in these three coastal districts. The concerned Tourism department have been directed to do an extensive survey of the tourist attraction spots along with various categories of lodgings, restaurants, local cuisines, categorise the tourist loops and submit them. The Coastal Development Authority along with KSTDC will earmark customised Buses to ply in various tourist circuits encouraging more of tourists to visit coastal Karnataka. If this plan is materialised, this will help in generating revenue to state exchequer as well as generate employment among locals. Efforts will also be made to make the local agencies and publics near-by tourist spots more tourist friendly through orientation programmes in coming days. CDA will also be hosting a seminar involving various stake-holders, policy makers & bureaucrats to chalk out plans for improving and branding coastal Karnataka Tourism.

**Table 14.11: Funds Allocated to Karavali Development Authority since inception**

Year	Budget Allocation (in lakh)	Amount Released (in lakh)	Expenditure (in lakh)
2009-10	100.00	100.00	37.10
2010-11	300.00	150.00	126.25
2011-12	300.00	150.00	117.86
2012-13	1000.00	250.00	106.04
2013-14	100.00	50.00	45.60
2014-15	100.00	54.20	40.60
2015-16	1000.00	750.00*	482.75*
Total	2900.00	1504.20	956.20

\*Upto February 2016

The major on-going effort by CDA is to bring in INS-Virat the prestigious war-ship which is of-late declared to be converted to museum to either Mangalore housing major port NMPT or Karwar having an well established naval base. This effort if materialised will be a win-win situation as the maintenance of this legendary ship will not be a problem with both the places well equipped for its maintenance, at the same time this move will boost our efforts in transforming coastal Karnataka into major tourist spot.

For the current financial year a grant of Rs 10.00 crore provided to carry out developmental works. During the year 2015-16 (Upto February 2016) Rs. 7.50 crore has been released, out of that authority has incurred an expenditure of Rs. 4.83 crore.

### **14.3 Karnataka Legislators' Local Area Development Scheme**

Government has introduced the **Karnataka Legislator's Local Area Development Scheme (KLLADS)** in 2001-02 with a budget allocation of Rs. 75 crore under non-plan. From 2008-09 onwards the scheme was shifted from non-plan to plan.

#### **Objectives:**

The investment in development programmes based on a sectoral planning process to benefit local area leaves some infrastructure gaps, despite best planning effort. This under-mines the investment, which is not optimally beneficial to the local area. The domination of the sectoral planning process has limited the potential scope for participation by people's elected representatives and the user community. There have been occasions where some important works have not been undertaken, as they are not covered by any existing plan or non-plan scheme.

In order to accommodate local aspirations and needs better, and to ensure responsive planning and delivery of services, the Government has taken up schemes for asset creation, infrastructure development and employment generation for the benefit of the poor and weaker sections, whose planning and execution can be done at the Legislator's Constituency Level.

The KLLADS follows a participatory demand responsive development approach to address infrastructure development requirements of the local area within a Legislator's Constituency. It also provides flexibility in taking up works which are otherwise not covered by other government programmes.



**Table 14.12: Amount Released under KLLADS since Inception (in.crore)**

Year	Amount Provided	Amount Released
2001-02	75.00	75.00
2002-03	31.00	31.00
2003-04	Amount not provided due to drought	
2004-05		
2005-06	150.00	150.00
2006-07	300.00	300.00
2007-08	300.00	183.25
2008-09	200.00	150.00
2009-10	460.50	460.50
2010-11	399.20	399.20
2011-12	300.00	298.62
2012-13	300.00	300.00
2013-14	600.00	581.53
2014-15	600.00	600.00
2015-16	600.01	300.00

For effective monitoring of KLLAD Scheme in all 30 districts it is proposed to establish Facilitation centre and also web based applications as MIS and WORKSOFT software.

#### **New Districts Development Programs**

A special grant of Rs.5000.00 lakh each was provided for taking-up developmental works in the newly formed Yadgir and Chikkaballapur district. Out of which Rs 4885.00 lakhs to Yadgir district and Rs.2424.64 lakhs to Chikkaballapur has been released so far.

#### **Naxal Affected Area Development Programs**

A grant of Rs.500.00 lakh each was provided to naxal affected taluks for taking-up developmental works. Amount released so far to the taluks are as follows;

#### **14.4 Member Of Parliament Local Area Development Scheme (MPLADS)**

MPLADS is a Grant-in-Aid Plan Scheme started in December 1993 by Government of India, as a special central assistance to states for expenditure to be incurred for the creation of community assets based on the recommendation of the Hon'ble Members of

Parliament. The Scheme is governed by a set of guidelines. Under the scheme a sum of Rupees 5 crore per annum per Member of Parliament is released by GOI directly to the Deputy Commissioners of the Nodal Districts for execution of the works of development nature based on the locally felt needs recommended by the Member of Parliament concerned. Karnataka is represented by 28 Members of Lok Sabha, 12 Members of Rajya Sabha and one nominated member of Rajya Sabha. The MPLADS Cell of the Planning Department is the Nodal Department between GOI and the Deputy Commissioners. The Parliamentary Committee of Lok Sabha and Rajya Sabha periodically visit the State for review and inspection of the MPLADS works. The features of the scheme, list of prohibited works and list of permissible works and works of non-durable nature, detailed guidelines, Government Orders and circulars are available on the website [www.mplads.nic.in](http://www.mplads.nic.in)

The MPLADS Cell is responsible for co-ordination with the Ministry of Statistics and Programme Implementation, Government of India for proper and effective supervision of the implementation of the scheme in the State. The Cell also co-ordinates with the District Authorities for timely submission of Utilization Certificates and Audit Certificates to the Ministry.

**Table 14.13: Amount released through Naxal Affected Area Development Programme (Rs. in lakhs)**

Sl. No.	District	Taluks	Amount allocated	Releases*
1	Tumkur	Pavagada	500.00	468.75
2	Shivamogga	Thirthahalli	500.00	500.00
		Hosanagara	500.00	500.00
3	Chickmagalore	Sringeri	500.00	500.00
		Mudigere	500.00	500.00
		Koppa	500.00	500.00
4	Udupi	Karkala	500.00	500.00
		Kundapura	500.00	500.00
5	Dakshina Kannada	Belthangadi	500.00	500.00
Total			4500.00	4468.75

\*Upto February 2016

**Table 14.14: Funds allocated and spent under MPLADS since inception (Rs. crore) (up to December 2015)**

Area	Amount Sanctioned	Released by GOI	% of released over sanctioned	Expenditure Incurred	% of Utilisation over released
Lok Sabha	1353.09	1351.40	99.87	1209.59	89.5
Rajya Sabha	547.71	554.60	101.25	495.55	89.35

### 14.5 Article 371J – Special Status for Hyderabad-Karnataka Region

**Hyderabad-Karnataka** region is located in the north-eastern part of the State. The region, encompassed by the Kannada speaking people, was earlier ruled by the Nizams of Hyderabad until 1948. After merging with the Indian Union, the region was a part of the then Hyderabad State until 1956. The Hyderabad-Karnataka region comprises of Bidar, Yadgir, Raichur, Koppala, Ballary and Kalaburagi districts. The Hyderabad-Karnataka region is the second largest arid region in India. Article 371J will grant special status to six backward districts of Hyderabad-Karnataka region to:

1. Establish a separate Development Board
2. The Board ensures sufficient funds are allocated for Development of the region.
3. Local reservation in education and Government-jobs (Domicile requirement)

The State had constituted a high power committee under Prof. Nanjundappa to study regional imbalances in the State and to recommend strategies to address them. The committee identified 35 indicators to measure the extent of development in various sectors and had built a Comprehensive Composite Development Index (CCDI) and Composite Deprivation Index (CDI). On the basis of CDI all taluks are categorised as most backward, more backward, backward and relatively developed taluks. 21 taluks of HK region are categorized as most backward, 5 taluks as more backward and 2 taluks as backward.

### Salient features of Hyderabad Karnataka Region

- HK region account for 23% of state geographical area
- Uncultivated area of the region is 23% of state uncultivated area
- Decadal population growth of the region is 17.73% whereas state growth rate is 15.60%

- HKRDB region is having 18% of the State population
- 24% of State SC population is residing in the region
- 34% of State ST population is residing in the region
- Literacy rate of the region is 64.45% whereas State literacy is 75.36%
- Dropout rate in the HKRDB region is 5.77 whereas the State Dropout rate is 2.96
- Child Mortality Rate of the region is 59 whereas State Child Mortality rate is 41
- Infant Mortality Rate of the region is 51 whereas State Infant Mortality Rate is 35
- Net District domestic product of HKRDB region is Rs. 72284 per capita whereas the State average is Rs. 116238 per capita

#### **Article 371(J)**

(1) The Hon'ble President may, by order, made with respect to the State of Karnataka, provide for any special responsibility of the Hon'ble Governor for –

- (a) Establishment of a separate development board for Hyderabad-Karnataka Region with the provision that a report on the working of the board will be placed each year before the State Legislative Assembly;
- (b) Equitable allocation of funds for developmental expenditure over the said region, subject to the requirements of the State as a whole; and
- (c) Equitable opportunities and facilities for the people belonging to the said region, in matters of public employment, education and vocational training, subject to the requirements of the State as a whole.

(2) An order made under sub-clause (1) may provide for –

- (a) Reservation of a proportion of seats in educational and vocational training

institutions in the Hyderabad-Karnataka region for students who belong to that region by birth or by domicile; and

(b) Identification of posts or classes of posts under the State Government and in any body or organisation under the control of the State Government in the Hyderabad-Karnataka Region and reservation of a proportion of such posts for persons who belong to that region by birth or by domicile and for appointment there to by direct recruitment or by promotion or in any other manner as may be specified in the order.

The Constitutional obligation consequent to Amendment of Article 371(J) by insertion of Article 371(J), binds the State and Central Governments to put forth all out efforts for development of the Hyderabad-Karnataka region besides ensuring the same by way of providing reservation in the Education and Public Employment sectors. A Cabinet Sub-Committee was constituted to advise the State Government for effective implementation of Article 371(J). The Cabinet Sub-Committee has held wide range of discussions with all stakeholders of the region and has submitted a report to the Government. Some of the important orders issued by the state in pursuance to the implementation of Article 371J are as follows:

- a. The Hyderabad-Karnataka Region Development Board Order, 2013
- b. The Karnataka Public Employment (Reservation in Appointment for Hyderabad- Karnataka Region) Order, 2013 – Provides for creation of a local cadre and reservation in the Hyderabad- Karnataka Region as under, besides reservation of 8% of the posts in the State level offices or institutions or apex institutions
- c. The Karnataka Private Un-aided Educational Institutions (Regulations of Admission in the Hyderabad-Karnataka Region) Order, 2013. - provides for reservation of 70% of the available seats in every course of study in any

regional university or educational institution referred to in the First Schedule, besides 8% of the available seats in every course of study provided in a State wide university or a State wide educational institution.

- d. The Karnataka Educational Institutions (Regulations of Admission in the Hyderabad – Karnataka Region) Order, 2013 – provides for reservation of 70% of available seats.

To address the issue of backwardness in the State, Government has been implementing a Special Development Programme (SDP) since 2007-08. 40% of budget of SDP is earmarked for Hyderabad-Karnataka region. Besides, Hyderabad Karnataka Development Board was also engaged in the development of this region till it was repealed on 22/02/2014. In pursuance to the Article 371(J) Hyderabad Karnataka Region Development Board was formed on 06/11/2013. It was constituted with 28 members on the 23<sup>rd</sup> January 2014. Sri Qamrul Islam Honourable Minister of Municipal Administration, & Hajj and Walkf and Minorities Welfare was nominated as the Chairman of the Board. At present Dr. Sharan Prakash Patil, Honourable Minister for Medical Education has been nominated as Board Chairman. The Board has convened its first meeting of 2015-16 on 23.06.2015 and the second meeting on 13.11.2015. The Third meeting of the Board was held on 11.01.2016.

#### **Action Plan of 2014-15**

The HKRDB finalised the action plan of 2014-15 for Rs. 600 crore. The action plan is approved by Hon. the Governor of Karnataka during September-2014. Earmarking in the Action Plan is as follows:

- Rs. 96.00 crore for Macro projects
- Rs. 496.80 crore for Micro projects
- Rs. 7.20 crore for administrative expenses

In the action plan of 2014-15, HKRDB has earmarked 70% of budget for bridging infrastructure gaps and 30% for institutional gaps. Administrative charges continued to be 4% of institutional gap allocation.

Rs. 600 crore has been budgeted for 2014-15 against which Rs.300 crore has been released. The Board has incurred an expenditure of Rs. 123.35 crore.

#### **Action Plan of 2015-16**

The HKRDB finalised the action plan of 2015-16 for Rs. 1000 crore. The action plan is approved by Hon. the Governor of Karnataka during May 2015. Earmarking in the Action Plan is as follows:

- Rs. 235.00 crore for Macro projects
- Rs. 670.73 crore for Micro projects
- Rs. 58.27 crore as Education Fund
- Rs. 36.00 crores for administrative and others

In the action plan of 2015-16, HKRDB has earmarked 70% of budget for bridging infrastructure gaps and 30% for institutional gaps. Administrative charges continued to be 4% of institutional gap allocation.

Rs. 1000 crore has been budgeted for 2015-16 against which Rs.500 crore has been released. The Board has incurred an expenditure of Rs. 291.13 crore upto end of January 2016.

#### **Issues and Challenges**

Despite the interventions to develop the HK region on par with the relatively developed regions, vital indicators relating to human development, in particular, of the region depicts that the gaps in the indices still persists. This indicates that the barriers to development are still strong enough to retard the development processes. The focus of the Twelfth Five Year Plan viz., faster, more inclusive and sustainable growth implies that people in

all the regions of the Country should gain access to development.

In this context, intensive efforts are required to bridge the development gap and attain equitable distribution of gains from development across regions and people in the State. Therefore to plug the backwardness of the Hyderabad-Karnataka region, State has made a conscious effort by substantially increasing the allocations provided to the HKRDB during 2015-16. The focus, however, needs to be on education, health and nutrition and skill development along with development of farm and non-farm activities. Therefore, formulation and effective implementation of development programmes tailored to the needs of the region are required to meet the challenges of this region.

In this direction the Board in its second meeting held on 13.11.2015 proposes to implement certain ambitious projects mentioned below which will help in the development of the region.

**a. Dr. A.P.J Abdul Kalam Gnana Tunga Project.**

The HKRDB's APJ Abdul Kalam Knowledge Project 2015-16 to 2017-18 is focusing on cognition and skill development through rural ICT where in 300 Government High Schools and 100 Gram Panchayat Libraries, Competitive Centre Facilities in 1 University and One Research Project in Agriculture, Horticulture or Animal Husbandry will be taken up every year from 2015-16.

**b. Jalamrita Project (2015-16 to 2017-18)**

Supply of purified and treated water to rural households will have significant health benefits besides economic benefits

which accrue from healthier individuals. The purification process should be all-encompassing and multiple removing smell, turbidity, BOD, Hardness, Chemical Contamination. The containers, storage vessels and distribution should be through non-reactive food grade material. The purification process should include : a) Sand Filter b) Carbon Filter c) Micron Filter d) 500 LPH RO Membrane e) UV filter f) 3 Layer food – grade white PUR pure water tank of 1000 litre capacity and raw water tank of 2000 litre capacity. ZP and ULB will have to partner the scheme with HKRDB by providing :

1. Building infrastructure
2. Water source, connection & pipeline of at least 1000 lph and electrification, pump for raw water
3. Raw water storage
4. Testing, Operation & Maintenance, Revenue Collection through appropriate arrangement & CAMC
5. AMC and additional public utilities & facilities for subsequent years

**c. Margarogya Vahini :Urban Road Maintenance Task Force, Kalaburagi**

Urban Road maintenance is a recurring problem causing damage to vehicles, pedestrians, accidents. Annually huge sums are spent on regular maintenance and there is compounded damage to roads during monsoon. A departmental solution is proposed to this recurring problem through the HKRDB sponsored Margarogya Vahini for Kalaburagi Municipal Corporation. This will be a fully owned and operated Road Health Task Force of the KMC with necessary machinery and equipment provided by HKRDB and labour and materials provided by KMC. The latest technology in pot-hole filling such as instant asphalt compounds would be used along with IRC validated conventional methods or innovative technologies.

**Table 14.15 HKRDB PROGRESS**

Year	Financial (Rs.in crore)			Physical (works in nos.)			
	Allocation	Releases	Expenditure	Approved works	Completed works	Works under progress	Different Stages of Implementation
2013-14	150	30	-	728	286	306	136
2014-15	600	300	123.35	2380	502	1005	873
2015-16*	1000	500	291.13	3412	75	596	2741

• Upto Jan.2016

**Reservation in Education sector and Recruitment in Public Employment under Article 371J of the Constitution of India**

Special stress is laid upon for area development, reservation in public employment and reservation in admission to various courses for the local persons belonging to Hyderabad-Karnataka region under Article 371J of the Constitution of India conferring special status to the Hyderabad-Karnataka region. Consequential orders have been issued for implementation of Article 371J. A Cabinet Sub-Committee is reviewing the implementation of the same from time to time. The reservation imposed for filling up of vacant posts consequent upon the amendment to the Constitution by insertion of Article 371J has since been relaxed permitting the appointing authorities to fill in the vacant posts both in the local and parent residual cadres after formation of local cadre and allotment of the local persons to the respective cadres based on their option.

Clarifications and guidelines in the form of Circulars, Official Memorandum and Government Orders are issued from time to time for effective implementation. Action is being taken to fill in all the vacant posts in the Government offices located in the Hyderabad-Karnataka region consequent to the accordal of special status to the Hyderabad-Karnataka region providing for reservation in Public Employment and admissions to various courses in the educational institutions, ample opportunities are made available to the local persons in the Public Employment and Educational sectors. In this direction recruitment has been made for about 9450 posts in different departments through direct recruitment and for about 12000 posts recruitment is under process. With regard to reservation in the educational institutions for professional courses, there has been a substantial improvement in the cut of ranking during admission in the academic year 2015-16 in respect of professional courses and many of the local persons have been benefited.

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## EVALUATION OF GOVERNMENT PROGRAMMES AND SCHEMES

# 15

Karnataka was the first State in the Country to come out with an “*Evaluation Policy*” in the year 2000. After the implementation of the year 2000 Evaluation Policy, introspection was done about its implementation a decade later by the Planning, Programme Monitoring and Statistics department of the State. With a view to overcome the shortcomings and lacunae in evaluations of the past and to have a professional, unbiased and independent body with the responsibility of carrying out evaluations, the Government of Karnataka constituted the “*Karnataka Evaluation Authority*” in the year 2011. The Karnataka Evaluation Authority is a non-profit society registered under the Karnataka Societies Act 1960. It receives funds for evaluation studies from the Government of Karnataka and also some of its departments. It has been exempted from paying Income Tax by the Income Tax department.

### Main Points OF Evaluation Policy of 2011:

The mission of the Evaluation Policy of 2011 is to have a “transparent, effective and efficient policy of evaluation of its development policies and programmes”. It provides for prescribing standards of evaluation and strives to enhance the technical capacities within the departments of the Government and independent evaluation agencies to undertake and utilize evaluation outputs. This policy includes all departments, urban and rural local bodies, Corporations and State owned industries. The policy envisages two broad types of Evaluation, namely – external

**A. External Evaluation:** This is where the Karnataka Evaluation Authority (KEA) initiates Evaluation studies that are paid by its own funds. When a scheme is taken up for external evaluation by KEA,

it cannot get evaluated by the concerned department. The line department is duty bound to furnish all information to KEA in time, and extend all help in the carrying out the evaluation.

**B. Internal Evaluation:** An evaluation taken up by the line departments from their own resources is referred to as Internal Evaluation. In order to ensure that there is no conflict of interest, it is mandatory for the concerned department to take advice from the KEA on the Terms of Reference (ToR) of the evaluation study, data collection tools, vendor outsourcing, all other technical matters and to follow the rules and procedures prescribed by KEA. The Evaluation Policy has made provision that any evaluation can be handed over to KEA at any stage.

### Functions of the Karnataka Evaluation Authority:

The functions of KEA are –

- (a) To supervise, facilitate, build capacity and handhold departments for effective Planning, Monitoring and fine tuning the policies, programmes and schemes.
- (b) To undertake or commission training, consultancy, advocacy activity to further goals of effective and meaningful scheme formulation, Monitoring and Evaluation.
- (c) To keep record of all Terms of Reference(ToR) of Evaluation Studies, data collection tools, evaluation reports and to follow up utilization of evaluation outputs.
- (d) To formulate rules and procedures for selection of agency for Evaluation and publication of a training manual on Evaluation.
- (e) To disseminate the findings of evaluation studies.



**Procedure of Evaluation:**

Briefly, Evaluations follow the following stages:

- a. The department whose scheme or programme is being evaluated prepares a Terms of Reference (ToR) for the study. This ToR is discussed between the KEA and the concerned department. A final ToR is prepared jointly by them.
- b. A committee has been constituted to frame the appropriate sampling design in the ToRs of various evaluation studies prior to the ToRs sanction. This committee will also prepare/scrutinise the questionnaires prepared by the Consultant Evaluation Organization.
- c. The ToR is put before the Technical Committee of KEA. The Committee has academicians and officers of KEA as its members and is headed by the Principal Secretary, Planning. The Technical Committee goes through the contents of the ToR and approves it after making such changes as deemed appropriate.
- d. The Evaluation is outsourced to a Consultant Evaluation Organization. It prepares a Work Plan and submits to the Technical Committee of KEA.
- e. The Work Plan is put before the Technical Committee of KEA. The Technical Committee goes through the contents of the Work Plan and approves it after making such changes as deemed appropriate.
- f. The Consultant Evaluation Organization does the study and submits a draft report to KEA. This is given to an Independent Assessor of KEA for

suggestions, comments and improvements.

- g. The Consultant Evaluation Organization complies with the suggestions of the Independent Assessor of KEA and submits the final draft report to the Technical Committee of KEA.
- h. The Final draft report is put before the Technical Committee of KEA. The Technical Committee goes through its contents and a presentation made on it by the Consultant Evaluation Organization and approves it with or without appropriate changes.
- i. The final approved Evaluation report is sent to the Independent Assessor of KEA for rating. This rating has a bearing on the ranking of empanelled Consultant Evaluation Organizations.

In 2015-2016, 48 Consultant Evaluation Organizations were empanelled following the procedure prescribed by the Empanelment Manual and Six Independent Assessors were appointed for rating the evaluation reports as prescribed by the Empanelment Manual.

**Progress made by the KEA:** Karnataka Evaluation Authority has prepared and published the following Manuals relating to Evaluation Studies during 2014-2015.

- (A) The Manual for Empanelment of Consultants and Independent Assessors.
- (B) The Manual for Output Grading of Evaluation Studies.
- (C) The Human Resource Manual.
- (D) The Manual for Finance and Accounting.
- (E) The Technical Manual for Evaluation.

**Table 15.1: Achievement of KEA in conducting Evaluation Studies**

Sl. no.	Work Type	Achievement in	
		2014-15	2015-16 up to December 2015
1.	Approval of Terms of Reference of Evaluation Studies.	42	21
2.	Outsourcing External Studies.	17	24
3.	Completing Evaluation Studies.	47	14

**Table 15.2: List of studies received for approval upto December 2015**

Sl. No.	Name of the Evaluation Study	Name of the Department
1	Evaluation of Performance of the Mysore Sugar Company Limited	Public Enterprises
2	Evaluation of functioning of All Women Police Stations in Karnataka	Home
3	Evaluation study of Specialized Skill Development Institutions (SSDIs) of Industries and Commerce Department.	Industries and Commerce
4	Evaluation of Police Public Schools run by the Home Department of the Government of Karnataka.	Home
5	Evaluation of Working Women's Hostels funded by Department of Women & Child Development in Karnataka.	Women & Child Development
6	Impact of Individual Land Development Activity undertaken under MGNREGA.	RDPR
7	Impact Assessment of "Help Line for Senior Citizens" for Disabled Welfare Department.	Empowerment of Differently abled and Senior Citizens
8	National Food Security Mission scheme (NFSM) in Karnataka State (Revised).	Agriculture
9	Need and Functioning of Bayaluseeme Area Development Board, Chitradurga.	Planning
10	Need and Functioning of Malnad Area Development Board, Shivmogga.	Planning
11	Transfer of Development Rights Scheme in BBMP	Urban Development
12	Functioning of Schools for differently abled children under the Child Centric Scheme.	Empowerment of Differently abled and Senior Citizens
13	Performance of New Government Electric Factory, Hubballi.	Public Enterprises
14	Performance of the Kaigarika Vikasa Scheme.	Industries and Commerce

**Objectives of KEA for 2015-16:**

KEA has a programme of completing 35 Evaluation studies in 2015-16, with preference given to schemes and

programmes where departments and parastatals take the initiative. KEA has targeted to approve the Terms of Reference of 35 Evaluation studies in 2015-16.

**Table 15. 3: List of Final Reports of the studies commenced in 2015-16, expected to be available next year**

SL.NO	Name of the Evaluation Study	Department Related to it
1	Evaluation of Fodder Development Programme Implemented under SDP in Karnataka from 2009-10 to 2012-13.	Animal Husbandry and Veterinary Services department
2	Evaluation of the performance of Madilu programme in Karnataka.	Health and Family Welfare Department.
3	Evaluation of the Performance, Status, Effectiveness and Impact of Mobile Governance in Karnataka.	Centre for e-Governance.
4	Evaluation of Ganga Kalyana scheme from 2008-09 to 2012-13 implemented by the Karnataka Maharishi Valmiki Scheduled Tribes Development Corporation Ltd.	The Karnataka Maharishi Valmiki Scheduled Tribes Development Corporation Ltd.
5	Evaluation of Land Purchase and Land Allotment Scheme for Landless Scheduled Tribe Women for the Period 2009-10 to 2013-14 implemented by Karnataka Maharishi Valmiki Scheduled Tribes Development Corporation Ltd.	
6	Evaluation of Distribution of tax exempted diesel and kerosene to fishing boats in Karnataka.	Fisheries department.
7	Evaluation of Assistance to inland water fishermen for purchase of fishery requisite kits in Karnataka.	
8	Evaluation of Green House Farming under protected cultivation structure done under NHM (period 2010-11 to 2012-13) and RKVY (period 2012-13 to 2013-14).	Horticulture Department
9	Study of the migration of labour to and from Karnataka.	Karnataka Evaluation Authority.
10	Study of the status of some of the superstitions of Karnataka that are malignant, exploitative and offensive to human dignity and the change in their status of prevalence in the past 25 years.	
11	Evaluation of the Implementation of State Strategic Statistical Plan 2010-14.	KSSDA of Planning Department.
12	Evaluation of Micro Credit Scheme for Stree Shakthi, SHGs implemented from 2011-12 to 2014-15 by the Karnataka State Women Development Corporation, Bengaluru.	Karnataka State Women Development Corporation, Bengaluru.
13	Evaluation of Rehabilitation of Devadasi Programme, implemented by the Karnataka State Women's Development Corporation, Bengaluru.	
14	Evaluation of "Ksheera Sanjeevini" Project for Socio economic Development of women through dairying Implemented by Karnataka Milk Federation Ltd. Bengaluru.	Karnataka Co-operative Milk Producer's Federation Limited (KMF)
15	Evaluation of Yeshasvini Co-operative Health Care Scheme in Karnataka for the period 2010-11 to 2014-15.	Co-operation Department

**Table 15. 3: List of Final Reports of the studies commenced in 2015-16, expected to be available next year**

16	Evaluation of Utilisation of Individual Household Latrines Constructed in the State from 2010-11 to 2014-15	State Water and Sanitation Agency Government of Karnataka RDPR Department.
17	Evaluation of Self Employment Programme, Industry Service & Business and Dairy Scheme implemented from 2010-11 to 2014-15 by the Dr. B.R. Ambedkar Development Corporation Limited, Karnataka.	Dr. B.R. Ambedkar Development Corporation Limited,
18	Evaluation of "Socio Economic Development of dairying women under phase VIII of STEP scheme of the Government of India in Karnataka"	Karnataka Co-operative Milk Producer's Federation Limited (KMF)
19	Evaluation of "Integrated Project on Vegetables Production for benefit of Rural Women under STEP scheme operating in four Districts of Karnataka"	Women and Child Development Department
20	Evaluation of "Support to Training and Empowerment Programme for Women (STEP) under Sheep Rearing" implemented in Haveri District by the NGO Sri Shakthi Association (R) Guttur Post, Harihar, Karnataka.	
21	Evaluation of "Support to Training and Empowerment Programme for Women (STEP) under Goatery Project" implemented in Dharwad Taluk by the NGO Grama Chetana, Sattigeri, of Belagavi District in Karnataka.	

As an activity ancillary to evaluation, KEA will be empanelling more Consultant Evaluation Organizations and Independent Assessors.

**A. Sample Check on Developmental Programmes:** Sample checks on developmental programme are being conducted by the Directorate of Economics Statistics of selected schemes. The purpose is to cross verify the assets created by the departments and delivery of service and utilization by the eligible beneficiaries. This will facilitate the departments for on course correction and improvements in implementation of the schemes for better delivery of services. The Directorate of economics and statistics during 2015-16 taken up 4 schemes for studies.

1. Maintenance of Pre- Metric Hostels.

2. Supply of Medicines from Animal Husbandry and Veterinary Services Department  
3. Prasoothi Araiike.

4. Construction of Anganavadi Buildings. The study of Prasoothi Araiike has been published and the other three studies are in advance stage of completion and are expected to be published by March 2015.

**Rapid Assessment Survey:** Directorate of Economics & Statistics has undertaken rapid assessment survey of following four major schemes launched by the Government recently to check the outcome. The field work for all the four programmes is completed and the preparation of report is under progress.

1. Anna Bhagaya  
2. Ksheera Bhagaya  
3. Interest Subvention Scheme  
4. Krishi Bhagaya

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Economic Survey of Karnataka  
2015-16

**STATISTICAL APPENDIX**



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### Appendix 1.1

#### Selected Socio- Economic Indicators of States in India

State	Geographical Area(in Lakh Sq. Km. ) *	Population (in lakh) *	Density of Population(per Sq Km) *	% of Urban Population to total Population *	% of State Population to all India Population* *	Decennial growth rate of Population % *	Sex Ratio *
Reference Year/Date	2011 Census	2011 Census	2011 Census	2011 Census	2011 Census	2001-2011 Census	2011 Census
1	2	3	4	5	6	7	8
Andhra Pradesh	2.75	845.81	308	33.36	6.99	11.0	993
Arunachal Pradesh	0.84	13.84	17	22.94	0.11	26.0	938
Assam	0.78	312.06	398	14.10	2.58	17.1	958
Bihar	0.94	1040.99	1106	11.29	8.60	25.4	918
Jharkhand	0.80	329.88	414	24.05	2.73	22.4	949
Delhi	0.01	167.88	11320	97.50	1.39	21.2	868
Goa	0.04	14.58	394	62.17	0.12	8.2	973
Gujarat	1.96	604.39	308	42.60	4.99	19.3	919
Haryana	0.44	253.51	573	34.88	2.09	19.9	879
Himachal Pradesh	0.56	68.65	123	10.03	0.57	12.9	972
Jammu & Kashmir	2.22	125.41	124	27.38	1.04	23.6	889
Karnataka	1.92	610.95	319	38.67	5.05	15.6	973
Kerala	0.39	334.06	860	47.70	2.76	4.9	1084
Madhya Pradesh	3.08	726.27	236	27.63	6.00	20.3	931
Chattisgarh	1.35	255.45	189	23.24	2.11	22.6	991
Maharashtra	3.08	1123.74	365	45.22	9.28	16.0	929
Manipur	0.22	25.70	115	32.45	0.21	18.6	992
Meghalaya	0.22	29.67	132	20.07	0.25	27.9	989
Mizoram	0.21	10.97	52	52.11	0.09	23.5	976
Nagaland	0.17	19.79	119	28.86	0.16	-0.6	931
Odisha	1.56	419.74	270	16.69	3.47	14.0	979
Punjab	0.50	277.43	551	37.48	2.29	13.9	895
Rajasthan	3.42	685.48	200	24.87	5.66	21.3	928
Sikkim	0.07	6.10	86	25.15	0.05	12.9	890
Tamil Nadu	1.30	721.47	555	48.40	5.96	15.6	996
Tripura	0.10	36.74	350	26.17	0.30	14.8	960
Uttar Pradesh	2.41	1998.12	829	22.27	16.51	20.2	912
Uttarakhand	0.53	100.86	189	30.23	0.83	18.8	963
West Bengal	0.89	912.76	1028	31.87	7.54	13.8	950
<b>India *</b>	<b>32.87</b>	<b>12105.93</b>	<b>382</b>	<b>31.15</b>	<b>100.00</b>	<b>17.7</b>	<b>943</b>

\* excludes Union Territories

(Contd..... )

### Appendix 1.1

#### Selected Socio- Economic Indicators of States in India

State	Percentage of SC & ST Population to total population *	Percentage of main workers to Total Workers *	Percentage of Agricultural Labourers to Total Workers *	Female work participation rate *	Literacy Percentage		
					Total *	Male *	Female *
Reference Year	2011 Census	2011 Census	2011 Census	2011 Census	2011 Census	2011 Census	2011 Census
1	9	10	11	12	13	14	15
Andhra Pradesh	23.4	83.8	43.0	36.2	67.02	74.88	58.68
Arunachal Pradesh	68.8	81.5	6.2	35.4	65.38	72.55	53.52
Assam	19.6	72.6	15.4	22.5	72.19	77.85	63
Bihar	17.2	61.5	52.8	19.1	61.8	71.2	46.4
Jharkhand	38.3	52.1	33.9	29.1	66.41	76.84	52.04
Delhi	16.8	95.0	0.7	10.6	86.21	90.94	68.85
Goa	11.9	82.5	4.6	21.9	88.7	92.65	82.16
Gujarat	21.5	82.2	27.6	23.4	78.03	85.75	63.31
Haryana	20.2	78.7	17.1	17.8	75.55	84.06	56.91
Himachal Pradesh	30.9	57.9	4.9	44.8	82.8	89.53	73.51
Jammu & Kashmir	19.3	61.2	12.7	19.1	67.16	76.75	49.12
Karnataka	24.1	83.9	25.7	31.9	75.36	82.47	66.01
Kerala	10.6	80.3	11.4	18.2	94.00	96.11	100.76
Madhya Pradesh	36.7	71.9	38.6	32.6	69.32	78.73	54.49
Chattisgarh	43.4	67.7	41.8	39.7	70.28	80.27	59.58
Maharashtra	21.2	88.5	27.3	31.1	82.34	88.38	69.87
Manipur	38.9	73.8	9.6	38.6	79.21	86.06	71.73
Meghalaya	86.7	77.7	16.7	32.7	74.43	75.95	71.88
Mizoram	94.5	85.3	8.6	36.2	91.33	93.35	86.72
Nagaland	86.5	76.1	6.5	44.7	79.55	82.75	70.01
Odisha	39.9	61.0	38.4	27.2	72.87	81.59	62.46
Punjab	31.9	85.4	16.0	13.9	75.84	80.44	62.52
Rajasthan	31.3	70.5	16.5	35.1	66.11	79.19	47.76
Sikkim	38.4	74.8	8.4	39.6	81.42	86.55	66.39
Tamil Nadu	21.1	85.0	29.2	31.8	80.09	86.77	73.14
Tripura	49.6	73.3	24.1	23.6	87.22	91.53	78.98
Uttar Pradesh	21.3	67.8	30.3	16.7	67.68	77.28	51.36
Uttarakhand	21.7	74.1	10.4	26.7	78.82	87.4	67.06
West Bengal	29.3	73.9	29.3	18.1	76.26	81.69	66.57
<b>India *</b>	<b>25.2</b>	<b>75.2</b>	<b>30.0</b>	<b>25.5</b>	<b>74.04</b>	<b>82.14</b>	<b>65.46</b>

\* excludes Union Territories

(Contd..... )

**Appendix 1.1**

**Selected Socio- Economic Indicators of States in India**

State	Birth Rate	Death Rate	Infant Mortality Rate	Percapita Income at Current Prices (Rs)	No. of Students in Primary and Secondary Schools per 000' Population ( I - VIII )	Average Yield (qntls/Ha )	
						Total Cereals	Total Pulses
Reference Year/ Date	2011	2011	2011	2014-15	2013-14	2012-13	2012-13
1	16	17	18	19	20	21	22
Andhra Pradesh	17.5	7.4	41	95689	131	33.8	8.3
Arunachal Pradesh	19.4	5.8	33	101033	235	18.0	11.2
Assam	22.5	7.9	55	53618	186	20.4	6.0
Bihar	27.7	6.6	43	34856	204	24.8	10.5
Jharkhand	24.7	6.8	38	58344	201	21.4	10.4
Delhi	17.3	4.2	25	252011	175	35.5	21.0
Goa	13.1	6.6	10	274939	136	26.8	9.0
Gujarat	21.1	6.6	38	124358	153	22.2	8.7
Haryana	21.6	6.4	42	150260	156	38.0	8.0
Himachal Pradesh	16.2	6.7	36	119720	141	18.7	14.1
Jammu & Kashmir	17.6	5.4	39	65598	147	20.1	5.3
Karnataka	18.5	7.1	32	130897	136	19.1	5.6
Kerala	14.9	6.9	12	138390	123	25.7	10.4
Madhya Pradesh	26.6	8.1	56	51371	201	21.0	9.7
Chattisgarh	24.5	7.9	47	73758	180	16.9	7.0
Maharashtra	16.6	6.3	25	134081	144	11.9	7.0
Manipur	14.6	4.0	10	NA	214	21.3	9.4
Meghalaya	24.1	7.6	49	71101	249	20.2	10.2
Mizoram	16.3	4.4	35	85359	199	18.6	10.6
Nagaland	15.6	3.2	18	76679	208	20.9	10.9
Odisha	19.9	8.5	53	63108	152	18.0	5.1
Punjab	15.9	6.8	28	114561	145	43.8	8.2
Rajasthan	25.9	6.6	49	76881	179	17.9	6.0
Sikkim	17.2	5.4	24	NA	197	16.8	9.1
Tamil Nadu	15.7	7.4	21	135806	130	25.4	4.1
Tripura	13.9	4.8	28	NA	161	27.8	7.0
Uttar Pradesh	27.4	7.7	53	44197	184	27.5	9.9
Uttarakhand	18.5	6.1	34	139184	169	20.4	8.4
West Bengal	16.1	6.3	32	NA	145	27.8	9.5
<b>India</b>	<b>21.6</b>	<b>7.0</b>	<b>42</b>	<b>86879</b>	164	<b>24.5</b>	<b>7.9</b>

N A: Not Available

(Contd..... )

**Appendix 1.1**

**Selected Socio- Economic Indicators of States in India**

State	Average Yield (qntls/ha)			Per-capita Food grains production (Kgs)	Consumption of fertilizers per ha. of cropped area (Kg. per ha.)	Percentage of Net Area irrigated to total cropped area	Percentage of Net Area sown to total cropped area	Factor y Employment per lakh popn.
	Total Food Grains	Cotton	Sugar-cane					
<b>Reference Year/Date</b>	2012-13	2012-13	2012-13	2012-13	2013-14	2011-12	2010-11	2012-13
<b>1</b>	<b>23</b>	<b>24</b>	<b>25</b>	<b>26</b>	<b>27</b>	<b>28</b>	<b>29</b>	<b>30</b>
Andhra Pradesh	26.7	5.2	794.2	221	226.72	35.07	77.08	595
Arunachal Pradesh	17.7	-	197.1	267	0.00	20.50	76.62	0
Assam	19.6	#	356.1	169	65.41	3.87	67.57	538
Bihar	23.7	-	509.0	153	164.87	42.42	73.10	112
Jharkhand	18.8	-	690.4	138	82.45	10.01	86.87	570
Delhi	35.3	-	-	5	93.33	50.00	50.00	709
Goa	23.6	-	538.7	91	31.83	25.63	81.88	3827
Gujarat	19.7	6.0	721.0	117	119.52	34.56	84.12	2256
Haryana	36.9	6.9	736.3	640	179.48	47.24	54.08	2235
Himachal Pradesh	18.5	#	223.5	216	52.74	11.17	56.80	2692
Jammu & Kashmir	19.6	-	-	146	89.07	27.98	64.21	484
Karnataka	14.9	4.4	840.8	178	136.06	26.34	80.56	1411
Kerala	25.4	#	952.4	15	121.03	15.45	78.28	1139
Madhya Pradesh	16.8	6.2	444.0	326	84.43	35.78	68.58	416
Chattisgarh	15.1	#	27.6	299	100.22	24.95	82.82	678
Maharashtra	10.4	3.1	746.5	98	127.07	13.51	72.32	1588
Manipur	19.3	-	566.7	131	29.59	19.83	100.00	237
Meghalaya	20.1	#	26.8	89	14.22	19.23	84.02	404
Mizoram	17.6	#	51.4	38	35.67	9.77	97.74	0
Nagaland	19.7	#	435.2	304	4.45	18.58	80.09	154
Odisha	15.9	5.7	655.5	191	98.13	23.19	86.24	628
Punjab	43.5	7.1	713.1	1029	216.73	51.83	52.75	2103
Rajasthan	14.8	5.3	730.6	268	49.69	27.38	70.57	646
Sikkim	16.1	-	-	174	0.00	9.21	50.66	1685
Tamil Nadu	21.3	6.6	976.9	78	153.76	51.52	86.11	2724
Tripura	27.1	#	505.4	197	61.73	17.14	73.14	776
Uttar Pradesh	25.4	#	598.7	254	148.86	52.83	65.37	413
Uttarakhand	19.6	-	617.4	181	143.80	28.97	61.79	3324
West Bengal	27.2	#	1004.4	181	131.17	32.19	52.19	719
<b>India</b>	<b>21.3</b>	<b>4.9</b>	<b>682.5</b>	<b>212</b>	<b>125.39</b>	<b>32.79</b>	<b>71.16</b>	<b>1070</b>

(Contd..... )

**Appendix 1.1**  
**Selected Socio- Economic Indicators of States in India**

State	Percapita gross Output in Industries (Rs.in lakhs)	Percapita value added in industries (Rs.in lakhs)	No.of. Motor Vehicles per lakh of Population	Total Road Length per 100 Sq. Km. of Area	No.of Banking Offices per lakh of Population	Percapita Deposits (Rs.)	Percapita Bank Credit (Rs.)
Reference Year/Date	2012-13	2012-13	2012	2011	31.03.2013	31.03.2013	31.03.2013
1	31	32	33	34	35	36	37
Andhra Pradesh	1656.63	250.50	14689	86.53	10	46029	50604
Arunachal Pradesh	0.00	0.00	10910	25.74	7	49772	10561
Assam	1717.85	255.61	5791	308.26	5	24167	8884
Bihar	1755.44	100.46	2990	138.74	5	15215	4580
Jharkhand	5101.65	1171.91	9573	29.99	7	30788	9733
Delhi	1867.93	297.75	43781	1999.18	17	433880	423250
Goa	6802.34	2104.88	59356	287.06	36	270557	76193
Gujarat	6142.48	807.99	23849	79.68	10	57716	41664
Haryana	5687.81	925.59	23581	94.38	13	64591	49143
Himachal Pradesh	3992.12	1053.41	10736	86.15	18	64818	22455
Jammu & Kashmir	2935.78	534.28	7312	12.14	10	45337	16629
Karnataka	4105.95	656.86	17857	146.92	12	73794	52655
Kerala	1923.12	210.95	20634	517.77	16	69487	50943
Madhya Pradesh	4804.51	746.42	11213	64.01	7	26662	15371
Chattisgarh	2161.21	255.76	12151	69.51	7	31501	16723
Maharashtra	4430.52	878.18	17292	133.41	9	154165	136154
Manipur	288.53	44.03	8366	85.70	4	19167	5258
Meghalaya	3424.17	992.93	6673	53.43	8	44831	10503
Mizoram	0	0	9298	46.53	10	37223	13119
Nagaland	567.03	86.51	14704	205.96	6	32633	9105
Odisha	4671.16	1015.71	8956	166.23	8	33419	15395
Punjab	1699.46	231.76	22575	167.18	17	70556	57150
Rajasthan	2512.68	443.22	13108	70.51	8	24828	22883
Sikkim	10181.69	6044.79	7049	65.25	16	80200	21627
Tamil Nadu	2316.94	406.96	24134	147.89	11	60079	73892
Tripura	257.17	74.48	5553	322.07	8	31556	10247
Uttar Pradesh	3103.93	422.69	7730	161.98	6	24873	10852
Uttarakhand	6737.41	1639.13	12334	92.14	15	63407	22086
West Bengal	3346.24	366.78	4230	337.13	7	46756	28792
<b>India</b>	<b>3364.51</b>	<b>562.40</b>	<b>13175</b>	<b>142.68</b>	<b>9</b>	<b>56380</b>	<b>44028</b>

Note:- # Data relates to 2010., P=Provisional. NA: Not Available.



**Appendix - 2.1**  
**Gross State Domestic Product - At Current Prices**

(Rs. Crore)

Sl. No	Industry	2011-12	2012-13	2013-14 SRE	2014-15 FRE	2015-16 AE
1	Crops	53395	56774	70781	79947	81006
2	Livestock	13497	15070	16019	19524	21570
3	Forestry and Logging	5935	6049	6651	6840	7099
4	Fishing	2723	3192	3849	5004	5316
5	Mining and Quarrying	4503	4073	5626	6101	6349
6	Manufacturing	97352	108721	117240	126175	136397
7	Electricity, Gas and Water supply	10829	11478	13916	15230	16067
8	Construction	49053	50860	55320	58442	62255
9	Trade and Repair Services	49570	57749	67780	76617	86312
10	Hotel and Restaurants	10873	11905	12898	14143	15507
11	Railways	2022	2298	2296	2603	2954
12	Road Transport	21957	25330	29882	34073	39183
13	Water Transport	269	253	267	268	276
14	Air Transport	374	678	545	714	754
15	Services incidental to Transport	472	398	457	529	571
16	Storage	276	315	351	395	444
17	Communication	8083	9061	11266	13857	17073
18	Financial Services	28794	32119	36014	39223	42719
19	Real estate, Ownership of Dwellings and Professional	143668	177315	212870	255521	306791
20	Public Administration	14888	17858	20541	23046	26022
21	Other Services	32561	38377	45849	52662	60207
	<b>Total GSVA at Basic Prices</b>	<b>551092</b>	<b>629874</b>	<b>730418</b>	<b>830915</b>	<b>934871</b>
	Product Taxes	70375	82515	93484	107761	124218
	Product Subsidies	18812	22373	26153	30837	36360
	<b>GSDP at Market Prices</b>	<b>602655</b>	<b>690015</b>	<b>797750</b>	<b>907839</b>	<b>1022729</b>
	Population ('000)	61482	62151	62827	63510	64201
	<b>Per Capita GSDP (Rs.)</b>	<b>98021</b>	<b>111022</b>	<b>126976</b>	<b>142944</b>	<b>159301</b>
	Primary Sector	80051	85158	102927	117416	121340
	Secondary Sector	157234	171060	186476	199848	214719
	Tertiary Sector	313807	373656	441015	513651	598812
	<b>Total GSVA at Basic Prices</b>	<b>551092</b>	<b>629874</b>	<b>730418</b>	<b>830915</b>	<b>934871</b>
	I. Agriculture	75549	81084	97301	111315	114992
	II. Industry	161736	175133	192102	205948	221068
	III. Services	313807	373656	441015	513651	598812
	<b>Total GSVA at Basic Prices</b>	<b>551092</b>	<b>629874</b>	<b>730418</b>	<b>830915</b>	<b>934871</b>

AE : Advance Estimates, FRE : First Revised Estimates, SRE : Second Revised Estimates.

**Appendix - 2.2**  
**Gross State Domestic Product - At Constant (2011-12) Prices**

(Rs. Crore)

Sl. No	Industry	2011-12	2012-13	2013-14 SRE	2014-15 FRE	2015-16 AE
1	Crops	53395	49326	56251	56577	52199
2	Livestock	13497	14078	14521	15217	15768
3	Forestry and Logging	5935	5764	5614	5526	5449
4	Fishing	2723	2659	2778	3107	3264
5	Mining and Quarrying	4503	3920	5108	5298	5408
6	Manufacturing	97352	103804	108553	114132	119862
7	Electricity, Gas and Water supply	10829	10589	12302	13104	13431
8	Construction	49053	46281	47090	48583	50528
9	Trade and Repair Services	49570	54584	59150	63637	66717
10	Hotel and Restaurants	10873	11253	11248	11732	11959
11	Railways	2022	2192	2130	2222	2363
12	Road Transport	21957	23959	26097	28340	30363
13	Water Transport	269	253	267	268	276
14	Air Transport	374	641	476	593	584
15	Services incidental to Transport	472	377	399	440	443
16	Storage	276	298	307	329	344
17	Communication	8083	8550	9851	11581	13208
18	Financial Services	28794	31481	32966	35866	39021
19	Real estate, Ownership of Dwellings and Professional	143668	161155	174382	196689	220217
20	Public Administration	14888	16673	17901	18907	19931
21	Other Services	32561	34841	37557	40540	43181
	<b>Total GSVA at Basic Prices</b>	<b>551092</b>	<b>582676</b>	<b>624950</b>	<b>672687</b>	<b>714517</b>
	Product Taxes	70375	75978	79825	88447	95472
	Product Subsidies	18812	20761	22886	26147	29183
	<b>GSDP at Market Prices</b>	<b>602655</b>	<b>637893</b>	<b>681889</b>	<b>734988</b>	<b>780805</b>
	Population ('000)	61482	62151	62827	63510	64201
	<b>Per Capita GSDP (Rs.)</b>	<b>98021</b>	<b>102636</b>	<b>108534</b>	<b>115728</b>	<b>121619</b>
	Primary Sector	80051	75746	84271	85725	82088
	Secondary Sector	157234	160674	167945	175819	183821
	Tertiary Sector	313807	346257	372733	411144	448607
	<b>Total GSVA at Basic Prices</b>	<b>551092</b>	<b>582676</b>	<b>624950</b>	<b>672687</b>	<b>714517</b>
	I. Agriculture	75549	71826	79163	80427	76680
	II. Industry	161736	164594	173053	181116	189230
	III. Services	313807	346257	372733	411144	448607
	<b>Total GSVA at Basic Prices</b>	<b>551092</b>	<b>582676</b>	<b>624950</b>	<b>672687</b>	<b>714517</b>

AE : Advance Estimates, FRE : First Revised Estimates, SRE : Second Revised Estimates.

**Appendix - 2.3**  
**Net State Domestic Product -- At Current Prices**

(Rs. Crore)

Sl. No	Industry	2011-12	2012-13 TRE	2013-14 SRE	2014-15 FRE	2015-16 AE
1	Crops	48074	50713	63828	71970	71854
2	Livestock	13297	14841	15777	19229	21244
3	Forestry and Logging	5870	5981	6575	6762	7018
4	Fishing	2403	2845	3441	4473	4752
5	Mining and Quarrying	3959	3579	4852	5260	5475
6	Manufacturing	83648	93142	100722	108398	117180
7	Electricity, Gas and Water supply	7194	7505	9137	9999	10549
8	Construction	46737	48175	52335	55289	58896
9	Trade and Repair Services	47521	55326	64926	73391	82678
10	Hotel and Restaurants	10424	11405	12355	13547	14854
11	Railways	1578	1798	1735	1967	2232
12	Road Transport	19967	23181	27582	31451	36167
13	Water Transport	245	232	246	247	255
14	Air Transport	340	621	503	659	696
15	Services incidental to Transport	429	364	422	488	527
16	Storage	237	273	298	335	377
17	Communication	6551	7417	9480	11660	14367
18	Financial Services	28339	31551	35330	38478	41908
19	Real estate, Ownership of Dwellings and Professional Services	133598	163888	196382	235729	283027
20	Public Administration	11487	13886	16323	18314	20679
21	Other Services	28136	33660	40706	46755	53453
	<b>Total NSVA at Basic Prices</b>	<b>500034</b>	<b>570384</b>	<b>662954</b>	<b>754404</b>	<b>848187</b>
	Product Taxes	70375	82515	93484	107761	124218
	Product Subsidies	18812	22373	26153	30837	36360
	<b>NSDP at Market Prices</b>	<b>551597</b>	<b>630526</b>	<b>730286</b>	<b>831328</b>	<b>936045</b>
	Population ('000)	61482	62151	62827	63510	64201
	<b>Per Capita NSDP (Rs.)</b>	<b>89717</b>	<b>101451</b>	<b>116238</b>	<b>130897</b>	<b>145799</b>
	Primary Sector	73603	77960	94473	107695	110343
	Secondary Sector	137579	148822	162193	173686	186624
	Tertiary Sector	288852	343602	406288	473023	551219
	<b>Total NSVA at Basic Prices</b>	<b>500034</b>	<b>570384</b>	<b>662954</b>	<b>754404</b>	<b>848187</b>
	I. Agriculture	69644	74381	89621	102434	104868
	II. Industry	141538	152401	167045	178947	192099
	III. Services	288852	343602	406288	473023	551219
	<b>Total NSVA at Basic Prices</b>	<b>500034</b>	<b>570384</b>	<b>662954</b>	<b>754404</b>	<b>848187</b>

**AE : Advance Estimates, FRE : First Revised Estimates, SRE : Second Revised Estimates.**

**Appendix - 2.4**  
**Net State Domestic Product - At Constant (2011-12) Prices**

**(Rs. Crore)**

<b>Sl. No</b>	<b>Industry</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14 SRE</b>	<b>2014-15 FRE</b>	<b>2015-16 AE</b>
1	Crops	48074	43712	50346	50366	45665
2	Livestock	13297	13866	14307	14993	15536
3	Forestry and Logging	5870	5701	5547	5460	5384
4	Fishing	2403	2332	2419	2706	2843
5	Mining and Quarrying	3959	3449	4406	4569	4665
6	Manufacturing	83648	88801	93131	97917	102833
7	Electricity, Gas and Water supply	7194	6954	8667	9232	9462
8	Construction	46737	43719	44318	45723	47553
9	Trade and Repair Services	47521	52299	56562	60852	63797
10	Hotel and Restaurants	10424	10782	10756	11218	11436
11	Railways	1578	1723	1628	1698	1806
12	Road Transport	19967	21902	23975	26035	27894
13	Water Transport	245	232	246	246	254
14	Air Transport	340	586	437	545	537
15	Services incidental to Transport	429	344	367	404	407
16	Storage	237	258	259	277	290
17	Communication	6551	6944	8132	9560	10902
18	Financial Services	28339	30930	32314	35156	38248
19	Real estate, Ownership of Dwellings and Professional Services	133598	148455	159261	179634	201122
20	Public Administration	11487	12856	13974	14758	15559
21	Other Services	28136	30348	32819	35427	37734
	<b>Total NSVA at Basic Prices</b>	<b>500034</b>	<b>526195</b>	<b>563870</b>	<b>606777</b>	<b>643927</b>
	Product Taxes	70375	75978	79825	88447	95472
	Product Subsidies	18812	20761	22886	26147	29183
	<b>NSDP at Market Prices</b>	<b>551597</b>	<b>581412</b>	<b>620809</b>	<b>669078</b>	<b>710215</b>
	Population ('000)	61482	62151	62827	63510	64201
	<b>Per Capita NSDP (Rs.)</b>	<b>89717</b>	<b>93548</b>	<b>98812</b>	<b>105350</b>	<b>110624</b>
	Primary Sector	73603	69061	77026	78095	74094
	Secondary Sector	137579	139474	146115	152871	159849
	Tertiary Sector	288852	317661	340729	375811	409985
	<b>Total NSVA at Basic Prices</b>	<b>500034</b>	<b>526195</b>	<b>563870</b>	<b>606777</b>	<b>643927</b>
	I. Agriculture	69644	65611	72620	73525	69429
	II. Industry	141538	142923	150521	157441	164513
	III. Services	288852	317661	340729	375811	409985
	<b>Total NSVA at Basic Prices</b>	<b>500034</b>	<b>526195</b>	<b>563870</b>	<b>606777</b>	<b>643927</b>

**AE : Advance Estimates, FRE : First Revised Estimates, SRE : Second Revised Estimates.**

**Appendix 2.5: Gross / Net State Domestic Product and Per Capita Income**

Sl. No	Year	Gross State Domestic Product (GSDP) at Current Prices (Rs. Lakhs)	Gross State Domestic Product (GSDP) at Constant Prices (Rs. Lakhs)	Net State Domestic Product (NSDP) at Current Prices (Rs. Lakhs)	Net State Domestic Product (NSDP) at Constant Prices (Rs. Lakhs)	Per Capita Income (Per Capita Net State Domestic Product (NSDP) at Current Prices) (in Rs.)
1	1960-61a			69164	69164	296
2	1961-62a			76445	74095	320
3	1962-63a			81180	78174	333
4	1963-64a			94137	81348	378
5	1964-65a			108609	81084	427
6	1965-66a			116372	75647	448
7	1966-67a			142621	85711	537
8	1967-68a			152521	85644	562
9	1968-69a			163106	93338	588
10	1969-70a			176316	99881	622
11	1970-71b			185811	185811	641
12	1971-72b			191564	188522	646
13	1972-73b			201243	176970	664
14	1973-74b			281535	204113	907
15	1974-75b			317771	203296	1000
16	1975-76b			309240	216477	951
17	1976-77b			328291	207012	986
18	1977-78b			381307	244450	1117
19	1978-79b			399507	253858	1142
20	1979-80b			482171	261228	1345
21	1980-81c	621032	621032	558736	558736	1520
22	1981-82c	716860	661709	642344	595740	1707
23	1982-83c	801276	680456	713722	610171	1855
24	1983-94c	961003	727767	861717	653582	2192
25	1984-85c	1083088	780809	969723	702315	2416
26	1985-86c	1157468	756897	1021834	673330	2495
27	1986-87c	1327121	824469	1173306	736513	2810
28	1987-88c	1515827	881547	1343482	788292	3159
29	1988-89c	1770911	956698	1567132	856321	3620
30	1989-90c	2021422	1013026	1779770	904572	4044
31	1990-91c	2330040	1025982	2055120	911210	4598
32	1991-92c	3009173	1149444	2673762	1026985	5889
33	1992-93c	3303585	1181049	2916231	1050758	6321
34	1993-94d	4107905	4107906	3698228	3698229	7838
35	1994-95d	4791516	4338693	4306510	3891705	8960
36	1995-96d	5621456	4616681	5002819	4097390	10217
37	1996-97d	6517572	5030220	5807078	4473655	11670
38	1997-98d	7304576	5377782	6475689	4751682	12832
39	1998-99d	8784091	6061964	7875624	5396093	15396
40	1999-00e	10124741	10124741	9053192	9053192	17502
41	2000-01e	10836170	10268651	9634777	9113592	18344
42	2001-02e	11284650	10555966	9889675	9278843	18547
43	2002-03e	12088876	11035977	10589474	9776504	19621
44	2003-04e	13098974	11417352	11423011	9966856	20901
45	2004-05f	16674713	16674713	14872897	14872898	26882
46	2005-06f	19590407	18427703	17491121	16403065	31239
47	2006-07f	22723706	20266010	20381918	18108596	35981
48	2007-08f	27062879	22820215	24302840	20380990	42419
49	2008-09f	31031233	24442138	27853414	21830924	48084
50	2009-10f	33755850	24759029	30074742	21836349	51364
51	2010-11f	41070316	27272131	36833840	24081677	62251
52	2011-12g	60265493	60265493	55159732	55159732	89717
53	2012-13g	69001501	63789339	63052580	58141198	101451
54	2013-14g SRE	79774992	68188853	73028562	62080864	116238
55	2014-15g FRE	90783909	73498795	83132779	66907786	130897
56	2015-16g AE	102272928	78080509	93604479	71021517	145799

Note: Estimates of Net State Domestic Product only were computed from 1960-61 to 1979-80.

- a) Computed with base year as 1960-61
- b) Computed with base year as 1970-71
- c) Computed with base year as 1980-81
- d) Computed with base year as 1993-94
- e) Computed with base year as 1999-2000
- f) Computed with base year as 2004-05
- g) Computed with base year as 2011-12

AE : Advance Estimates, FRE : First Revised Estimates, SRE : Second Revised Estimates,

Source: Directorate of Economics and Statistics, Government of Karnataka.

**Appendix 2.6**

**Gross / Net District Domestic Product and Per Capita Net District Income for the year 2013-14**

(Provisional) (Rs. Crore)

Sl. No	District	At Current Prices		At Constant (2011-12) Prices		Per capita Income (Net District Domestic Product (NDDP) at Current Prices) (in Rs.)
		Gross District Domestic Product (GDDP)	Net District Domestic Product (NDDP)	Gross District Domestic Product (GDDP)	Net District Domestic Product (NDDP)	
1	Bagalkote	2081815	1906061	1818629	1658488	107127
2	Bengaluru Urban	26851771	24580639	22813713	20731772	271387
3	Bengaluru Rural	1296833	1170013	1124490	1011512	127264
4	Belagavi	3559925	3263465	3140574	2868973	72428
5	Ballari	2735339	2481092	2356364	2126137	108454
6	Bidar	1235609	1137066	1059761	971243	70543
7	Vijayapura	1600515	1467417	1368700	1249437	71482
8	Chamarajanagar	976866	901002	862244	791963	93059
9	Chickballapur	1169790	1071829	998060	910834	90634
10	Chikkamagaluru	1970779	1804718	1658996	1512655	168412
11	Chitradurga	1326948	1214871	1099206	1001988	77759
12	Dakshina Kannada	4697010	4253511	4092492	3685480	218580
13	Davangere	1650103	1515368	1359275	1243129	82479
14	Dharwad	2007201	1849453	1720353	1576951	105677
15	Gadag	917392	842978	777912	711491	83800
16	Kalaburagi	1791547	1638016	1478377	1345934	67886
17	Hassan	1924707	1778226	1626389	1496695	105361
18	Haveri	1320419	1215268	1127828	1033063	80369
19	Kodagu	710719	654321	528652	485243	124636
20	Kolar	1485479	1355433	1342388	1219066	94021
21	Koppal	1056499	970682	883268	808771	73916
22	Mandya	2121930	1959560	1852783	1704009	114270
23	Mysuru	2796888	2559674	2413649	2197362	90626
24	Raichur	1464814	1344824	1212225	1108230	73851
25	Ramnagara	1285180	1169148	1122506	1016281	115436
26	Shivamogga	2300889	2117794	1943320	1780038	127655
27	Tumakuru	3048193	2776642	2649083	2403293	110646
28	Udupi	2136686	1954411	1848426	1681201	176479
29	Uttara Kannada	1419761	1310137	1227224	1126267	96066
30	Yadagiri	833387	764944	681963	623361	69014
	<b>State</b>	<b>79774995</b>	<b>73028564</b>	<b>68188852</b>	<b>62080865</b>	<b>126976</b>

Source: Directorate of Economics and Statistics, Government of Karnataka.

**Appendix 2.7**  
**Net District income in Karnataka at current and constant (2011-12) prices - 2013-14**

(Provisional) (Rs. Crore)

Sl. No	District	NSDP Current Prices				NSDP Constant Prices			
		Primary	Secondary	Tertiary	Total	Primary	Secondary	Tertiary	Total
1	Bagalkote	3737	5109	8457	17303	3278	4609	7177	15064
2	Bengaluru Urban	2195	47838	173110	223143	1749	43010	143544	188303
3	Bengaluru Rural	1557	3755	5310	10621	1280	3441	4467	9187
4	Belagavi	6920	7233	15472	29626	6400	6540	13118	26058
5	Ballari	5444	4847	12232	22523	4635	4305	10372	19311
6	Bidar	2213	1857	6253	10322	1840	1679	5302	8822
7	Vijayapura	3476	2803	7042	13321	2879	2506	5963	11348
8	Chamarajanagar	1801	1778	4600	8179	1657	1612	3925	7193
9	Chickballapur	2416	2263	5051	9730	1973	2055	4245	8273
10	Chikkamagaluru	3516	5308	7559	16383	2501	4802	6436	13739
11	Chitradurga	3124	1987	5917	11029	2343	1789	4969	9101
12	Dakshina Kannada	3465	16985	18164	38613	2736	15403	15335	33475
13	Davangere	4139	3287	6331	13757	3016	2945	5330	11291
14	Dharwad	1892	4716	10181	16789	1546	4178	8599	14323
15	Gadag	1525	1559	4569	7653	1177	1412	3874	6462
16	Kalaburagi	4834	2278	7758	14870	3599	2072	6554	12225
17	Hassan	3331	2978	9834	16143	2596	2650	8349	13594
18	Haveri	3064	1925	6043	11032	2543	1732	5107	9383
19	Kodagu	2814	820	2306	5940	1722	739	1947	4407
20	Kolar	3214	2975	6115	12305	3202	2723	5148	11073
21	Koppal	2855	1684	4272	8812	2209	1524	3612	7346
22	Mandya	3548	4170	10071	17789	3114	3749	8614	15477
23	Mysuru	3768	4719	14750	23237	3265	4288	12405	19958
24	Raichur	3558	1974	6677	12208	2674	1761	5631	10066
25	Ramnagara	1944	3613	5056	10614	1692	3300	4240	9231
26	Shivamogga	3857	5278	10091	19225	2996	4661	8511	16168
27	Tumakuru	4051	8560	12595	25206	3469	7741	10619	21829
28	Udupi	2409	5730	9603	17742	1971	5177	8122	15270
29	Uttara Kannada	1926	2827	7140	11893	1654	2514	6062	10230
30	Yadagiri	1880	1336	3728	6944	1310	1198	3154	5662
	<b>State</b>	<b>94473</b>	<b>162192</b>	<b>406287</b>	<b>662952</b>	<b>77026</b>	<b>146115</b>	<b>340731</b>	<b>563869</b>

Source: Directorate of Economics and Statistics, Government of Karnataka.

**Appendix -2.8**  
**Index Numbers of Wholesale Prices in India**

**Base Year : 2004-05=100**

Sl. No.	Item group	Weight	2013-14		2014-15		2015-16		Percentage variation in December over April		
			April	December	April	December	April	December	2013-14	2014-15	2015-16
1	Primary Articles	20.12	226.5	243.7	242.4	244.4	243.6	257.8	7.59	0.83	5.83
2	Fuel & Power	14.91	193.7	211.1	211.8	194.6	184.3	176.8	8.98	-8.12	-4.07
3	Manufactured Products	64.97	149.1	152.5	154.6	154.7	153.9	152.6	2.28	0.06	-0.84
All Commodities		100.00	171.3	179.6	180.8	178.7	176.4	177.4	4.85	-1.16	0.57

Source: Office of the Economic Adviser, Ministry of Commerce and Industry, GOI.

**Appendix - 2.9 All - India Wholesale Price Index Numbers**

Year	Primary Articles	All Commodities	Percentage variation over previous year/month	
			Primary Articles	All Commodities
<b>Base year: 1993-94=100</b>				
2000-01	162.5	155.7	2.85	7.16
2001-02	168.4	161.3	3.63	3.60
2002-03	174.0	166.8	3.33	3.41
2003-04	181.5	175.9	4.31	5.46
2004-05	188.1	187.3	3.64	6.48
<b>New Base year: 2004-05=100</b>				
2005-06	104.3	104.4	4.30	4.40
2006-07	114.3	111.3	9.59	6.61
2007-08	123.9	116.6	8.40	4.76
2008-09	137.5	126.0	10.98	8.06
2009-10	154.9	130.8	12.65	3.81
2010-11	182.0	143.3	17.50	9.56
2011-12	200.3	156.1	10.05	8.93
2012-13	220.0	167.6	9.84	7.37
2013-14	241.6	177.6	9.82	5.99
2014-15	248.8	181.2	2.98	2.00
<b>(April 2015 to December 2015)</b>				
April 2015	243.6	176.4	1.92	0.17
May 2015	244.2	178.0	0.25	0.91
June 2015	249.1	179.1	2.01	0.62
July 2015	246.4	177.6	-1.08	-0.84
August 2015	250.2	176.5	1.54	-0.62
September 2015	251.9	176.5	0.68	0.00
October 2015	253.4	176.9	0.60	0.23
November 2015	256.5	177.5	1.22	0.34
December 2015	257.8	177.4	0.51	-0.06

Source: Office of the Economic Adviser, Ministry of Commerce and Industry, GOI.



**Appendix - 2.10 Wholesale Price Index Numbers of Agricultural Commodities in Karnataka**

**Base year : 1981-82=100**

Year	Index	Percentage variation over previous year/month
2000-01	402	-6.29
2001-02	387	-3.73
2002-03	397	2.58
2003-04	428	7.81
2004-05	439	2.57
2005-06	461	5.01
2006-07	501	8.68
2007-08	546	8.98
2008-09	671	22.89
2009-10	754	12.37
2010-11	794	5.31
2011-12	891	12.22
2012-13	978	9.76
2013-14	1042	6.54
2014-15	1151	10.46
<b>(April 2015 to December 2015)</b>		
April 2015	1178	1.03
May 2015	1172	-0.51
June 2015	1188	1.37
July 2015	1201	1.09
August 2015	1221	1.67
September 2015	1229	0.66
October 2015	1232	0.24
November 2015	1219	-1.06
December 2015	1211	0.66

Source : Directorate of Economics and Statistics, GOK.

**Appendix -2.11 Groupwise Index Numbers of Wholesale Prices of Agricultural Commodities in Karnataka**

**Base Year 1981-82=100**

Sl. No	Commodity Group	Weight	2013-14		2014-15		2015-16		Percentage variation in December over April		
			April	December	April	December	April	December	2013-14	2014-15	2015-16
1	Cereals	29.89	1162	1131	1121	1100	1122	1196	-2.67	-1.87	6.60
2	Pulses	4.92	1142	1114	1113	1502	1533	2275	-2.45	34.95	48.40
3	Oilseeds	17.31	1126	967	901	898	1059	1102	-14.12	-0.33	4.06
4	Gur & Sugar	14.56	674	644	668	634	628	612	-4.45	-5.09	-2.55
5	Fiber	9.64	751	761	750	736	746	788	1.33	-1.87	5.63
6	Condiments and Spices	2.27	799	966	1004	1072	993	1139	20.90	6.77	14.70
7	Miscellaneous *	21.41	1154	1291	1527	1854	1859	1677	11.87	21.41	-9.79
<b>All Commodities</b>		100.00	1034	1026	1065	1143	1178	1211	-0.77	7.32	2.80

Note: \* Miscellaneous items include coffee, onion, potato, tobacco, tamarind, coconut and arecanut.

Source: Directorate of Economics and Statistics, GOK.

**Appendix - 2.12**

**Consumer Price Index Numbers for Industrial Workers at All India and Karnataka**

Month	All India			Karnataka*		
	Base year : 2001=100			Base year : 1987-88=100		
	2013-14	2014-15	2015-16	2013-14	2014-15	2015-16
April	226	242	256	667	715	749
May	228	244	258	674	720	761
June	231	246	261	686	731	769
July	235	252	263	690	744	773
August	237	253	264	695	745	777
September	238	253	266	699	744	780
October	241	253	269	705	745	786
November	243	253	270	709	752	795
December	239	253	269	704	751	798
January	237	253		706	751	
February	238	253		704	748	
March	239	254		708	746	

Note : \* Average of 16 centres (11 State series + 5 Central series)

Source : 1) Labour Bureau, Shimla, GOI. 2) Directorate of Economics and Statistics, GOK.

**Appendix- 2.13**

**Consumer Price Index Numbers for Industrial Workers in Karnataka**

Sl. No.	Centres	2013-14		2014-15		2015-16		Percentage variation in December over April		
		April	December	April	December	April	December	2013-14	2014-15	2015-16
<b>Central Series (Base year: 2001=100)</b>										
1	Bengaluru	236	243	247	262	260	277	2.97	6.07	6.54
2	Belagavi	239	246	247	257	258	275	2.93	4.05	6.59
3	Hubbali-Dharwad	239	256	260	272	273	291	7.11	4.62	6.59
4	Madikere	236	248	246	262	260	276	5.08	6.50	6.15
5	Mysuru	239	252	256	262	262	275	5.44	2.34	4.96
<b>State Series (Base year : 1987-88=100)</b>										
6	Ballari	578	626	634	659	662	716	8.30	3.94	8.16
7	Bhadravathi	631	677	692	710	711	759	7.29	2.60	6.75
8	Davanagere	677	737	745	774	777	824	8.86	3.89	6.05
9	Dandeli	611	675	688	722	722	761	10.47	4.94	5.40
10	Kalaburagi	545	608	616	646	653	697	11.56	4.87	6.74
11	Harihar	582	630	638	663	668	714	8.25	3.92	6.89
12	Hassan	603	671	684	720	722	767	11.28	5.26	6.23
13	Mandya	676	734	744	774	773	815	8.58	4.03	5.43
14	Mangaluru	536	594	612	641	649	697	10.82	4.74	7.40
15	Raichur	668	726	735	766	772	820	8.68	4.22	6.22
16	Tumakuru	505	558	566	597	600	656	10.50	5.48	9.33

Source: 1. Labour Bureau, Shimla, GOI.

2. Directorate of Economics & Statistics, GOK.

**Appendix - 2.14 Consumer Price Index Numbers for Industrial Workers at selected centres in Karnataka State**

**CENTRAL SERIES**

Base Year: 2001=100

Year/ Month	BENGALURU		BELAGAVI		HUBBALLI-DHARWAD		MADIKERI		MYSURU		
	Food	General	Food	General	Food	General	Food	General	Food	General	
Weight →	45.53	100.00	51.76	100.00	49.51	100.00	55.41	100.00	48.05	100.00	
2006-07	128	128	126	127	126	125	118	116	125	125	
2007-08	140	138	140	135	138	135	128	122	135	132	
2008-09	163	154	156	147	159	151	153	139	156	146	
2009-10	185	171	183	167	181	169	176	160	180	165	
2010-11	198	185	201	184	196	185	191	176	193	177	
2011-12	206	197	226	204	217	204	202	191	204	191	
2012-13	235	217	247	222	245	225	228	216	231	212	
2013-14	279	242	281	246	268	252	269	244	286	248	
2014-15	295	258	289	256	279	270	284	259	293	260	
<b>(April 2015 to December 2015)</b>											
April 2015	298	260	286	258	275	273	281	260	290	262	
May 2015	307	265	301	266	286	279	293	268	294	265	
June 2015	311	269	308	270	290	281	298	271	301	268	
July 2015	311	270	304	268	289	282	300	272	303	270	
August 2015	312	271	306	269	288	281	307	276	305	270	
September 2015	310	271	306	270	298	286	303	274	305	270	
October 2015	316	273	306	270	304	289	302	274	309	272	
November 2015	323	276	310	273	308	291	305	275	313	274	
December 2015	324	277	313	275	308	291	306	276	315	275	

Source: Directorate of Economics & Statistics, GOK.

**Appendix -2.15 Consumer Price Index Numbers for Industrial Workers at selected centres in Karnataka State**

**STATE SERIES**

Base Year: 1987-88=100

Year/ Month	BALLARI		BADRAVATHI		DAVANAGERE		DANDELI		KALABURAGI		HARIHARA	
	Food	General	Food	General	Food	General	Food	General	Food	General	Food	General
Weight →	54.73	100.00	48.53	100.00	52.53	100.00	49.22	100.00	49.23	100.00	49.58	100.00
2006-07	340	315	382	330	390	328	381	353	337	308	343	304
2007-08	381	341	406	349	434	355	415	371	390	330	387	328
2008-09	452	387	464	388	498	405	475	408	452	373	439	362
2009-10	530	429	547	436	574	461	538	449	485	398	491	388
2010-11	560	457	557	451	615	495	580	474	527	425	525	407
2011-12	583	479	619	508	674	549	656	524	606	478	583	457
2012-13	669	539	718	586	785	629	736	575	658	524	674	534
2013-14	755	612	825	665	916	718	828	654	744	587	781	616
2014-15	797	652	868	706	961	767	859	710	789	637	809	657
<b>(April 2015 to December 2015)</b>												
April 2015	795	662	871	711	959	777	853	722	803	653	807	668
May 2015	802	666	876	714	965	780	860	726	810	656	815	672
June 2015	808	670	886	718	971	783	865	729	816	660	820	675
July 2015	810	676	888	723	972	788	874	735	818	666	818	683
August 2015	823	684	905	731	984	795	884	741	837	674	828	688
September 2015	837	691	918	738	1002	803	892	746	848	679	842	696
October 2015	858	702	929	743	1012	809	904	752	856	685	852	701
November 2015	874	712	949	753	1030	818	908	757	877	694	873	711
December 2015	880	716	962	759	1037	824	915	761	883	697	877	714

Source: Directorate of Economics & Statistics, GOK.

**Appendix -2.15 (Contd....) Consumer Price Index Numbers for Industrial Workers at selected centres in Karnataka State**

STATE SERIES

Base Year-1987-88=100

Year/ Month	HASSAN		MANDYA		MANGALURU		RAICHUR		TUMAKURU	
	Food	General	Food	General	Food	General	Food	General	Food	General
Weight →	56.02	100.00	53.48	100.00	58.11	100.00	52.71	100.00	41.29	100.00
2006-07	342	315	363	328	348	312	335	339	349	279
2007-08	366	328	405	351	375	332	384	371	393	300
2008-09	419	368	473	393	444	373	457	423	456	335
2009-10	490	415	543	438	494	408	550	482	527	373
2010-11	538	453	583	481	548	444	578	510	564	395
2011-12	583	497	637	538	584	479	654	563	576	421
2012-13	670	561	740	621	592	501	738	626	649	463
2013-14	795	648	871	716	688	575	833	708	796	542
2014-15	845	707	923	764	753	633	875	756	855	586
<b>(April 2015 to December 2015)</b>										
April 2015	847	722	929	773	775	649	888	772	871	600
May 2015	852	726	937	777	782	653	888	775	879	604
June 2015	863	731	941	781	793	659	895	779	891	610
July 2015	868	736	939	786	800	665	907	787	882	618
August 2015	883	744	952	793	811	672	914	793	902	627
September 2015	900	749	962	798	823	679	923	799	910	634
October 2015	909	755	971	803	831	684	934	806	921	640
November 2015	917	763	986	811	846	693	951	816	943	651
December 2015	923	767	990	815	854	697	956	820	950	656

Source: Directorate of Economics & Statistics, GOK.

**Appendix - 2.16**

**Consumer Price Index Numbers for Agricultural Labourers at All India and Karnataka**

Base Year: 1986-87=100

Item	2013-14		2014-15		2015-16		Percentage variation in December over April			
	April	December	April	December	April	December	2013-14	2014-15	2015-16	
<b>Karnataka</b>										
i)	Food	793	832	827	860	870	974	4.92	3.99	11.95
ii)	General	775	817	824	871	884	957	5.42	5.70	8.26
<b>All-India</b>										
i)	Food	695	752	751	782	772	829	8.20	4.13	7.38
ii)	General	711	759	771	807	805	853	6.75	4.67	5.96

Source: Labour Bureau, Shimla, GOI.

**Appendix - 2.17 Consumer Price Index Numbers for Agricultural Labourers at All India and Karnataka**

**Base Year : 1986-87=100**

Year/Month	All India		Karnataka	
	Food	General	Food	General
2000-01	303	305	311	306
2001-02	302	309	303	306
2002-03	312	319	319	320
2003-04	325	331	340	338
2004-05	333	340	343	343
2005-06	345	353	332	339
2006-07	376	380	349	358
2007-08	406	409	394	397
2008-09	452	450	451	445
2009-10	522	513	536	517
2010-11	572	564	595	575
2011-12	602	611	657	649
2012-13	658	672	737	724
2013-14	737	750	836	815
2014-15	778	800	860	863
<b>(April 2015 to December 2015)</b>				
April 2015	772	805	870	884
May 2015	780	811	880	890
June 2015	790	820	901	904
July 2015	792	822	908	910
August 2015	805	832	929	924
September 2015	814	839	933	927
October 2015	826	849	949	938
November 2015	831	853	966	950
December 2015	829	853	974	957

Source : Labour Bureau, Shimla, GOI.

**Appendix - 2.18 Rural Retail Price Index Numbers in Karnataka**

**Base Year : 1970=100**

Year	Index	Percentage variation over previous year/month
2000-01	1395	1.53
2001-02	1445	3.58
2002-03	1458	0.90
2003-04	1528	4.80
2004-05	1606	5.10
2005-06	1669	3.92
2006-07	1825	9.35
2007-08	1922	5.32
2008-09	2171	12.96
2009-10	2641	21.65
2010-11	2911	10.22
2011-12	3231	10.99
2012-13	3565	10.34
2013-14	3923	10.05
2014-15	4189	6.78
<b>(April 2015 to December 2015)</b>		
April 2015	4285	0.13
May 2015	4323	0.89
June 2015	4388	1.50
July 2015	4469	1.85
August 2015	4718	5.57
September 2015	4785	1.42
October 2015	4873	1.83
November 2015	4922	1.01
December 2015	4938	0.33

Source : Directorate of Economics and Statistics, GOK.

**Appendix - 2.19**  
**Urban Retail Price Index Numbers in Karnataka**

**Base Year : 1970=100**

<b>Year</b>	<b>Index</b>	<b>Percentage variation over previous year/month</b>
2000-01	1012	-5.33
2001-02	1045	3.26
2002-03	1087	4.02
2003-04	1193	9.75
2004-05	1257	5.36
2005-06	1296	3.10
2006-07	1347	3.94
2007-08	1425	5.79
2008-09	1589	11.51
2009-10	1878	18.19
2010-11	1982	5.54
2011-12	2161	9.03
2012-13	2441	12.96
2013-14	2810	15.12
2014-15	2996	6.62
<b>(April 2015 to December 2015)</b>		
April 2015	3042	0.08
May 2015	3073	1.02
June 2015	3111	1.24
July 2015	3149	1.22
August 2015	3366	6.89
September 2015	3381	0.45
October 2015	3450	2.04
November 2015	3470	0.58
December 2015	3476	0.17

Source : Directorate of Economics and Statistics, GOK.

### Appendix 3.1

#### Allocation of Plan Outlay to Panchayat Raj Institutions (PRI) in Karnataka

(Rs. Crore)

Year	State Plan Outlay			Allocation of Plan Outlay to PRIs			% of PRI Plan Outlay to State Plan Outlays		
	State	Centre	Total	State	Centre	Total	State	Centre	Total
1992-93	2159	466	26925	374	296	670	17	63	25
1993-94	3025	596	3621	471	322	793	15	54	22
1994-95	3383	792	4175	538	435	973	16	55	23
1995-96	3758	890	4648	620	480	1100	16	54	24
1996-97	4360	951	5311	732	541	1273	17	57	24
1997-98	4545	1090	5635	732	688	1420	16	63	25
1998-99	5353	1160	6513	732	715	1447	14	65	22
1999-00	5888	1199	7087	792	736	1528	13	61	22
2000-01	7274	1232	8506	962	735	1697	13	60	20
2001-02	8588	1017	9605	1083	751	1834	13	74	20
2002-03	8611	911	9522	617	624	1241	7	69	13
2003-04	9780	890	10670	688	614	1302	7	69	12
2004-05	12323	988	13311	1013	655	1668	8	66	13
2005-06	13555	1054	14609	1992	877	2869	15	83	20
2006-07	16166	1640	17806	2176	1256	3432	13	77	19
2007-08	17783	2749	20532	2241	1330	3571	13	48	17
2008-09	25953	2246	28199	2632	1785	4417	10	79	16
2009-10	29500	2931*	32431	2880	1857	4737	10	63	15
2010-11	31000	2764*	33764	3010	1860	4870	10	67	14
2011-12	38070	2802*	40872	3726	2316	6042	10	83	15
2012-13	39764	3208*	42972	4055	3754	7809	10	48	16
2013-14	48450	7243*	55693	4841	4080	8921	10	40	15
2014-15	65600	1476*	67076	9676	804	10480	15	54	15
2015-16	72597	796*	73392	10776	552	11328	15	69	15

\* Includes Centre's share of allocation under Mahatma Gandhi NREGS, Swarna Jayanti Grama Swarozgar Yojana, District Rural Development Agency, Integrated Waste Land Development Programme, Drought Prone Area Programme and Desert Development Programme as per the budget link document.

**Appendix 3.2**  
**Trends in revenue and capital receipts in Karnataka**

(Rs. Crore)

Year	State's Own Tax Revenues	Share in Central Taxes	Total Tax Receipts	Total Non-Tax Receipts	Total Revenue Receipts	Total Capital Receipts	Aggregate Receipts
2000-01	9042.68	2573.83	11616.51	1659.97	14822.72	4807.6	19630.32
2005-06	18631.55	4213.42	22844.97	3874.71	30352.05	4401.54	34753.59
2006-07	23301.03	5374.33	28675.36	4098.41	37586.94	6444.85	44031.79
2007-08	25986.76	6779.23	32765.99	3357.66	41151.14	6275.47	47426.61
2008-09	27645.66	7153.77	34799.43	3158.99	43290.68	9466.32	52757.00
2009-10	30578.61	7359.97	37938.58	3333.80	49155.70	13012.46	62168.16
2010-11	38473.13	9506.30	47979.43	3358.28	58206.23	12215.64	70421.86
2011-12	46476.01	11074.99	57551.00	4086.86	69806.27	15317.53	85123.80
2012-13	53753.56	12647.14	66400.70	3966.11	78176.22	16878.51	95054.73
2013-14	62603.54	13808.27	76411.81	4031.89	89542.52	19533.42	109075.94
2014-15(RE)	68554.09	15410.01	83964.10	4465.33	108907.75	21689.71	130597.46
2015-16(BE)	76445.39	24789.79	101235.18	5206.17	116360.32	22509.88	138870.20

RE=Revised Estimates, BE=Budget Estimates

**Appendix 3.3**  
**Trends in developmental and non-developmental expenditure in Karnataka**

(Rs. Crores)

Year	Developmental Expenditure	Developmental Expenditure as % of Total Expenditure	Non-Developmental Expenditure	Non-Developmental Expenditure as % of Total Expenditure	Aggregate Expenditure
2000-01	12921.21	65.06	6742.44	34.94	19663.65
2001-02	14351.59	65.67	7500.27	34.33	21851.86
2002-03	14551.24	60.70	9421.93	39.30	23973.17
2003-04	15483.22	53.22	13607.47	46.78	29090.69
2004-05	19321.24	56.72	14742.56	43.28	34063.80
2005-06	22733.77	65.47	11990.24	34.53	34724.01
2006-07	29952.24	68.30	13899.82	31.70	43852.06
2007-08	33642.14	70.72	13926.45	29.28	47568.59
2008-09	37133.30	69.79	16072.05	30.21	53205.35
2009-10	44923.87	72.55	16993.52	27.44	61917.39
2010-11	51626.38	72.74	19344.94	27.26	70971.32
2011-12	60929.69	72.14	23533.97	27.86	84463.66
2012-13	68067.53	71.66	26922.26	28.34	94989.79
2013-14	76328.45	69.99	32729.25	30.01	109057.70
2014-15(RE)	92761.86	71.12	37665.29	28.88	130427.15
2015-16(BE)	98200.56	70.52	41060.41	29.48	139260.97

RE=Revised Estimates, BE=Budget Estimates



**Appendix 3.4**  
**Developmental and non-developmental expenditure, Karnataka 2013-14 to 2015-16:**  
**revenue, capital and loans**

(Rs. Crore)

Category of Expenditure		2013-14 (Accounts)			
		Revenue	Capital	Loan	Total
<b>I.</b>	<b>Developmental Expenditure (A+B)</b>	<b>59214.72</b>	<b>16446.12</b>	<b>667.613</b>	<b>76328.45</b>
<b>A.</b>	<b>Economic Services of which</b>	<b>26592.83</b>	<b>13393.44</b>	<b>239.42</b>	<b>40225.69</b>
1	Agriculture & Allied Services	12589.82	933.10	40.41	<b>13563.34</b>
2	Rural Development	2282.83			<b>2282.83</b>
3	Special Area Programmes	152.39			<b>152.39</b>
4	Irrigation & flood control & Power Development	6728.03	6688.70	81.74	<b>13498.47</b>
5	Industries & Minerals	882.05	177.29	116.27	<b>1175.61</b>
6	Transport & Communication	2560.09	5298.47	0.00	<b>7858.57</b>
7	Science and Technology	60.85			<b>60.85</b>
8	General Economic Services	1336.76	295.87	1.00	<b>1633.63</b>
<b>B.</b>	<b>Social Services of which</b>	<b>32621.89</b>	<b>3052.68</b>	<b>428.19</b>	<b>36102.76</b>
1	Education, Sports, Art & Culture	16165.55	388.11	0.00	<b>16553.65</b>
2	Medical and Public Health, Family Welfare, Water Supply and Sanitation	4618.14	1384.74	225.30	<b>6228.17</b>
3	Housing and Urban Development	2145.09	243.25	192.63	<b>2580.97</b>
4	Information and Publicity	73.23	4.00		<b>77.23</b>
5	Social Security & Welfare including SCs, STs & OBCs	7715.38	1006.49		<b>8721.87</b>
6	Labour & Employment	288.68			<b>288.68</b>
7	Nutrition	850.25	0.00	0.00	<b>850.25</b>
8	Natural calamities	542.05		8.76	<b>550.81</b>
9	Other social services	195.28	26.10	1.50	<b>222.88</b>
10	Sec. Social Services	28.25		0.00	<b>28.25</b>
<b>II.</b>	<b>Non-Developmental Expenditure(a+b+c)</b>	<b>29974.84</b>	<b>500.74</b>	<b>3844.66</b>	<b>34320.24</b>
<b>a.</b>	<b>Revenue Expenditure under General Services</b>	<b>24954.41</b>	<b>0.00</b>	<b>0.00</b>	<b>24954.41</b>
	i) Organs of the State	1010.40			<b>1010.40</b>
	ii) Fiscal Services	1859.64			<b>1859.64</b>
	iii) Interest Payment & Servicing of Debts	7837.33			<b>7837.33</b>
	iv) Administrative Services	5030.44			<b>5030.44</b>
	v) Pension & Miscellaneous General Services	9216.60			<b>9216.60</b>
<b>b.</b>	<b>Devolution to ULBs</b>	<b>5020.44</b>			<b>5020.44</b>
<b>c.</b>	<b>Capital Expenditure</b>	<b>0.00</b>	<b>500.74</b>	<b>3844.66</b>	<b>4345.40</b>
	i) General Services		500.74		<b>500.74</b>
	ii) Discharge of Internal Debt (Net)			1531.57	<b>1531.57</b>
	iii) Repayment of loans to Government of India			694.27	<b>694.27</b>
	iv) Loans and Advance to Govt. Servant & Miscellaneous loans			27.82	<b>27.82</b>
	v) Market borrowings and ways & means advances from RBI			1591.00	
	<b>Aggregate Expenditure : (I + II)</b>	<b>89189.57</b>	<b>16946.86</b>	<b>4512.27</b>	<b>110648.70</b>

**Appendix 3.4 (Contd..)**  
**Developmental and non-developmental expenditure, Karnataka 2012-13 to 2014-15:**  
**revenue, capital and loans**

Category of Expenditure		2014-15 (RE)			
		Revenue	Capital	Loan	Total
<b>I.</b>	<b>Developmental Expenditure (A+B)</b>	<b>74189.59</b>	<b>18141.585</b>	<b>430.694</b>	<b>92761.87</b>
<b>A.</b>	<b>Economic Services of which</b>	<b>31192.49</b>	<b>13118.86</b>	<b>277.39</b>	<b>44588.75</b>
1	Agriculture & Allied Services	11029.42	1346.92	25.08	<b>12401.42</b>
2	Rural Development	5619.29			<b>5619.29</b>
3	Special Area Programmes	304.97			<b>304.97</b>
4	Irrigation & flood control & Power Development	7951.03	6926.74	80.00	<b>14957.77</b>
5	Industries & Minerals	1111.96	330.56	170.32	<b>1612.83</b>
6	Transport & Communication	3281.84	4209.64	0.00	<b>7491.48</b>
7	Science and Technology	80.69			<b>80.69</b>
8	General Economic Services	1813.28	305.01	2.00	<b>2120.29</b>
<b>B.</b>	<b>Social Services of which</b>	<b>42997.10</b>	<b>5022.72</b>	<b>153.30</b>	<b>48173.12</b>
1	Education, Sports, Art & Culture	20289.45	740.63		<b>21030.08</b>
2	Medical and Public Health, Family Welfare, Water Supply and Sanitation	6851.66	1983.33	300.00	<b>9134.99</b>
3	Housing and Urban Development	3196.99	526.04	-150.00	<b>3573.03</b>
4	Information and Publicity	86.76	5.60	0.00	<b>92.36</b>
5	Social Security & Welfare including SCs, STs & OBCs	9700.87	1744.32	3.30	<b>11448.49</b>
6	Labour & Employment	605.51			<b>605.51</b>
7	Nutrition	1281.95	0.00		<b>1281.95</b>
8	Natural calamities	738.68			<b>738.68</b>
9	Other social services	195.29	22.80		<b>218.09</b>
10	Sec. Social Services	49.94			<b>49.94</b>
<b>II.</b>	<b>Non-Developmental Expenditure(A+B+C)</b>	<b>34558.03</b>	<b>738.47</b>	<b>4777.07</b>	<b>40073.57</b>
<b>a.</b>	<b>Revenue Expenditure under General Services</b>	<b>27690.36</b>	<b>0.00</b>	<b>0.00</b>	<b>27690.36</b>
	i) Organs of the State	1189.76			<b>1189.76</b>
	ii) Fiscal Services	1144.29			<b>1144.29</b>
	iii) Interest Payment & Servicing of Debts	9563.87			<b>9563.87</b>
	iv) Administrative Services	6064.06			<b>6064.06</b>
	v) Pension & Miscellaneous General Services	9728.38			<b>9728.38</b>
<b>b.</b>	<b>Devolution to ULBs</b>	<b>6867.68</b>			<b>6867.68</b>
<b>c.</b>	<b>Capital Expenditure</b>	<b>0.00</b>	<b>738.47</b>	<b>4777.07</b>	<b>5515.54</b>
	i) General Services	0.00	738.47		<b>738.47</b>
	ii) Discharge of Internal Debt (Net)			1625.96	<b>1625.96</b>
	iii) Repayment of loans to Government of India			723.34	<b>723.34</b>
	iv) Loans and Advance to Govt. Servant & Miscellaneous loans			19.48	<b>19.48</b>
	v) Market borrowings and ways & means advances from RBI			2408.29	
	<b>Aggregate Expenditure : (I + II)</b>	<b>108747.63</b>	<b>18880.06</b>	<b>5207.76</b>	<b>132835.44</b>

**Appendix 3.4 (Contd..)**

**Developmental and non-developmental expenditure, Karnataka 2012-13 to 2014-15 :  
revenue, capital and loans**

Category of Expenditure		2015-16(BE)			
		Revenue	Capital	Loan	Total
<b>I.</b>	<b>Developmental Expenditure (A+B)</b>	<b>77903.72</b>	<b>19731.2</b>	<b>565.64</b>	<b>98200.56</b>
<b>A.</b>	<b>Economic Services of which</b>	<b>32175.31</b>	<b>15255.34</b>	<b>213.64</b>	<b>47644.29</b>
1	Agriculture & Allied Services	10961.25	1221.37	45.59	<b>12228.21</b>
2	Rural Development	4766.31			<b>4766.31</b>
3	Special Area Programmes	718.47			<b>718.47</b>
4	Irrigation & flood control & Power	9695.26	9102.71	73.00	<b>18870.97</b>
5	Industries & Minerals	1076.96	280.09	93.05	<b>1450.10</b>
6	Transport & Communication	3345.49	4080.23	0.00	<b>7425.72</b>
7	Science and Technology	69.07			<b>69.07</b>
8	General Economic Services	1542.50	570.94	2.00	<b>2115.44</b>
<b>B.</b>	<b>Social Services of which</b>	<b>45728.41</b>	<b>4475.86</b>	<b>352.00</b>	<b>50556.27</b>
1	Education, Sports, Art & Culture	19596.48	705.65		<b>20302.13</b>
2	Medical and Public Health, Family Welfare, Water Supply and	7802.26	1051.44	347.00	<b>9200.70</b>
3	Housing and Urban Development	4531.88	703.19	0.00	<b>5235.07</b>
4	Information and Publicity	88.39	4.67	0.00	<b>93.06</b>
5	Social Security & Welfare including SCs, STs & OBCs	11212.16	1975.91	5.00	<b>13193.07</b>
6	Labour & Employment	579.21			<b>579.21</b>
7	Nutrition	1342.87	0.00		<b>1342.87</b>
8	Natural calamities	376.23			<b>376.23</b>
9	Other social services	161.71	35.00		<b>196.71</b>
10	Sec. Social Services	37.22			<b>37.22</b>
<b>II.</b>	<b>Non-Developmental</b>	<b>37545.96</b>	<b>832.42</b>	<b>5955.49</b>	<b>44333.87</b>
<b>a.</b>	<b>Revenue Expenditure under</b>	<b>30997.04</b>	<b>0.00</b>	<b>0.00</b>	<b>30997.04</b>
	i) Organs of the State	973.64			<b>973.64</b>
	ii) Fiscal Services	1053.74			<b>1053.74</b>
	iii) Interest Payment & Servicing of	11202.67			<b>11202.67</b>
	iv) Administrative Services	6988.04			<b>6988.04</b>
	v) Pension & Miscellaneous	10778.95			<b>10778.95</b>
<b>b.</b>	<b>Devolution of ULBs</b>	<b>6548.92</b>			<b>6548.92</b>
<b>c.</b>	<b>Capital Expenditure</b>	<b>0.00</b>	<b>832.42</b>	<b>5955.49</b>	<b>6787.91</b>
	i) General Services		832.42		<b>832.42</b>
	ii) Discharge of Internal Debt (Net)			1738.32	<b>1738.32</b>
	iii) Repayment of loans to			776.12	<b>776.12</b>
	iv) Loans and Advance to Govt. Servant & Miscellaneous loans			167.59	<b>167.59</b>
	v) Market borrowings and ways & means advances from RBI			3273.46	
	<b>Aggregate Expenditure : (I + II)</b>	<b>115449.68</b>	<b>20563.62</b>	<b>6521.13</b>	<b>142534.43</b>

Source : 1. Annual Financial Statement (Budget) 2015-16, Government of Karnataka  
2. Detailed Estimates of Expenditure of (Volume - II), Government of Karnataka

**Appendix 3.5: Plan expenditure, outlays by minor sectors and programmes**

(Rs. Crore)

Head of Developments	Eleventh Plan (2007-12) Approved Outlay (2006-07)	Eleventh Plan (2007-12) Expenditure at Current Prices)	Annual Plan						BE
			Accounts						
			2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	
<b>A. Economic Services</b>	57931.28	79580.48	16320.43	17040.63	22023.62	22591.04	29714.77	33014.56	<b>2015-16</b> 37890.60
<b>I. Agriculture &amp; Allied Services</b>									
1 Crop Husbandry	3666.10	3919.44	749.57	685.70	1419.98	1350.48	1905.39	2820.90	3120.30
2 Soil & Water Conservation	759.50	481.84	33.99	66.36	138.78	99.95	118.18	512.78	292.60
3 Animal Husbandry	772.70	884.16	167.56	192.53	292.24	262.55	399.92	445.74	357.79
4 Dairy Development	440.00	1055.40	247.73	312.85	350.53	340.86	853.48	895.00	992.27
5 Fisheries	376.54	283.21	65.23	61.32	102.61	83.03	121.52	101.86	210.45
6 Forestry & Wild Life	739.37	1021.61	237.79	194.08	208.29	228.20	286.61	461.11	259.37
7 Food, Storage & Warehousing	65.00	82.65	18.11	16.07	24.98	40.00	36.41	21.08	35.59
8 Agricultural Research & Education	490.00	540.13	72.45	75.60	170.91	172.45	200.62	276.23	167.42
9 Investment in Agricultural Financial Institutions	16.00	28.63	3.30	3.48	4.73	4.00	4.00	4.00	5.00
10 Marketing & Quality Control	57.11	29.95	2.00	3.25	3.50	10.00	150.47	199.92	126.68
11 Co-operation	1044.53	1898.73	234.43	404.45	547.80	1470.72	3085.58	405.60	1012.05
<b>Total (1 to 11)</b>	<b>8426.85</b>	<b>10225.75</b>	<b>1832.16</b>	<b>2015.69</b>	<b>3264.35</b>	<b>4062.24</b>	<b>7162.18</b>	<b>6144.22</b>	<b>6579.52</b>
<b>II. Rural Development</b>									
12 Special Programmes for Rural Development	1732.80	2510.47	1107.6	1103.56	1334.65	415.87	229.00	530.95	489.32
(a) I.R.D.P. & Allied Programmes									
(b) DPAP (Including State DPAP)									
(c) Int. Rural Energy Programmes									
13 National Rural Employment	1315.93	1015.09				26.21	52.03	1664.45	1591.65

**Appendix 3.5: Plan expenditure, outlays by minor sectors and programmes**

(Rs. Crore)

	Head of Developments	Eleventh Plan (2007-12) Approved Outlay (2006-07)	Eleventh Plan (2007-12) Expenditure at Current Prices)	Annual Plan							
				Accounts						RE	BE
				2009-10	2010-11	2011-12	2012-13	2013-14	2014-15		
	Programme (Includes REGS & RLEGP) Jawahar Rojgar Yojana (JRY)										
14	Land Reforms	7.5	8.26	99.13	202.95	7.39	12.27	32.06			11.93
15	Other Programmes of Rural	2144.04	2133.00	78.5	79.5	817.03	921.72	1002.07			982.20
	Development (Anthyodhaya, 100 Walls & CRT &										
16	Community Development (Includes Grants to ZPs) + others			307.41	487.3						
	<b>Total (12 to 16)</b>	<b>5200.27</b>	<b>5666.82</b>	<b>1585.87</b>	<b>2104.40</b>	<b>1266.50</b>	<b>1215.02</b>	<b>3229.53</b>			<b>3075.10</b>
	<b>III. Special Area Programmes</b>										
17	Hyderabad Karnataka Development Programmes (Including MADB & BADP)	1369.11	2086.74	139.69	332.17	485.29	853.96	1363.02			1803.49
	<b>Total (17)</b>	<b>1369.11</b>	<b>2086.74</b>	<b>139.69</b>	<b>332.17</b>	<b>485.29</b>	<b>853.96</b>	<b>1363.02</b>			<b>1803.49</b>
	<b>IV. Irrigation &amp; Flood Control</b>										
18	Major & Medium Irrigation Projects	10905.00	15078.53	3470.17	4567.39	3831.32	6351.95	7463.81			9913.29
19	Minor Irrigation	3254.36	3301.22	687.63	1242.65	1082.69	1025.43	1297.96			1249.31
20	Command Area Development (CADA)	550.00	479.52	97.68	196.33	172.95	177.48	487.75			502.01
21	Flood Control Projects (including Anti-Sea Erosion, etc.)	86.00	116.58	23.34	26.50	67.21	52.68	47.78			42.06
	<b>Total : IV (18 to 21)</b>	<b>14795.36</b>	<b>18975.85</b>	<b>4278.82</b>	<b>6032.87</b>	<b>5154.17</b>	<b>7607.54</b>	<b>9297.30</b>			<b>11706.67</b>
	<b>V. Energy</b>										
22	Power	5781.00	7594.15	3540.74	3457.80	2003.02	3395.20	2900.00			2685.00

**Appendix 3.5: Plan expenditure, outlays by minor sectors and programmes**

(Rs. Crore)

	Head of Developments	Eleventh Plan (2007-12) Approved Outlay (2006-07)	Eleventh Plan (2007-12) Expenditure at Current Prices)	Annual Plan						RE	BE		
				Accounts									
				2009-10	2010-11	2011-12	2012-13	2013-14	2014-15				
23	Generation (KPC)												
24	Transmission & Distribution (KPTCL) Non-conventional Sources of Energy	4269.55	9145.98	4.68	4.80	6.61	2380.53	916.85	1480.32				2131.46
	<b>Total : V (22 TO 24)</b>	<b>10050.55</b>	<b>16740.13</b>	<b>4063.38</b>	<b>3545.54</b>	<b>3464.41</b>	<b>4383.55</b>	<b>4312.05</b>	<b>4380.32</b>				<b>4816.46</b>
<b>VI.</b>	<b>Industry &amp; Minerals</b>												
25	Village & Small Scale Industry	1818.74	1594.57	162.45	199.87	225.03	314.21	396.00	564.76				532.24
25a.	Major & Medium Industry (Other than SSI) (including KSBPE)	297.63	1326.56	325.40	432.34	591.67	264.36	366.18	446.89				379.94
26	Mining: Mineral Exploration	27.00	29.25	3.09	3.07	16.68	11.81	14.15	39.75				46.60
	<b>Total : VI (25 to 26)</b>	<b>2143.37</b>	<b>2950.38</b>	<b>490.94</b>	<b>635.28</b>	<b>833.38</b>	<b>590.38</b>	<b>776.33</b>	<b>1051.40</b>				<b>958.78</b>
<b>VII.</b>	<b>Transport</b>												
27	Ports and Lighthouses	41.00	7.71			7.71	15.47	21.37	46.70				106.93
28	Roads and Bridges	8555.25	15194.95	2813.98	3381.07	4252.55	4858.72	5860.52	5450.81				6570.66
29	Road Transport	4343.01	3804.57	901.19	512.95	741.11	793.66	909.32	596.04				324.01
a)	Pollution Control (MV Dept.)	20.00	2.92	0.46	0.75	0.33	0.58	0.51	1.00				1.01
b)	Inland Water Transport												
	<b>Total : VII (27 to 29)</b>	<b>12959.26</b>	<b>19010.15</b>	<b>3715.63</b>	<b>3894.77</b>	<b>5001.70</b>	<b>5668.43</b>	<b>6791.72</b>	<b>6094.55</b>				<b>7002.61</b>
<b>VIII.</b>	<b>Science, Tech &amp; Environment</b>												
30	Scientific Research (Incl. S & T)	84.22	126.62	22.17	34.36	37.08	59.01	60.17	73.17				61.76
31	Ecology & Environment	59.00	39.67	6.90	9.90	25.31	9.08	8.67	15.50				15.30
	Information Technology	193.00	316.59	65.13	85.79	105.50	142.25	120.39	280.84				182.90
	<b>Total : VIII (30 to 31)</b>	<b>336.22</b>	<b>482.88</b>	<b>94.20</b>	<b>130.05</b>	<b>167.89</b>	<b>210.34</b>	<b>189.23</b>	<b>369.51</b>				<b>259.96</b>

**Appendix 3.5: Plan expenditure, outlays by minor sectors and programmes**

(Rs. Crore)

	Head of Developments	Eleventh Plan (2007-12) Approved Outlay (2006-07)	Eleventh Plan (2007-12) Expenditure at Current Prices)	Annual Plan							
				Accounts						RE	BE
				2009-10	2010-11	2011-12	2012-13	2013-14	2014-15		
<b>IX.</b>	<b>General Economic Services</b>										
32	Secretariat Economic Services	5.00	2.20	2.72	3.59	4.79	0.20	0.22	1.00	1.00	
33	Tourism	650.00	860.62	181.14	201.29	272.97	212.20	276.77	385.00	401.91	
34	Survey & Statistics	1.00	0.78	0.36	13.95	2.98	0.17	0.14	0.20	0.20	
35	Other General Economic Services			54.73	39.24	42.04					
a)	Legal Metrology	12.00	2.58				0.97	0.20	1.00	2.75	
b)	Other-District Level Sub-Plan	10.30	12.26				3.22	3.16	17.48	4.89	
c)	Modernization of Administration	4.00	3.24				0.70				
d)	Civil Supplies										
e)	Transfer of cess to the infrastructure initiative fund										
f)	Block Grants / Market Research		4.48				1.55				
g)	Technical Assistance for VAT	93.50	52.70				7.99	1.77	0.89	4.92	
h)	Infrastructure Development	1800.00	2345.00	399.63	556.85	499.67	464.26	500.02	652.14	1260.73	
i)	One time ACA		24.99								
j)	NABARD assisted improvement		44.01				9.35				
k)	Rashtriya Krishi Vikas Yojana	74.49	27.70				12.33				
l)	Private Whole sale Markets										
m)	Karnataka state Statistical System		16.29				1.19	1.53	9.00	5.11	
n)	Evaluation Authority		5.75				7.50		3.00	3.00	
o)	Infrastructure for New District Development Yadagir		24.50				13.31	16.20	14.00	0.00	

**Appendix 3.5: Plan expenditure, outlays by minor sectors and programmes**

(Rs. Crore)

	Head of Developments	Eleventh Plan (2007-12) Approved Outlay (2006-07)	Eleventh Plan (2007-12) Expenditure at Current Prices)	Annual Plan						RE	BE	
				Accounts								
				2009-10	2010-11	2011-12	2012-13	2013-14	2014-15			
p)	Investment in trading Institutions		13.83									
q)	Dev. work in Naxal affected Areas		0.85				35.00	6.56		0.00		3.00
r)	Decision Support System											
s)	Result Frame work Document						0.20	0.17		1.00		0.50
	<b>Total : IX (32 to 35)</b>	<b>2650.29</b>	<b>3441.78</b>	<b>814.92</b>	<b>822.45</b>	<b>770.14</b>	<b>806.74</b>	<b>1084.71</b>	<b>1688.01</b>			
<b>B.</b>	<b>Social Services</b>	41770.92	53852.62	10058.57	15574.98	16360.77	17766.03	31775.47	33851.83			
<b>X.</b>	<b>Social Services Education, Sports, Art &amp; Culture</b>											
36	General Education	7167.12	9903.99	1722.96	2729.66	2962.38	3318.53	7286.72	6511.92			
37	Technical Education	598.95	852.36	84.09	192.36	292.19	440.87	541.41	467.57			
38	Art & Culture	478.34	725.27	146.58	178.94	219.88	220.46	284.32	297.68			
39	Sports & Youth Services	167.61	318.23	97.37	71.94	109.21	91.29	153.69	130.44			
	<b>Total : X (36 to 39)</b>	<b>8412.02</b>	<b>11799.85</b>	<b>2051.00</b>	<b>3172.90</b>	<b>3583.66</b>	<b>4071.15</b>	<b>8266.14</b>	<b>7407.61</b>			
<b>XI.</b>	<b>Health</b>											
40	Medical & Public Health	3376.22	4587.56	824.68	1248.29	1292.04	1587.35	3470.23	3239.03			
	<b>Total : XI (40)</b>	<b>3376.22</b>	<b>4587.56</b>	<b>824.68</b>	<b>1248.29</b>	<b>1292.04</b>	<b>1587.35</b>	<b>3470.23</b>	<b>3239.03</b>			
<b>XII.</b>	<b>Water Supply, Housing &amp; Urban</b>											
41	Water Supply	5409.35	5493.12	1297.47	1743.98	2225.78	1340.00	2563.26	3186.78			
42	Housing (incl. Police Housing & Sainik	3393.05	3680.39	580.61	1120.33	1103.26	1231.88	2362.82	3876.09			



**Appendix 3.5: Plan expenditure, outlays by minor sectors and programmes**

(Rs. Crore)

	Head of Developments	Eleventh Plan (2007-12) Approved Outlay (2006-07)	Eleventh Plan (2007-12) Expenditure at Current Prices)	Annual Plan						RE	BE		
				Accounts									
				2009-10	2010-11	2011-12	2012-13	2013-14	2014-15				
	Welfare Infrastructure)												
43	Urban Development	13027.41	13246.45	2725.87	3211.98	3687.81	2732.87	3452.16	6195.82			5684.91	
	<b>Total : XII (41 to 43)</b>	<b>21829.81</b>	<b>22419.96</b>	<b>4603.95</b>	<b>5460.90</b>	<b>6552.12</b>	<b>6061.91</b>	<b>6024.04</b>	<b>11121.90</b>			<b>12747.78</b>	
<b>XIII.</b>	<b>Information &amp; Publicity</b>												
44	Information & Publicity	59.00	105.20	13.96	34.09	30.21	33.31	29.14	35.71			38.70	
	<b>Total : XIII (44)</b>	<b>59.00</b>	<b>105.20</b>	<b>13.96</b>	<b>34.09</b>	<b>30.21</b>	<b>33.31</b>	<b>29.14</b>	<b>35.71</b>			<b>38.70</b>	
<b>XIV.</b>	<b>Welfare of SCs, STs &amp; OBCs</b>												
45	Welfare of SCs, STs, Backward Classes and BCs	3626.33	7095.41	1233.81	1818.89	2261.36	2867.01	3380.20	5298.81			6115.40	
	<b>Total : XIV (45)</b>	<b>3626.33</b>	<b>7095.41</b>	<b>1233.81</b>	<b>1818.89</b>	<b>2261.36</b>	<b>2867.01</b>	<b>3380.20</b>	<b>5298.81</b>			<b>6115.40</b>	
<b>XV.</b>	<b>Labour &amp; Labour Welfare</b>												
46	Labour and Labour Welfare	572.18	786.84	188.35	181.43	182.40	211.53	188.97	468.24			470.60	
	<b>Total : XV (46)</b>	<b>572.18</b>	<b>786.84</b>	<b>188.35</b>	<b>181.43</b>	<b>182.40</b>	<b>211.53</b>	<b>188.97</b>	<b>468.24</b>			<b>470.60</b>	
<b>XVI.</b>	<b>Social Welfare &amp; Nutrition</b>												
47	Social Security & Welfare	824.76	3255.67	884.53	1551.95	1813.34	982.36	1382.79	1104.00			1318.11	
a)	Nutrition and Civil supply	3070.60	3802.13	258.29	262.68	314.36	1328.95	1102.39	2010.44			2514.60	
	<b>Total: XVI (47)</b>	<b>3895.36</b>	<b>7057.80</b>	<b>1142.82</b>	<b>1814.63</b>	<b>2127.70</b>	<b>2311.31</b>	<b>2485.18</b>	<b>3114.44</b>			<b>3832.71</b>	
<b>C.</b>	<b>General Services</b>												
48	Fire Protection	1961.80	2919.14	565.09	546.87	851.38	811.76	558.07	1113.47			854.38	
		77.00	24.07	1.11	10.95	6.00	6.46	9.44	7.64			24.15	
49	Stationery & Printing	40.00	52.85	10.49	9.99	11.29	11.41	20.97	29.00			37.00	
50	Public Works –Administrative Buildings	1779.20	2566.02	331.24	297.97	479.00	668.13	558.07	1113.47			854.38	
51	Training - ATI, Mysore	1.60	8.15	0.72	0.69	5.70	5.81	5.59	3.88			3.67	

**Appendix 3.5: Plan expenditure, outlays by minor sectors and programmes**

(Rs. Crore)

	Head of Developments	Eleventh Plan (2007-12) Approved Outlay (2006-07)	Eleventh Plan (2007-12) Expenditure at Current Prices)	Annual Plan						RE	BE
				Accounts							
				2009-10	2010-11	2011-12	2012-13	2013-14	2014-15		
52	Administration of Justice	55.40	129.97	26.08	34.45	39.87	60.01	27.32	40.86	40.92	
53	Others	8.60	138.08	195.45	192.82	309.52	59.94	143.05	297.48	120.71	
	<b>Total C: General Services (48 to 53)</b>	<b>1961.80</b>	<b>2919.14</b>	<b>565.09</b>	<b>546.87</b>	<b>851.38</b>	<b>811.76</b>	<b>558.07</b>	<b>1113.47</b>	<b>854.38</b>	
	<b>Total - State Plan Outlay (A+B+C)</b>	<b>101664.00</b>	<b>136352.24</b>	<b>26944.09</b>	<b>31154.42</b>	<b>38449.98</b>	<b>39763.57</b>	<b>48038.87</b>	<b>65903.50</b>	<b>72596.81</b>	
<b>D.</b>	Irrigation projects pending approval			540.83	560.72	429.35	276.79	264.39	3.58	102.58	
<b>E.</b>	CSS/CPS			1477.68	1572.35	1620.50	3208.00	4234.16	1501.36	795.65	
<b>F.</b>	Western Ghats development			26.30	28.82	31.02	32.10	31.83	4.05	4.05	
	<b>Grand Total</b>	<b>101664.00</b>	<b>136352.24</b>	<b>28988.90</b>	<b>33316.31</b>	<b>40530.805</b>	<b>43280.46</b>	<b>52569.25</b>	<b>67412.49</b>	<b>73499.09</b>	

Source : Draft Annual Plan 2015-16 volume-I  
Economic Survey 2014-15  
Eleventh Plan Document Volume II

### Appendix 3.6

**Expenditure on annual plans, centrally sponsored & central plan schemes :  
irrigation  
projects pending approval and western ghats development for  
2001-02 to 2015-16**

(Rs. Crore)

Year	State Plan	Centrally Sponsored & Central Plan Schemes (GOI) Share	Irrigation Projects Pending Approval	Western Ghats Development	Total	
					Outlay	Per Capita Outlay (Rs.)
2001-02	8347.55	818.96	205.93	8.16	9380.50	1634.00
2002-03	8163.91	806.49	200.02	14.96	9185.38	1681.44
2003-04	8619.45	737.56	82.02	15.43	9454.46	1732.27
2004-05	11888.72	766.32	7.83	16.50	12679.37	2296.99
2005-06	12678.29	941.53	3.44	13.81	13637.07	2413.64
2006-07	18308.69	1122.53	3.55	14.89	19449.66	3406.25
2007-08	17226.91	1487.05	928.51	23.01	19665.48	3402.33
2008-09	22576.74	1829.19	317.30	31.49	24754.72	4238.82
2009-10	26944.10	1477.68	540.83	26.30	28988.91	4921.72
2010-11	31154.44	1572.35	560.72	28.82	33316.33	5452.75
2011-12	38450.00	1620.50	429.35	31.02	40530.87	6537.24
2012-13	39764.00	3208.00	276.79	32.10	43280.89	6980.79
2013-14	48038.88	4234.16	264.39	31.83	52569.26	8357.59
2014-15(RE)	65903.50	1501.36	3.58	4.05	67412.49	10566.22
2015-16(BE)	72596.81	795.65	102.58	4.05	73499.09	11324.98

RE: Revised Estimates, BE: Budget Estimates

Source: Details of Provisions for Plan Schemes, Budget document

### Appendix 3.7

#### Expenditure in Karnataka by Economic Classification of the budget 2000-01 to 2015-16

Year	Final Outlays				Transfers Payments			Financial Investments and Loans to the Rest of the Economy	Total Expenditure
	Govt's Consumption Expenditure	Gross Capital Formation	Acquisition of Fixed Assets	Total	Current Transfers	Capital Transfers	Total		
2000-01	4125.62	1586.92	15.97	5728.51	10444.79	259.78	10704.57	1204.78	17637.86
2001-02	4685.29	1970.86	12.34	6667.79	12227.09	418.17	12645.26	1176.46	20489.51
2002-03	4509.36	1964.41	51.20	6524.97	12741.45	196.05	12937.50	1846.75	21309.22
2003-04	5818.99	2107.48	1.28	7927.75	13302.34	164.49	13466.83	2713.95	24108.53
2004-05	5512.64	3380.89	-0.06	8893.47	15320.36	146.71	15467.07	3258.99	27619.53
2005-06	6724.23	3815.51	-0.12	10539.62	18208.83	33.53	18242.36	3414.12	32196.10
2006-07	8499.05	5822.44	-0.21	14321.28	20923.85	234.30	21158.15	5364.81	40844.24
2007-08	7676.82	6400.08	-244.41	13832.49	25374.63	654.42	26029.05	4176.83	44038.37
2008-09	9714.64	8441.81	-180.56	17975.89	22760.72	475.35	28236.07	4196.17	50408.13
2009-10	10218.46	9570.80	-67.46	19721.80	30747.02	509.49	31256.51	5854.19	56832.50
2010-11	11810.47	11416.37	-66.57	23160.27	35627.21	193.96	35821.17	7258.61	66240.05
2011-12	14705.97	13036.50	-81.13	27661.34	31925.53	185.59	32111.12	7064.97	66837.43
2012-13	18759.46	13849.88	-27.06	32582.28	39582.93	936.67	40519.60	6086.81	79188.69
2013-14	22942.50	15629.56	-80.56	38491.5	46131.35	856.39	46987.74	6662.55	92141.79
2014-15(RE)	30726.62	21314.78	-68.82	51972.58	52903.99	1259.02	54163.01	6544.88	112680.47
2015-16(BE)	31252.36	21806.67	-67.29	52991.74	47477.57	2614.96	50092.53	9295.95	112380.22

RE: Revised Estimates, BE: Budget Estimates

Source : An Economic-cum-Purpose Classification of the Karnataka Government Budget - Earlier Issues and 2015-16, Directorate of Economics & Statistics

### Appendix 3.8

#### Capital formation by the Government of Karnataka 2000-01 to 2015-16

(Rs. Crore)

Year	Value of Assets Created by		Total	Changes in Stock	Gross Capital Formation
	Departmental Commercial Undertakings	Government Administration			
2000-01	746.49	834.73	1581.22	5.00	1586.22
2001-02	1069.69	890.86	1970.55	-0.39	1970.16
2002-03	1054.43	907.85	1962.28	2.13	1964.41
2003-04	1641.49	445.99	2107.48	1.40	2108.83
2004-05	835.30	2545.19	3380.49	-2.80	3377.69
2005-06	889.69	2959.23	3851.46	2.54	3851.46
2006-07	922.80	5133.73	6056.53	16.22	6072.75
2007-08	1012.93	5797.16	6810.09	-4.45	6805.64
2008-09	1318.61	7417.99	8736.60	-8.09	8728.51
2009-10	2048.07	7964.76	10012.83	-0.93	10011.90
2010-11	9392.06	2151.70	11543.76	-4.57	11539.19
2011-12	2519.58	10518.28	13037.86	-1.36	13036.50
2012-13	2463.90	11386.77	13850.67	-0.79	13849.88
2013-14	2723.03	12906.70	15629.73	-0.17	15629.56
2014-15(RE)	3325.94	18017.46	21343.40	-28.62	21314.78
2015-16(BE)	4012.48	17794.18	21806.66	0.01	21806.67

RE: Revised Estimates, BE: Budget Estimates

Source : Reports on An Economic-cum-Purpose Classification of the Karnataka Government Budget - Earlier Issues and 2015-16, Directorate of Economics and Statistics.

**Appendix 4.1 Export Performance of Karnataka State 2007-08 to 2014-15**

(Rs. Crore)

Sl. No	Commodity	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
1	Electronics, Computer Software & BT	69518	82153	90735	105351	135660	156000	178000	194020
2	Readymade Garments	4125	5395	5125	6866	8143	7670	8900	9821
3	Petroleum & Petroleum Products	11232	11642	11041	14602	23418	33915	35392	40882
4	Engineering Products	8301	6185	4387	7324	8263	12568	17978	20958
5	Iron Ore & Minerals (incl Granite)	10197	7275	4693	868	1134	1735	739	749
6	Silk Products	912	897	702	678	673	654	650	554
7	Coffee Products	1308	1579	1423	2184	3173	3534	3598	4973
8	Basic Chemicals , Pharmaceuticals & Cosmetics	2070	2531	2761	2893	5077	7233	8300	5896
9	Agriculture & Processed Food Products	416	712	663	670	763	1149	1300	1383
10	Gem and Jewellery	9749	10893	17409	19897	23728	24483	24175	21998
11	Cashew and Cashew Kernels	527	638	644	587	882	847	1200	1505
12	Handicrafts	428	429	257	293	267	374	516	548
13	Leather Products	201	214	194	202	320	452	450	543
14	Chemicals and Allied Products	399	457	311	339	480	491	562	955
15	Marine Products	153	236	412	528	605	632	1067	1313
16	Plastic Goods	215	266	327	563	604	788	700	376
17	Spices	245	479	382	450	700	905	1150	1126
18	Wool & Woolwn Products	148	153	144	91	129	151	176	191
19	Miscellaneous and Other	2560	2120	1261	1038	4819	4789	5565	5777
	<b>Total</b>	<b>122704</b>	<b>134254</b>	<b>142871</b>	<b>165424</b>	<b>218838</b>	<b>258370</b>	<b>290418</b>	<b>313568</b>

**Appendix 5.1 Hut dwellers**

<b>District Code</b>	<b>District</b>	<b>No. of Hut-dwellers</b>
1	Belagavi	84656
2	Bagalkot	9733
3	Vijayapura	33586
4	Kalaburagi	94754
5	Bidar	54989
6	Raichur	86676
7	Koppal	36441
8	Gadag	27422
9	Dharwad	10889
10	UttaraKannada	19349
11	Haveri	33961
12	Ballari	75918
13	Chitradurga	29958
14	Davanagere	34093
15	Shivamogga	39368
16	Udupi	5901
17	Chikkmagaluru	8053
18	Tumkuru	91965
19	Kolar	14445
20	Bengaluru Urban	797
21	Bengaluru Rural	1486
22	Mandya	23115
23	Hassan	30982
24	DakshinaKannada	5296
25	Kodagu	2396
26	Mysuru	40714
27	Chamarajanagar	27788
28	Ramanagara	31618
29	Chikkaballapura	33262
30	Yadgiri	60389
	<b>Grand Total</b>	<b>1050000</b>

## Appendix -5.2

Sl. No	District Name	District/Yearwise Physical achievement made under Rural Ashraya											
		2012-13		2013-14		2014-15		2015-16		Total		2015-16	
		Target	completed	Target	completed	Target	completed	Target	completed	Target	completed	Target	Completed Upto Dec-2015
1	2	3	4	5	6	7	8	9	10				
1	Bagalkot	4935	3550	7650	5961	7865	5345	20450	14856	6722	2761		
2	Ballari	5467	5884	9212	8595	10888	9456	25567	23935	8017	3040		
3	Belagavi	10199	13114	14898	24680	13900	19261	38997	57055	10244	4912		
4	BengaluruRural	2090	2231	1836	2748	1860	2311	5786	7290	2599	881		
5	BengaluruUrban	3083	1603	1655	1559	1814	1507	6552	4669	1863	741		
6	Bidar	3291	3563	5918	6183	5730	5039	14939	14785	5183	2805		
7	Chamarajanagar	2634	2966	3113	3216	3784	4301	9531	10483	3483	1695		
8	Chikkaballapur	2175	1860	5707	2894	7806	5817	15688	10571	6245	2497		
9	Chikkamagaluru	3103	2390	2569	3904	2576	3484	8248	9778	4126	1475		
10	Chitradurga	2438	2131	3530	4330	4010	4609	9978	11070	5145	2122		
11	DakshinaKannada	2468	3231	1950	4228	2108	4174	6526	11633	3252	1522		
12	Davanagere	5017	5977	9061	11558	10688	8610	24766	26145	9905	2751		
13	Dharwad	1879	3605	2315	4971	2182	3521	6376	12097	2435	1265		
14	Gadag	2744	2294	4898	4580	5716	5721	13358	12595	3860	1760		
15	Hassan	4894	3226	6988	8551	7365	6596	19247	18373	7392	2726		
16	Haveri	6815	9881	10355	14481	8649	7882	25819	32244	7975	2985		
17	Kalaburagi	4845	7717	5878	5291	7275	4009	17998	17017	7245	3330		
18	Kodagu	864	1151	3040	1846	1620	2160	5524	5157	2017	628		
19	Kolar	3548	2362	7496	5403	8935	6974	19979	14739	6118	2100		
20	Koppal	4077	4055	5111	6316	5266	5848	14454	16219	4052	2279		
21	Mandya	5193	4526	7836	8001	5761	5992	18790	18519	6404	2838		
22	Mysuru	5176	5554	6063	6473	8167	8574	19406	20601	7659	2751		
23	Raichur	7342	3652	11322	9074	13461	10862	32125	23588	9284	4242		
24	Ramanagara	6868	4282	6186	7698	5747	3970	18801	15950	4696	1459		
25	Shivamogga	3797	2452	4675	5024	6688	7050	15160	14526	6687	2515		
26	Tumakuru	6595	7011	11236	16869	10098	11510	27929	35390	9152	3082		
27	Udupi	1308	893	1668	3740	1696	2511	4672	7144	2764	1414		
28	UttaraKannada	4817	3073	4645	6429	3853	4681	13315	14183	4259	2452		
29	Vijayapura	4663	8831	6948	7998	7438	7604	19049	24433	6443	3054		
30	Yadgiri	2675	3374	6241	4993	7054	5694	15970	14061	4774	2634		
	<b>Total</b>	<b>125000</b>	<b>126439</b>	<b>180000</b>	<b>207594</b>	<b>190000</b>	<b>185073</b>	<b>495000</b>	<b>519106</b>	<b>170000</b>	<b>70716</b>		



Appendix -5.3

District/Yearwise Physical achievement made under IAY											
Sl. No	District Name	2012-13		2013-14		2014-15		Total		2015-16	
		Target	completed	Target	completed	Target	completed	Target	completed	Target	Completed Upto Dec-2015
1	Bagalkot	3374	4316	7647	4648	5745	4107	16766	13071	5315	2552
2	BangaloreRural	1481	1331	112	799	927	1259	2520	3389	1734	940
3	BangaloreUrban	1467	1002	731	864	215	819	2413	2685	1489	374
4	Belgaum	11789	11310	14762	11753	9432	12332	35983	35395	7621	5225
5	Bellary	8145	8007	9730	7646	7396	6009	25271	21662	6262	3751
6	Bidar	2360	2393	297	2335	3448	4025	6105	8753	4910	2676
7	Bijapur	3444	6377	8316	6860	6001	6557	17761	19794	5309	3043
8	Chamarajanagar	2054	1880	1281	1745	2347	2599	5682	6224	2824	1837
9	Chikkaballapur	1584	1541	18	1197	2155	2174	3757	4912	3340	1644
10	Chikmagalur	2184	2288	46	1480	567	1409	2797	5177	2729	1084
11	Chitradurga	5318	5625	4667	3602	5591	4847	15576	14074	5058	3083
12	DakshinaKannada	1019	1012	110	816	825	1665	1954	3493	2471	1476
13	Davanagere	3671	6183	1583	3359	2847	3717	8101	13259	4322	2450
14	Dharwad	2233	3872	884	3026	448	1634	3565	8532	1711	1104
15	Gadag	1842	2487	1136	1908	1054	1800	4032	6195	1958	1153
16	Gulbarga	3948	4959	1421	2262	2949	4188	8318	11409	6350	2581
17	Hassan	1883	1533	4281	2451	2826	2500	8990	6484	4365	1565
18	Haveri	2562	2868	1189	2989	1601	2704	5352	8561	3523	1977
19	Kodagu	931	1247	75	425	246	727	1252	2399	1038	423
20	Kolar	1931	1227	192	1275	1294	1873	3417	4375	2752	1135
21	Koppal	4831	5375	7400	5174	5448	6246	17679	16795	4724	2843
22	Mandya	2102	2020	472	2034	393	1266	2967	5320	2669	1347
23	Mysore	3347	2888	1290	2495	4237	5129	8874	10512	5407	2463
24	Raichur	10726	10107	24865	13167	22365	10969	57956	34243	10054	5703
25	Ramanagara	1582	1736	842	1524	606	1156	3030	4416	2022	880
26	Shimoga	3108	2855	1136	2517	1091	2464	5335	7836	3211	1164
27	Tumkur	5712	7288	1366	4987	2713	4736	9791	17011	5038	3354
28	Udupi	1109	737	32	641	162	891	1303	2269	1072	617
29	UttaraKannada	2402	1915	2282	3285	1722	2005	6406	7205	1918	1183
30	Yadgir	1861	2114	1837	1551	3349	2291	7047	5956	3804	2001
<b>Total</b>		<b>100000</b>	<b>108493</b>	<b>100000</b>	<b>98815</b>	<b>100000</b>	<b>104098</b>	<b>300000</b>	<b>311406</b>	<b>115000</b>	<b>61628</b>

## Appendix-5.4

Sl. No	District Name	District/Yearwise Physical achievement made under Vajapayee Urban Housing Scheme											
		2012-13		2013-14		2014-15		Total		2015-16			
		Target	completed	Target	completed	Target	completed	Target	completed	Target	completed		
1	Bagalkot	623	1330	666	384	479	591	1768	2305	912	331		
2	Bangalore Rural	236	64	66	76	147	92	449	232	85	89		
3	Bangalore Urban	5004	0	0	0	119	172	5123	172	21	6		
4	Belgaum	742	229	918	406	549	569	2209	1204	1004	363		
5	Bellary	549	1050	1582	543	952	1135	3083	2728	1171	511		
6	Bidar	308	18	417	160	303	484	1028	662	438	251		
7	Bijapur	271	455	498	203	329	683	1098	1341	565	239		
8	Chamarajanagar	254	189	357	152	221	284	832	625	245	73		
9	Chickaballapur	308	193	435	95	299	150	1042	438	480	659		
10	Chikmagalur	271	76	189	68	101	65	561	209	170	57		
11	Chitradurga	235	301	253	19	157	74	645	394	375	141		
12	DakshinaKannada	373	258	216	166	128	243	717	667	242	108		
13	Davanagere	369	388	420	143	288	473	1077	1004	429	159		
14	Dharwad	326	168	90	289	62	167	478	624	254	69		
15	Gadag	356	735	1321	530	866	881	2543	2146	1388	429		
16	Gulbarga	462	457	1392	1004	828	649	2682	2110	1279	368		
17	Hassan	319	138	186	73	121	79	626	290	299	70		
18	Haveri	352	318	453	254	527	638	1332	1210	914	264		
19	Kodagu	165	44	84	75	24	39	273	158	70	23		
20	Kolar	319	77	297	210	243	157	859	444	267	78		
21	Koppal	236	165	189	148	89	144	514	457	196	126		
22	Mandya	299	89	276	86	262	190	837	365	354	87		
23	Mysore	405	657	228	252	171	429	804	1338	246	136		
24	Raichur	300	94	2919	277	1845	282	5064	653	1953	581		
25	Ramanagara	294	70	126	101	103	124	523	295	140	67		
26	Shimoga	409	351	480	928	191	224	1080	1503	373	164		
27	Tumkur	423	569	228	152	174	350	825	1071	256	193		
28	Udupi	251	130	12	27	8	36	271	193	39	55		
29	UttaraKannada	400	119	57	60	36	49	493	228	125	113		
30	Yadgir	141	253	645	94	378	225	1164	572	710	288		
	<b>Total</b>	<b>15000</b>	<b>8985</b>	<b>15000</b>	<b>6975</b>	<b>10000</b>	<b>9678</b>	<b>40000</b>	<b>25638</b>	<b>15000</b>	<b>6098</b>		

## Appendix-5.5

Sl. No.	District	District/Yearwise Physical achievement made under Rural House sites											
		2012-13		2013-2014		2014-2015		Total		2015-16			
		Target	Distributed	Target	Distributed	Target	Distributed	Target	Distributed	Target	Distributed Upto Dec-2015		
1	Bagalkot	849	1074	295	101	301	162	1445	1337	271	171		
2	Ballari	1291	149	346	97	346	0	1983	246	321	58		
3	Belagavi	2550	0	928	0	944	310	4422	310	921	150		
4	Bengaluru Rural	515	97	168	0	169	92	852	189	160	0		
5	Bengaluru Urban	450	4581	154	541	156	826	760	5948	182	8		
6	Bidar	923	0	322	0	332	0	1577	0	303	0		
7	Chamarajanagar	627	120	217	0	215	226	1059	346	215	0		
8	Chikkaballapura	793	155	276	0	279	195	1348	350	255	0		
9	Chikkamagaluru	1194	0	380	0	378	618	1952	618	410	36		
10	Chitradurga	981	201	343	131	348	42	1672	374	320	0		
11	DakshinaKannada	1070	691	357	459	358	409	1785	1559	382	178		
12	Davanagere	1213	785	401	0	399	202	2013	987	417	0		
13	Dharwad	667	343	218	86	217	156	1102	585	216	66		
14	Gadag	556	1272	201	1104	196	988	953	3364	174	272		
15	Hassan	1365	411	443	105	432	4	2240	520	468	228		
16	Haveri	1100	815	359	31	360	716	1819	1562	361	28		
17	Kalaburagi	1158	0	392	188	398	171	1948	359	379	53		
18	Kodagu	516	107	178	34	175	68	869	209	176	0		
19	Kolar	829	0	264	0	260	0	1353	0	270	0		
20	Koppal	715	469	240	0	240	505	1195	974	229	0		
21	Mandya	1236	40	405	179	405	105	2046	324	414	0		
22	Mysuru	1245	189	415	128	419	155	2079	472	410	146		
23	Raichur	870	501	277	100	283	864	1430	1465	282	632		
24	Ramanagara	685	468	228	78	231	0	1144	546	225	0		
25	Shivamogga	1378	677	462	268	450	74	2290	1019	471	1000		
26	Tumakuru	1698	170	564	238	564	290	2826	698	559	98		
27	Udupi	772	361	253	385	248	280	1273	1026	269	145		
28	UttaraKannada	1082	61	361	0	356	0	1799	61	360	14		
29	Vijayapura	1054	0	343	26	334	522	1731	548	366	203		
30	Yadgiri	618	0	210	0	207	160	1035	160	214	185		
	<b>Grand Total</b>	<b>30000</b>	<b>13737</b>	<b>10000</b>	<b>4279</b>	<b>10000</b>	<b>8140</b>	<b>50000</b>	<b>26156</b>	<b>10000</b>	<b>3671</b>		

## Appendix-5.6

Sl. No.	District	District/Yearwise Physical achievement made under Urban House Sites											
		2012-2013		2013-2014		2014-2015		Total		2015-16			
		Target	Distributed	Target	Distributed	Target	Distributed	Target	Distributed	Target	Distributed		
1	Bagalkot	1165	2101	572	0	572	54	2309	2155	548	0		
2	Ballari	989	850	500	5323	500	21	1989	6194	488	0		
3	Belagavi	1428	797	709	166	709	0	2846	963	668	2		
4	Bengaluru Rural	446	0	219	0	219	0	884	0	210	0		
5	Bengaluru Urban	647	1039	356	120	356	0	1359	1159	496	0		
6	Bidar	595	644	296	19	296	0	1187	663	261	0		
7	Chamarajanagar	502	85	250	37	250	0	1002	122	214	0		
8	Chikkaballapura	595	39	296	0	296	0	1187	39	264	0		
9	Chikkamagaluru	550	90	259	13	259	0	1068	103	290	0		
10	Chitradurga	464	1432	223	0	223	0	910	1432	227	27		
11	DakshinaKannada	747	170	377	100	377	361	1501	631	324	57		
12	Davanagere	717	363	372	61	372	273	1461	697	306	0		
13	Dharwad	611	0	313	0	313	52	1237	52	311	0		
14	Gadag	643	2510	305	64	305	0	1253	2574	384	400		
15	Hassan	600	1022	287	0	287	0	1174	1022	332	0		
16	Haveri	731	1731	360	0	360	1	1451	1732	379	0		
17	Kalaburagi	921	565	468	332	468	241	1857	1138	431	50		
18	Kodagu	303	0	145	0	145	0	593	0	182	0		
19	Kolar	620	356	310	1	310	0	1240	357	299	0		
20	Koppal	459	175	232	0	232	1926	923	2101	238	7		
21	Mandya	532	66	255	0	255	0	1042	66	308	0		
22	Mysuru	790	295	395	200	395	0	1580	495	391	0		
23	Raichur	595	0	296	0	296	0	1187	0	294	163		
24	Ramanagara	484	1368	258	0	258	0	1000	1368	211	0		
25	Shivamogga	805	113	413	61	413	0	1631	174	414	0		
26	Tumakuru	923	0	473	72	473	0	1869	72	462	0		
27	Udupi	378	0	193	85	193	0	764	85	178	0		
28	UttaraKannada	893	150	438	0	438	0	1769	150	434	0		
29	Vijayapura	514	309	251	0	251	0	1016	309	282	0		
30	Yadgiri	353	0	179	0	179	0	711	0	174	95		
<b>Grand Total</b>		<b>20000</b>	<b>16270</b>	<b>10000</b>	<b>6654</b>	<b>10000</b>	<b>2929</b>	<b>40000</b>	<b>25853</b>	<b>10000</b>	<b>801</b>		

## Appendix 6.1

### District- wise Urbanisation in Karnataka 2011

Sl. No	Districts	Urbanisation %
1	Bagalkote	32
2	Bangaluru	91
3	Bangaluru (Rural)	27
4	Belagavi	25
5	Ballari	38
6	Bidar	25
7	Vijayapura	23
8	Chamarajanagar	17
9	Chikkaballapura	22
10	Chikkmagaluru	21
11	Chitradurga	20
12	Dakshina Kannada	48
13	Davanagere	32
14	Dharawad	57
15	Gadag	36
16	Kalaburgi	33
17	Hassan	21
18	Haveri	22
19	Kodagu	15
20	Kolar	31
21	Koppal	17
22	Mandya	17
23	Mysuru	41
24	Raichur	25
25	Ramanagara	25
26	Shivamogga	36
27	Tumkuruu	22
28	Udupi	28
29	Uttara Kannada	29
30	Yadagiri	19
<b>Karnataka</b>		<b>39</b>

Source: 2011 Census

**Appendix 6.2 Construction of Houses in Various Schemes**

District/ Year	Ashraya Housing Scheme		Dr. B.R. Ambedkar Grameena Housing Scheme		Indira Awas Housing Scheme	
	Rural	Urban	Rural	Urban	Rural	Urban
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<b>2010-11</b>	<b>48422</b>	<b>685</b>	<b>3692</b>	<b>0</b>	<b>95311</b>	<b>0</b>
<b>2011-12</b>	<b>69529</b>	<b>4071</b>	<b>4722</b>	<b>0</b>	<b>26769</b>	<b>0</b>
<b>2012-13</b>	<b>158422</b>	<b>8985</b>	<b>5938</b>	<b>0</b>	<b>108493</b>	<b>0</b>
<b>2012-13</b>						
Bagalkote	3863	1330	105	0	4316	0
Bangaluru	1674	0	33	0	1002	0
Bangaluru (Rural)	2791	64	37	0	1331	0
Belagavi	17237	229	840	0	11310	0
Ballari	6019	1050	154	0	8007	0
Bidar	3899	18	307	0	2393	0
Vijayapura	9922	455	631	0	6377	0
Chamarajanagar	3498	189	497	0	1880	0
Chikkaballapura	2066	193	176	0	1541	0
Chikkmagaluru	3438	76	87	0	2288	0
Chitradurga	3742	301	215	0	5625	0
Dakshina Kannada	4123	258	32	0	1012	0
Davanagere	9662	388	226	0	6183	0
Dharawad	4032	168	75	0	3872	0
Gadag	2496	735	57	0	2487	0
Kalaburagi	7976	457	762	0	4959	0
Hassan	5772	138	144	0	1533	0
Haveri	11065	318	170	0	2868	0
Kodagu	1400	44	13	0	1247	0
Kolar	3062	77	53	0	1227	0
Koppal	4355	165	213	0	5375	0
Mandya	5438	89	92	0	2020	0
Mysuru	6202	657	187	0	2888	0
Raichur	3812	94	96	0	10107	0
Ramanagar	7105	70	63	0	1736	0
Shivamogga	2838	351	65	0	2855	0
Tumkuru	11434	569	365	0	7288	0
Udupi	2200	130	4	0	737	0
Uttara Kannada	3870	119	17	0	1915	0
Yadagiri	3431	253	222	0	2114	0

Note: Inclusion of SC/ ST and others Source: RGRHCL

**Appendix 6.3 Authorized & Unauthorized Slums in various Districts in Karnataka**

Sl No.	District Name	Authorized Slums	Unauthorized Slums	Total Slums
1	Bagalkote	62	57	119
2	Bangaluru (Rural)	25	22	47
3	Bangaluru	232	353	585
4	Belagavi	104	63	167
5	Ballari	143	38	181
6	Bidar	64	30	94
7	Vijayapura	67	4	71
8	Chamarajanagar	53	23	76
9	Chikkaballapura	44	22	66
10	Chikkmagaluru	33	45	78
11	Chitradurga	50	47	97
12	Dakshina Kannada	14	62	76
13	Davanagere	71	55	126
14	Dharawad	118	44	162
15	Gadag	83	27	110
16	Kalaburagi	121	58	179
17	Hassan	93	23	116
18	Haveri	56	35	91
19	Kodagu	8	10	18
20	Kolar	48	21	69
21	Koppal	41	18	59
22	Mandya	52	15	67
23	Mysuru	37	110	147
24	Raichur	61	71	132
25	Ramanagar	34	18	52
26	Shivamogga	150	31	181
27	Tumkuru	82	132	214
28	Udupi	9	40	49
29	Uttara Kannada	17	25	42
30	Yadagiri	15	5	20
<b>Total</b>		<b>1987</b>	<b>1504</b>	<b>3491</b>

Source: Karnataka Slum Development Board

**Appendix 6.4 Use of Energy for Cooking in ULBs of Various Districts in Karnataka- 2011**

Districts	Firewood	Crop Residue	Cow-pat	Coal/Lignite	Kerosene	LPG/PNG	Electricity	Bio-Gas	Other Sources	Non Cooking Items
Bagalkote	60.42	1.31	0.15	0.10	2.74	34.00	0.07	0.72	0.07	0.42
Bangaluru	4.10	0.31	0.07	0.06	15.85	77.89	0.18	0.80	0.09	0.66
Bangaluru (Rural)	16.38	0.54	0.07	0.05	19.97	61.54	0.21	0.70	0.06	0.49
Belagavi	26.24	1.33	0.23	0.15	5.62	64.77	0.14	0.93	0.19	0.39
Ballari	41.15	1.07	0.13	0.16	9.00	46.77	0.24	0.86	0.07	0.56
Bidar	47.95	5.11	0.41	0.33	6.99	37.42	0.15	0.78	0.46	0.41
Vijayapura	41.60	2.22	0.20	0.61	6.48	47.38	0.08	1.01	0.08	0.35
Chamarajanagar	41.99	1.35	0.05	0.06	11.43	42.79	0.06	1.54	0.43	0.30
Chikkaballapura	32.42	0.90	0.06	0.05	16.71	48.50	0.20	0.70	0.04	0.42
Chikkmagaluru	20.71	0.42	0.05	0.10	7.34	69.67	0.08	0.87	0.04	0.72
Chitradurga	33.77	1.18	0.10	0.10	8.00	55.36	0.09	0.98	0.02	0.40
Dakshina Kannada	27.90	0.29	0.04	0.05	2.91	68.03	0.06	0.31	0.11	0.31
Davanagere	35.80	2.37	0.08	0.05	4.28	55.89	0.10	0.92	0.03	0.48
Dharwad	27.07	1.54	0.22	0.13	7.75	61.69	0.10	0.65	0.38	0.47
Gadag	58.94	2.75	0.11	0.21	2.77	33.19	0.09	1.48	0.17	0.30
Kalaburagi	42.34	2.90	0.24	0.64	7.87	44.63	0.13	0.78	0.10	0.37
Hassan	16.85	0.38	0.05	0.04	15.42	65.44	0.11	1.17	0.07	0.48
Haveri	51.84	4.08	0.03	0.20	2.04	40.82	0.06	0.56	0.10	0.27
Kodagu	17.12	0.64	0.06	0.02	3.00	77.53	0.04	1.22	0.03	0.36
Kolar	30.52	1.09	0.13	0.10	19.51	47.29	0.29	0.53	0.06	0.47
Koppal	58.45	1.04	0.07	0.04	3.87	34.89	0.35	0.71	0.04	0.53
Mandya	27.41	0.83	0.05	0.06	18.21	51.90	0.21	0.73	0.15	0.43
Mysuru	11.45	0.36	0.09	0.05	15.62	71.23	0.11	0.65	0.08	0.38
Raichur	52.55	2.27	0.21	0.13	3.77	36.44	2.34	1.22	0.48	0.60
Ramanagar	31.79	0.88	0.24	0.15	21.95	43.34	0.21	0.82	0.07	0.55
Shivamogga	23.07	0.71	0.07	0.16	10.58	63.59	0.49	0.74	0.10	0.49
Tumkuru	26.58	0.56	0.05	0.08	12.79	58.03	0.14	1.30	0.04	0.42
Udupi	37.31	0.40	0.04	0.15	0.98	59.90	0.03	0.79	0.08	0.32
Uttara Kannada	36.28	0.57	0.11	0.04	2.85	58.72	0.53	0.37	0.04	0.49
Yadagiri	58.67	2.02	0.11	0.11	2.17	35.83	0.28	0.35	0.06	0.41
<b>Karnataka</b>	<b>21.23</b>	<b>0.91</b>	<b>0.10</b>	<b>0.11</b>	<b>11.67</b>	<b>64.33</b>	<b>0.21</b>	<b>0.80</b>	<b>0.11</b>	<b>0.52</b>

Source:2011 Census

**Appendix 6.5 List of number of Slums in Karnataka as per 2011 Census**

District Name	Total Houses in Slums	Total Number of Slums	Share of Slums Population in the State	Grade
Bangaluru	167551	722290	21.94	1
Dharwad	41169	204340	6.21	2
Ballari	41049	200499	6.09	3
Shivamogga	39393	170891	5.19	4
Tumkuru	37412	164368	4.99	5
Kalaburagi	26550	141951	4.31	6
Belagavi	29392	141515	4.30	7
Raichur	23224	122034	3.71	8
Mysuru	27093	117232	3.56	9
Bidar	19713	107117	3.25	10
Davanagere	21358	104092	3.16	11
Bagalkote	20504	103611	3.15	12
Kolar	21888	101713	3.09	13
Hassan	20730	87875	2.67	14
Chitradurga	18525	84013	2.55	15
Koppal	15560	79835	2.43	16
Chikkaballapura	15971	72508	2.20	17
Chamarajanagar	14807	65076	1.98	18
Gadag	13212	64730	1.97	19
Yadgiri	11437	63356	1.92	20
Haveri	11518	56235	1.71	21
Vijayapura	10564	55087	1.67	22
Mandya	12192	53938	1.64	23
Uttara Kannada	11230	50902	1.55	24
Bangaluru (R)	9559	42037	1.28	25
Chikkmagaluru	9067	38423	1.17	26
Ramanagar	8341	37199	1.13	27
Udupi	3667	17095	0.52	28
Dakshina Kannada	2758	12523	0.38	29
Kodagu	2228	8949	0.27	30
State Total	707662	3291434	100	

Source: 2011 Census

**Appendix- 7.1 (a)**  
**Statement showing District-wise & Month-wise Normal & Actual Rainfall with percentage Departure from normal**  
**From January to May 2015**

Sl. No.	District Name	January			February			March			April			May		
		Normal (mm)	Actual (mm)	%DEP	Normal (mm)	Actual (mm)	%DEP	Normal (mm)	Actual (mm)	%DEP	Normal (mm)	Actual (mm)	%DEP	Normal (mm)	Actual (mm)	%DEP
<b>South Interior Karnataka</b>		<b>1.8</b>	<b>2.3</b>	<b>29</b>	<b>3.5</b>	<b>0.2</b>	<b>-95</b>	<b>8.1</b>	<b>20.1</b>	<b>148</b>	<b>40.5</b>	<b>73.7</b>	<b>82</b>	<b>96.3</b>	<b>128.7</b>	<b>34</b>
1	BENGALURU URBAN	2.1	11.3	438	7.3	0.1	-99	8.7	32.2	270	37.6	143.8	282	105.1	143.5	37
2	BENGALURU RURAL	1.5	9.6	537	5.1	0.0	-100	6.6	28.7	335	34.5	92.7	169	91.9	157.0	71
3	RAMANAGARA	0.9	0.9	-6	4.8	0.3	-94	9.7	18.0	86	47.6	104.8	120	119.9	168.9	41
4	KOLAR	2.7	7.0	159	4.8	0.4	-91	10.4	35.1	237	29.4	104.6	256	76.0	86.4	14
5	CHIKBALLAPUR	2.2	8.3	275	4.6	0.0	-99	8.2	38.2	365	26.6	72.2	172	68.5	99.2	45
6	TUMAKURU	2.1	0.4	-79	3.2	0.0	-99	7.2	10.9	51	32.8	68.1	108	86.8	105.9	22
7	CHITRADURGA	1.2	0.3	-78	1.2	0.0	-98	3.8	10.2	169	25.6	45.3	77	67.2	107.0	59
8	DAVANAGERE	0.9	0.4	-52	1.0	0.0	-99	4.1	11.2	173	36.0	30.8	-15	74.7	116.2	56
9	CHAMARAJANAGAR	2.3	0.9	-59	5.7	0.8	-86	12.7	26.7	110	67.4	106.1	57	142.1	159.6	12
10	MYSURU	2.1	0.8	-61	4.5	0.4	-91	12.9	28.9	124	61.9	81.3	31	128.0	170.1	33
11	MANDYA	2.0	0.6	-73	4.6	0.1	-99	8.8	13.3	51	49.5	60.6	22	118.7	156.9	32
<b>North Interior Karnataka</b>		<b>2.1</b>	<b>2.5</b>	<b>19</b>	<b>1.8</b>	<b>0.2</b>	<b>-92</b>	<b>4.9</b>	<b>23.4</b>	<b>378</b>	<b>25.3</b>	<b>47.0</b>	<b>86</b>	<b>55.2</b>	<b>46.4</b>	<b>-16</b>
1	BALLARI	1.3	0.5	-61	1.3	0.0	-98	2.8	15.7	461	25.2	52.4	108	64.5	72.3	12
2	KOPPAL	1.0	0.8	-20	0.5	0.1	-88	2.8	17.4	522	22.5	69.1	207	54.6	36.3	-34
3	RAICHUR	1.5	2.8	86	1.5	0.0	-99	4.2	9.6	128	18.5	44.2	139	41.6	30.3	-27
4	KALABURGI	4.1	6.0	47	3.6	0.7	-80	6.6	34.5	423	19.3	76.2	295	37.6	23.9	-36
5	YADGIR	4.0	8.6	115	2.8	0.1	-97	5.1	20.4	299	20.2	53.3	164	37.0	23.6	-36
6	BIDAR	5.9	6.7	14	6.1	0.1	-98	10.7	34.2	219	19.8	74.8	278	31.1	32.9	6
7	BELGAVI	0.8	0.9	14	0.6	0.3	-52	5.4	30.2	459	28.4	20.6	-28	72.1	70.1	-3
8	BAGALKOTE	1.3	1.1	-15	1.4	0.0	-99	4.2	11.8	180	23.1	40.9	77	56.3	36.9	-34
9	VIJAYPURA	2.5	1.7	-32	2.7	0.1	-98	4.9	13.8	181	19.9	39.9	100	45.6	26.3	-42
10	GADAG	1.1	0.2	-83	1.3	0.1	-95	4.3	30.1	601	34.0	29.7	-13	71.6	48.6	-32
11	HAVERI	0.3	0.2	-37	0.5	0.1	-88	4.0	27.2	581	42.7	22.3	-48	79.7	92.0	15
12	DHARWAD	1.9	0.2	-87	2.9	0.1	-98	6.8	44.0	548	44.4	26.9	-39	84.6	80.4	-5
<b>Malnad</b>		<b>2.0</b>	<b>0.5</b>	<b>-77</b>	<b>2.0</b>	<b>0.7</b>	<b>-65</b>	<b>10.9</b>	<b>31.5</b>	<b>189</b>	<b>56.0</b>	<b>82.0</b>	<b>46</b>	<b>111.5</b>	<b>130.7</b>	<b>17</b>
1	SHIVAMOGGA	0.7	0.6	-19	0.7	0.1	-90	5.8	26.9	363	39.7	42.9	8	99.7	117.7	18
2	HASSAN	2.2	0.3	-85	2.7	0.3	-89	10.5	28.8	174	54.8	91.4	67	106.0	115.6	9
3	CHIKMAGALUR	1.7	0.3	-82	2.4	0.5	-79	12.2	36.2	197	58.4	90.8	55	104.9	123.9	18
4	KODAGU	3.3	0.7	-80	4.0	3.2	-21	19.9	37.3	87	86.9	133.5	54	155.9	194.3	25
<b>Coastal</b>		<b>1.0</b>	<b>1.6</b>	<b>61</b>	<b>0.1</b>	<b>0.3</b>	<b>160</b>	<b>4.8</b>	<b>31.7</b>	<b>560</b>	<b>30.5</b>	<b>53.6</b>	<b>76</b>	<b>134.7</b>	<b>119.6</b>	<b>-11</b>
1	DAKSHINA KANNADA	2.5	1.0	-62	0.7	0.7	3	9.7	38.6	298	50.3	111.4	121	168.6	189.9	13
2	UDUPI	1.0	1.1	6	0.4	0.2	-58	4.0	33.5	736	28.4	58.0	104	167.8	131.9	-21
3	UTTARA KANNADA	0.3	2.1	583	0.1	0.0	-60	2.7	27.7	926	22.2	27.2	22	107.1	82.4	-23
<b>STATE</b>		<b>1.7</b>	<b>2.1</b>	<b>22</b>	<b>2.5</b>	<b>0.3</b>	<b>-90</b>	<b>6.9</b>	<b>24.3</b>	<b>253</b>	<b>34.80</b>	<b>61.34</b>	<b>76.26</b>	<b>83.20</b>	<b>90.16</b>	<b>8.37</b>

Source: KSNDMC, Bengaluru.



**Appendix- 7.1 (b)**  
Statement showing District-wise & Month-wise Normal & Actual rainfall with percentage Departure from normal during  
**Southwest monsoon 2015**

Sl. No.	District Name	June			July			August			September			South - West Monsoon Rainfall (1st June to 30th Sept.)		
		Normal (mm)	Actual (mm)	% DEP	Normal (mm)	Actual (mm)	% DEP	Normal (mm)	Actual (mm)	% DEP	Normal (mm)	Actual (mm)	% DEP	Normal (mm)	Actual (mm)	% DEP
<b>South Interior Karnataka</b>		<b>64.2</b>	<b>86.6</b>	<b>35</b>	<b>78.5</b>	<b>41.3</b>	<b>-47</b>	<b>81.1</b>	<b>101.9</b>	<b>26</b>	<b>135.0</b>	<b>170.2</b>	<b>26</b>	<b>358.8</b>	<b>399.9</b>	<b>11</b>
1	EBNGALURU URBAN	71.3	98.4	38	94.9	54.6	-42	119.9	121.9	2	174.0	217.2	25	460.1	492.3	7
2	BENGALURU RURAL	67.9	74.1	9	91.0	66.8	-27	115.2	95.2	-17	166.6	246.0	48	440.7	482.0	9
3	RAMANAGARA	70.2	82.9	18	80.9	37.6	-54	100.6	148.3	47	178.4	197.6	11	430.1	466.3	8
4	KOLAR	63.3	75.4	19	75.9	39.4	-48	93.7	105.9	13	153.9	153.2	0	386.8	373.9	-3
5	CHIKBALLAPUR	62.6	69.0	10	86.1	50.0	-42	100.1	113.5	13	150.2	180.0	20	399.0	412.6	3
6	TUMAKURU	61.7	84.7	37	70.3	42.5	-40	80.9	107.9	33	148.4	246.2	66	361.3	481.3	33
7	CHITRADURGA	49.6	61.5	24	57.1	37.1	-35	60.4	81.4	35	108.5	164.3	51	275.6	344.2	25
8	DAVANAGERE	76.0	85.0	12	99.3	75.3	-24	83.5	91.6	10	114.0	126.8	11	372.8	378.5	2
9	CHAMARAJANAGAR	52.1	76.6	47	56.0	14.7	-74	65.5	98.8	51	130.9	107.5	-18	304.5	297.6	-2
10	MYSURU	89.1	162.6	83	123.8	39.1	-68	80.1	89.2	11	102.2	119.7	17	395.2	410.4	4
11	MANDYA	54.1	76.3	41	52.9	16.6	-69	62.8	104.1	66	133.8	135.0	1	303.6	331.9	9
<b>North Interior Karnataka</b>		<b>101.1</b>	<b>82.4</b>	<b>-18</b>	<b>130.8</b>	<b>37.7</b>	<b>-71</b>	<b>117.6</b>	<b>79.6</b>	<b>-32</b>	<b>144.5</b>	<b>136.3</b>	<b>-6</b>	<b>494.0</b>	<b>336.1</b>	<b>-32</b>
1	BALLARI	69.4	69.0	-1	72.4	26.2	-64	82.6	104.0	26	127.8	188.1	47	352.2	387.3	10
2	KOPPAL	72.8	57.5	-21	72.3	14.3	-80	86.5	86.7	0	144.6	184.5	28	376.2	343.0	-9
3	RAICHUR	80.7	35.0	-57	103.1	35.1	-66	114.9	67.0	-42	151.0	190.2	26	449.7	327.4	-27
4	KALABURGI	113.3	64.2	-43	151.5	53.6	-65	160.7	117.1	-27	188.6	131.9	-30	614.1	366.8	-40
5	YADGIR	110.8	56.5	-49	147.5	52.3	-65	157.7	99.7	-37	175.5	155.2	-12	591.5	363.5	-39
6	BIDAR	127.5	99.7	-22	186.7	57.5	-69	195.8	113.2	-42	174.2	132.1	-24	684.2	402.4	-41
7	BELGAVI	137.5	162.5	18	222.9	59.6	-73	136.5	62.1	-54	115.2	78.7	-32	612.1	362.9	-41
8	BAGALKOTE	78.0	51.5	-34	72.4	14.3	-80	69.7	45.8	-34	130.3	166.7	28	350.4	278.1	-21
9	VIJAYPURA	93.1	47.1	-49	90.0	12.2	-86	90.1	59.0	-34	154.6	143.2	-7	427.8	261.6	-39
10	GADAG	86.0	73.1	-15	75.9	16.3	-78	82.0	77.6	-5	138.1	105.1	-24	382.0	272.1	-29
11	HAVERI	111.1	137.9	24	165.4	58.5	-65	108.7	70.0	-36	99.6	73.6	-26	484.8	340.0	-30
12	DHARWAD	113.6	125.3	10	157.1	43.1	-73	104.9	54.8	-48	122.1	79.9	-35	497.7	303.2	-39
<b>Mainad</b>		<b>358.4</b>	<b>461.7</b>	<b>29</b>	<b>597.8</b>	<b>279.4</b>	<b>-53</b>	<b>382.0</b>	<b>239.7</b>	<b>-37</b>	<b>165.4</b>	<b>162.5</b>	<b>-2</b>	<b>1503.6</b>	<b>1143.2</b>	<b>-24</b>
1	SHIVAMOGGA	450.4	485.9	8	780.8	380.0	-51	477.7	283.8	-41	180.1	158.5	-12	1889.0	1307.8	-31
2	HASSAN	143.6	267.0	86	247.5	93.1	-62	158.7	155.8	-2	123.6	131.5	6	673.4	647.4	-4
3	CHIKMAGALUR	301.9	410.3	36	537.0	288.7	-46	355.4	237.2	-33	155.0	161.1	4	1349.3	1097.3	-19
4	KODAGU	622.4	826.0	33	904.7	360.1	-60	597.7	289.6	-52	219.9	224.5	2	2344.7	1700.2	-27
<b>Coastal</b>		<b>813.0</b>	<b>722.4</b>	<b>-11</b>	<b>1155.7</b>	<b>760.3</b>	<b>-34</b>	<b>760.0</b>	<b>514.9</b>	<b>-32</b>	<b>290.3</b>	<b>243.4</b>	<b>-16</b>	<b>3019.0</b>	<b>2240.8</b>	<b>-26</b>
1	DAKSHINA KANNADA	939.5	759.5	-19	1281.3	915.3	-29	894.8	600.1	-33	325.4	223.3	-31	3441.0	2498.0	-27
2	UDUPI	1127.3	808.2	-28	1457.0	1241.7	-15	1048.0	709.4	-32	438.9	312.5	-29	4071.2	3072.5	-25
3	UTTARA KANNADA	645.9	676.0	5	992.2	519.8	-48	597.4	407.4	-32	221.7	229.6	4	2457.2	1832.3	-25
<b>STATE</b>		<b>194.90</b>	<b>198.49</b>	<b>1.84</b>	<b>279.5</b>	<b>142.5</b>	<b>-49</b>	<b>205.7</b>	<b>150.9</b>	<b>-27</b>	<b>158.6</b>	<b>160.6</b>	<b>1</b>	<b>838.7</b>	<b>652.5</b>	<b>-22</b>

Source: KSNDMC, Bengaluru.

**Appendix - 7.1 (c)**  
Statement showing District-wise & Month-wise Normal & Actual rainfall with percentage Departure from normal during  
**Northeast monsoon 2015**

Sl. No.	District Name	October - 2015				November 2015				December 2015				North -East Monsoon Rainfall Pattern 2015 (1st Oct to 31st December )			
		Normal (mm)	Actual (mm)	Normal (mm)	%DEP	Normal (mm)	Actual (mm)	Normal (mm)	%DEP	Normal (mm)	Actual (mm)	Normal (mm)	%DEP	Normal (mm)	Actual (mm)	Normal (mm)	%DEP
<b>South Interior Karnataka</b>																	
1	BENGALURU URBAN	146.4	114.3	-22	50.0	175.0	14.0	250.0	7.3	48.1	210.4	296.6	41.0	233.7	327.7	40	
2	BENGALURU RURAL	161.4	91.2	-44	53.8	234.5	13.7	336	7.0	-49	228.9	332.6	45	228.9	332.6	45	
3	RAMANAGARA	168.7	122.8	-27	53.4	183.1	15.6	243	6.3	-60	237.7	312.2	31	237.7	312.2	31	
4	KOLAR	151.0	72.6	-52	62.0	353.1	23.3	470	15.7	-33	236.3	441.4	87	236.3	441.4	87	
5	CHIKKABALLAPURA	154.9	107.0	-31	52.5	314.8	14.8	500	9.6	-35	222.2	431.4	94	222.2	431.4	94	
6	TUMAKURU	147.0	148.2	1	46.7	175.0	10.2	275	5.8	-43	203.9	329.0	61	203.9	329.0	61	
7	CHITRADURGA	117.3	120.3	3	34.4	78.0	8.5	127	2.0	-76	160.2	200.3	25	160.2	200.3	25	
8	DAVANAGERE	120.7	114.7	-5	43.7	36.1	8.3	-17	1.0	-88	172.7	151.8	-12	172.7	151.8	-12	
9	CHAMARAJANAGARA	166.1	133.7	-20	66.8	210.1	23.6	215	16.5	-30	256.5	360.3	40	256.5	360.3	40	
10	MYSURU	145.8	84.8	-42	50.7	132.5	14.2	161	7.3	-49	210.7	224.6	7	210.7	224.6	7	
11	MANDYA	165.1	95.7	-42	51.2	205.9	16.7	302	7.7	-54	233.0	309.3	33	233.0	309.3	33	
<b>North Interior Karnataka</b>																	
1	BALLARI	106.8	93.2	-13	31.7	10.7	11.0	-66	2.7	-75	149.5	106.6	-29	149.5	106.6	-29	
2	KOPPALA	107.7	38.8	-64	26.6	4.8	8.0	-82	2.0	-75	142.3	45.6	-68	142.3	45.6	-68	
3	RAICHUR	114.2	39.4	-65	23.1	4.9	5.9	-79	3.3	-44	143.2	47.6	-67	143.2	47.6	-67	
4	KALABURAGI	100.9	35.6	-65	20.8	3.0	5.0	-86	3.9	-22	126.7	42.5	-66	126.7	42.5	-66	
5	YADGIR	121.0	35.1	-71	23.3	2.0	5.6	-91	2.1	-63	149.9	39.2	-74	149.9	39.2	-74	
6	BIDAR	90.7	31.9	-65	19.1	1.3	6.2	-93	1.2	-81	116.0	34.3	-70	116.0	34.3	-70	
7	BELAGAVI	116.2	68.4	-41	30.5	7.0	5.8	-77	1.0	-84	152.5	76.4	-50	152.5	76.4	-50	
8	BAGALKOTE	111.3	53.6	-52	25.6	7.4	7.2	-71	0.1	-99	144.1	61.0	-58	144.1	61.0	-58	
9	VIJAYAPURA	109.7	46.8	-57	24.8	7.2	6.4	-71	0.5	-92	140.9	54.5	-61	140.9	54.5	-61	
10	GADAG	120.6	68.3	-43	33.5	5.1	7.5	-85	0.4	-95	161.6	73.8	-54	161.6	73.8	-54	
11	HAVERI	118.1	100.9	-15	42.7	21.2	7.3	-50	0.6	-92	168.1	122.6	-27	168.1	122.6	-27	
12	DHARWAD	113.9	96.4	-15	39.2	11.9	6.3	-70	1.3	-80	159.4	109.6	-31	159.4	109.6	-31	
<b>Malnad</b>																	
1	SHIVAMOGGA	145.7	101.6	-30	46.3	62.5	9.7	35	1.0	-89	201.7	165.1	-18	201.7	165.1	-18	
2	HASSAN	159.3	86.7	-46	53.6	133.7	12.4	149	8.6	-31	225.3	229.0	2	225.3	229.0	2	
3	CHIKKAMAGALURU	158.8	140.2	-12	56.3	137.9	13.1	145	8.3	-36	228.2	286.4	25	228.2	286.4	25	
4	KODAGU	200.7	146.2	-27	70.0	120.5	17.7	72	9.2	-48	288.4	275.9	-4	288.4	275.9	-4	
<b>Coastal</b>																	
1	DAKSHINA KANNADA	187.1	163.0	-13	61.0	90.8	12.9	48.8	10.0	-22.3	261.0	263.8	1.1	261.0	263.8	1.1	
2	UDUPI	261.4	258.7	-1	89.4	149.7	16.2	67	27.5	70	367.0	435.9	19	367.0	435.9	19	
3	UTTARA KANNADA	212.9	226.5	6	70.0	164.7	15.6	135	10.4	-34	298.5	401.7	35	298.5	401.7	35	
3	UTTARA KANNADA	142.9	95.5	-33	44.4	37.4	10.3	-16	1.7	-84	197.6	134.5	-32	197.6	134.5	-32	
<b>STATE</b>																	
		136.0	92.8	-32	41.3	80.3	10.2	94	4.8	-53	187.5	178.0	-5	187.5	178.0	-5	

Source: KSNDMC, Bengaluru.

Appendix- 7.1 (d)

Statement showing Number of Districts/Taluks/Hoblis under different rainfall category from January to May 2015

Rainfall Classification	January			February			March			April			May		
	Dist.	Taluk	Hobli	Dist.	Taluk	Hobli	Dist.	Taluk	Hobli	Dist.	Taluk	Hobli	Dist.	Taluk	Hobli
Excess	8	48	202	0	6	21	30	161	648	24	127	534	10	70	320
Normal	6	15	56	1	6	23	0	8	39	3	18	86	11	60	213
Deficit	5	34	78	3	8	17	0	6	41	3	25	95	9	43	181
Scanty	11	79	411	26	156	686	0	1	19	0	6	32	0	3	33
Nil Rainfall	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Statement showing Number of Districts/Taluks/Hoblis under different rainfall category during Southwest monsoon 2015

Rainfall Classification	June			July			August			September			Cumulative Rainfall Pattern		
	Dist.	Taluk	Hobli	Dist.	Taluk	Hobli	Dist.	Taluk	Hobli	Dist.	Taluk	Hobli	Dist.	Taluk	Hobli
Excess	10	70	301	0	0	2	6	43	190	9	48	264	2	21	114
Normal	12	64	236	1	10	60	9	42	186	13	78	277	13	72	314
Deficit	8	35	172	12	77	293	15	83	323	8	49	189	15	81	310
Scanty	0	7	38	17	89	392	0	8	48	0	1	17	0	2	9
Nil Rainfall	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Statement showing Number of Districts/Taluks/Hoblis under different rainfall category during Northeast monsoon 2015

Rainfall Classification	October			November			December			Northeast monsoon (No. of Dist./Taluk/Hobli)					
	Dist.	Taluk	Hobli	Dist.	Taluk	Hobli	Dist.	Taluk	Hobli	Dist.	Taluk	Hobli	Dist.	Taluk	Hobli
Excess	0	6	42	16	91	395	1	10	48	11	59	247	11	59	247
Normal	9	48	168	2	8	39	0	12	61	6	33	164	6	33	164
Deficit	16	98	381	1	17	66	14	55	198	7	55	196	7	55	196
Scanty	5	24	156	11	60	242	15	96	408	6	29	140	6	29	140
Nil Rainfall	0	0	0	0	0	5	0	3	32	0	0	0	0	0	0

Source: KSNDMC, Bengaluru.

**Appendix 7.2**  
**Production of Principal Crops in Karnataka State 2014-15 & 2015-16**

Unit: Lakh Tonnes, Cotton in Lakh bales

Crops	KHARIF		RABI		SUMMER		ANNUAL	
	2014-15	2015-16	2014-15	2015-16	2014-15	2015-16	2014-15	2015-16
Rice	30.57	27.04	1.18	0.74	8.50	6.15	40.25	33.93
Jowar	1.60	1.10	10.06	7.67	0.08	0.07	11.74	8.84
Ragi	12.31	10.37	0.55	0.53	0.12	0.08	12.98	10.98
Maize	37.88	30.32	3.48	3.01	0.78	0.62	42.14	33.95
Bajra	2.48	1.36	-	-	-	-	2.48	1.36
Wheat	-	-	2.61	1.58	-	-	2.61	1.58
Minor Millets	0.12	0.08	-	-	-	-	0.12	0.08
<b>Total Cereals</b>	<b>84.96</b>	<b>70.27</b>	<b>17.88</b>	<b>13.53</b>	<b>9.48</b>	<b>6.92</b>	<b>112.32</b>	<b>90.72</b>
Tur (Red gram)	4.74	2.7	-	-	-	-	4.74	2.7
Bengal gram (Gram)	-	-	6.74	4.94	-	-	6.74	4.94
Horse gram	0.27	0.24	0.60	0.49	-	-	0.87	0.73
Black gram	0.18	0.14	0.03	0.02	-	-	0.21	0.16
Green gram	0.51	0.5	0.02	0.01	-	-	0.53	0.51
Avare	0.45	0.36	0.05	0.04	-	-	0.50	0.4
Cowpea & other pulses	0.25	0.27	0.03	0.05	0.03	0.02	0.31	0.34
<b>Total Pulses</b>	<b>6.40</b>	<b>4.21</b>	<b>7.47</b>	<b>5.55</b>	<b>0.03</b>	<b>0.02</b>	<b>13.90</b>	<b>9.78</b>
<b>Total Food grains</b>	<b>91.36</b>	<b>74.48</b>	<b>25.35</b>	<b>19.08</b>	<b>9.51</b>	<b>6.94</b>	<b>126.22</b>	<b>100.5</b>
Groundnut	3.49	1.88	0.08	0.05	1.45	1.49	5.02	3.42
Sesamum	0.22	0.23	-	-	-	-	0.22	0.23
Sunflower	0.86	0.52	1.06	0.76	0.14	0.13	2.06	1.41
Castor	0.07	0.06	-	-	-	-	0.07	0.06
Niger seed	0.03	0.02	-	-	-	-	0.03	0.02
Mustard	0.01	0.01	-	-	-	-	0.01	0.01
Soyabean	1.89	2.04	-	-	-	-	1.89	2.04
Safflower	-	-	0.27	0.29	-	-	0.27	0.29
Linseed	-	-	0.02	0.01	-	-	0.02	0.01
<b>Total Oilseeds</b>	<b>6.57</b>	<b>4.76</b>	<b>1.43</b>	<b>1.11</b>	<b>1.59</b>	<b>1.62</b>	<b>9.59</b>	<b>7.49</b>
Cotton	22.04	11.68	1.04	0.41	0.04	0.02	23.12	12.1
Sugarcane (Harvested)	437.76	367.65	-	-	-	-	437.76	367.65
Tobacco	0.67	0.61	-	-	-	-	-	0.61

Source: 2014-15 Final Estimates, 2015-16 Second Advance Estimates by DE&S

**Appendix 7.3**  
**Area of Principal Crops in Karnataka State- 2014-15 & 2015-16**

Unit: Area in Lakh Hectares

Crops	KHARIF		RABI		SUMMER		ANNUAL	
	2014-15	2015-16	2014-15	2015-16	2014-15	2015-16	2014-15	2015-16
Rice	10.00	9.65	0.48	0.3	2.78	1.85	13.26	11.8
Jowar	1.16	0.98	9.27	9.5	0.04	0.04	10.47	10.52
Ragi	6.67	6.50	0.34	0.35	0.07	0.05	7.08	6.9
Maize	12.1	10.82	1.03	0.98	0.24	0.20	13.37	12
Bajra	2.34	1.68	-	-	-	-	2.34	1.68
Wheat	-	-	1.98	1.65	-	-	1.98	1.65
Minor Millets	0.23	0.22	-	-	-	-	0.23	0.22
<b>Total Cereals</b>	<b>32.50</b>	<b>29.85</b>	<b>13.10</b>	<b>12.78</b>	<b>3.13</b>	<b>2.14</b>	<b>48.73</b>	<b>44.77</b>
Tur (Red gram)	7.28	7.10	-	-	-	-	7.28	7.10
Bengal gram (Gram)	-	-	9.39	13.00	-	-	9.39	13.00
Horse gram	0.58	0.55	1.23	1.08	-	-	1.81	1.63
Black gram	0.63	0.70	0.07	0.06	-	-	0.70	0.76
Green gram	2.57	3.00	0.06	0.04	-	-	2.63	3.04
Avare	0.53	0.52	0.06	0.07	-	-	0.59	0.59
Cowpea & other pulses	0.61	0.71	0.12	0.12	0.07	0.06	0.80	0.89
<b>Total Pulses</b>	<b>12.20</b>	<b>12.58</b>	<b>10.93</b>	<b>14.37</b>	<b>0.07</b>	<b>0.06</b>	<b>23.20</b>	<b>27.01</b>
<b>Total Food grains</b>	<b>44.70</b>	<b>42.43</b>	<b>24.03</b>	<b>27.15</b>	<b>3.20</b>	<b>2.20</b>	<b>71.93</b>	<b>71.78</b>
Groundnut	4.79	3.60	0.04	0.03	1.71	1.65	6.54	5.28
Sesamum	0.44	0.45	-	-	-	0.15	0.44	0.45
Sunflower	1.55	1.22	1.85	2.00	0.16	-	3.56	3.37
Castor	0.12	0.09	-	-	-	-	0.12	0.09
Niger seed	0.11	0.07	-	-	-	-	0.11	0.07
Mustard	0.02	0.02	-	-	-	-	0.02	0.02
Soyabean	2.56	2.68	-	-	-	-	2.56	2.68
Safflower	-	-	0.33	0.45	-	-	0.33	0.45
Linseed	-	-	0.05	0.05	-	-	0.05	0.05
<b>Total Oilseeds</b>	<b>9.59</b>	<b>8.13</b>	<b>2.27</b>	<b>2.53</b>	<b>1.87</b>	<b>1.8</b>	<b>13.73</b>	<b>12.46</b>
Cotton	8.08	5.50	0.65	0.33	0.02	0.01	8.75	5.84
Sugarcane (Harvested)	4.80	4.30	-	-	-	-	4.80	4.30
Sugarcane (Planted)	1.11	1.20	0.69	-	0.31	-	2.11	1.20
Tobacco	0.94	0.85	-	-	-	-	0.94	0.85

Source: 2014-15 Final Estimates ,2015-16 Second Advance Estimates by DE&S,

#### Appendix 7.4

##### Index numbers of area, production and yield of agricultural commodities

Base Triennium ending 1981-82 = 100

Year	Area	Production	Yield
2009-10	105.1	211.8	126.7
2010-11	110.8	252.0	151.6
2011-12	101.1	218.8	148.5

#### Appendix 7.4

##### (Additional information)

##### Index numbers of area, production and yield of agricultural commodities

Base Triennium ending 1981-82 = 100

Year	Total Cereals			Total pulses			Total food crops			Total Oil seeds		
	Area	Production	Yield	Area	Production	Yield	Area	Production	Yield	Area	Production	Yield
2009-10	92.2	163.1	115.0	159.4	420.3	109.9	106.1	195.9	114.3	100.1	140.1	112.1
2010-11	91.7	198.7	139.2	179.4	494.8	131.1	109.9	236.5	138.0	111.7	133.6	120.2
2011-12	86.1	172.4	129.7	147.8	306.1	103.8	98.9	189.5	126.2	97.3	139.9	102.7

Source: Directorate of Economics and statistics

#### Appendix 7.5

##### Area Under Principal Crops in Karnataka

Lakh Hectares

CROP	2012-2013	2013-2014	2014-2015
Rice	12.79	13.4	13.26
Ragi	6.45	6.71	7.08
Jowar	12.64	11.39	10.47
Bajra	2.75	2.80	2.34
Maize	13.22	13.77	13.37
Wheat	2.25	2.09	1.98
Minor millets	0.22	0.24	0.23
<b>Total cereals and Minor Millets</b>	<b>50.32</b>	<b>50.40</b>	<b>48.73</b>
Tur	6.60	8.24	7.28
<b>Total pulses</b>	<b>22.68</b>	<b>25.06</b>	<b>23.20</b>
<b>Total foodgrains</b>	<b>73.00</b>	<b>75.46</b>	<b>71.93</b>
Groundnut	5.89	6.55	6.54
<b>Total oilseeds</b>	<b>14.22</b>	<b>14.10</b>	<b>13.73</b>
Sugarcane	4.25	4.20	4.80
Cotton	4.95	6.62	8.75
Areca nut (processed)	2.21	2.18	2.36
Coconut	4.40	4.30	4.40
Dry chillies	0.62	0.90	0.95
Tobacco	1.06	1.09	0.94
Pepper	0.27	0.28	0.33
Cardamom	0.19	0.19	0.18

Note: Figures for 2012-13, 2013-14 & 2014-15 are based on Final estimates.

#### Appendix 7.6

##### Production of Principal Crops in Karnataka

Crop	2012-2013	2013-2014	2014-15
Rice	33.64	40.53	40.25
Ragi	9.74	12.57	12.98
Jowar	13.15	13.17	11.74
Bajra	2.85	3.31	2.48
Maize	34.76	43.56	42.14
Wheat	1.79	2.10	2.61
Minor millets	0.09	0.13	0.12
<b>Total cereals and Minor Millets</b>	<b>96.02</b>	<b>115.37</b>	<b>112.32</b>
Tur	4.67	7.57	4.74
<b>Total pulses</b>	<b>13.62</b>	<b>17.73</b>	<b>13.90</b>
<b>Total foodgrains</b>	<b>109.64</b>	<b>133.10</b>	<b>126.22</b>
Groundnut	3.95	5.65	5.02
<b>Total oilseeds</b>	<b>9.00</b>	<b>11.62</b>	<b>9.59</b>
Sugarcane	357.32	379.05	437.76
Cotton (1)	10.38	18.78	23.12
Areca nut (processed)	3.55	4.57	4.36
Coconut (2)	4336.79	3417.79	3931.01
Dry Chillies	0.76	1.14	1.18
Tobacco	0.67	0.90	0.67
Pepper (3)	0.76	0.69	1.92
Cardamom	0.02	0.01	0.01

1) Lakh bales of 170 Kgs, each in lint form. (2) Million nuts (3) Interms of lakh quintals

Note: Figures for 2012-13, 2013-14 & 2014-15 are based on Final Estimates

**Appendix 7.7**  
**Average Yield of Selected Crops - India and Karnataka 2012-13, 2013-14 and 2014-15 Final advance estimates**

Kgs/Hect.

Crop	2012-13		2013-14		2014-15	
	India**	Kar	India**	Kar	India**	Kar
Rice	2462	2769	2424	3184	Not Available	3195
Ragi	1428	1590	NA	1972		1930
Jowar	863	1095	926	1217		1180
Wheat	2462	836	3075	1057		1385
Maize	2553	2768	2583	3330		3318
Bajra	1214	1093	1164	1243		1117
Tur	806	745	849	967		685
Groundnut	996	706	1750	908		808
Cotton(lint)	483	375	532	508		395
Sugarcane*	67	88	70	95		96

\* Tonnes per hectare

N.A: Not Available

\*\* Source: Ministry of Agriculture & Co operation, G O I

**Appendix 7.8**  
**Area Irrigated by various sources in Karnataka State**

Area 000 hectares

Year	Net Area irrigated		Total Irrigated Area		Intensity of irrigated cropping	No of irrigation wells*(000)	Net area irrigated per well (ha.)	Gross cropped area	Percentage of gross irrigated area to gross cropped area
	Wells*	Other sources**	Net	Gross					
1	2	3	4	5	6	7	8	9	10
2011-12	1701	1739	3440	4137	120.3	1133	1.5	12059	34.3
2012-13	1729	1692	3421	4007	117.1	1268	1.4	11748	34.1
2013-14	1733	1823	3556	4112	115.6	1297	1.3	12267	33.5

Note:\*\* including borewells, canals, tanks, Lift irrigation & other sources.

**Appendix 7.9(a)**  
**Land use classification in Karnataka**

Area 000 hectares

Year	Geographical Area	Forest	Land put to non agriculture use	Barren & Uncultivable land	cultivable waste land	Permanent pastures and other grazing land	Miscellaneous tree crops, groves not included under net area sown	Current fallow	Other fallow	Net area sown	Area sown more than once	Gross cropped area	Cropping Intensity
2011-12	19050	3072	1433	787	413	908	285	1672	539	9941	2118	12059	121.31
2012-13	19050	3073	1436	787	413	908	283	1822	535	9793	1955	11748	119.96
2013-14	19050	3073	1444	787	411	906	281	1700	525	9923	2344	12267	123.62

Source: Directorate of Economics and Statistics, Bengaluru.

**Appendix 7.9 (b)**  
**Land utilisation Statistics**

(lakh hectares)

Classification	2011-12	2012-13	2013-14
<b>Total Geographical Area</b>	190.5	190.5	190.5
1. Forest	30.72	30.73	30.73
<b>2. Not available for cultivation</b>			
a. Land put to non agriculture use	14.33	14.36	14.44
b Barren and uncultivable land	7.87	7.87	7.87
<b>3. Cultivable waste</b>	4.13	4.13	4.11
<b>4. Uncultivated land excluding fallow land</b>			
a. Permanent Pastures and other grazing land	9.08	9.08	9.06
b. Miscellaneous tree crops, groves not included under net area sown	2.85	2.83	2.81
<b>5. Fallow land</b>			
a. Current fallow	16.72	18.22	17.00
b. Other fallow	5.39	5.35	5.25
<b>6. Net area sown</b>	99.41	97.93	99.23
<b>7. Total cropped Area</b>	120.59	117.48	122.67
<b>8. Area sown more than once</b>	21.18	19.55	23.44
Cropping Intensity	121.31	119.96	123.62

Source: Directorate of Economics and Statistics, Bengaluru.

**Appendix 7.10**  
**Cropping Pattern in Karnataka**

Area in Lakh Hectares

Sl. No.	Crops	Year		
		2013-14	2014-15	2015-16
1	Rice	13.40	13.26	11.80
2	Jowar	11.39	10.47	10.52
3	Ragi	6.71	7.08	6.90
4	Maize	13.77	13.37	12.00
5	Bajra	2.80	2.34	1.68
6	Wheat	2.09	1.98	1.65
7	M.Millets	0.24	0.23	0.22
	<b>Total Cereals:</b>	<b>50.40</b>	<b>48.73</b>	<b>44.77</b>
1	Tur	8.24	7.28	7.10
2	Bengal gram	9.46	9.39	13.00
3	Horse gram	1.63	1.81	1.63
4	Black gram	1.02	0.7	0.76
5	Green gram	3.20	2.63	3.04
6	Cowpea & other Pulses	0.88	0.8	0.59
7	Avare	0.63	0.59	0.89
	<b>Total Pulses:</b>	<b>25.06</b>	<b>23.20</b>	<b>27.01</b>
	<b>Total Food grains:</b>	<b>75.46</b>	<b>71.93</b>	<b>71.78</b>
1	Groundnut	6.55	6.54	5.28
2	Sesamum	0.41	0.44	0.45
3	Sunflower	4.17	3.56	3.37
4	Castor	0.12	0.12	0.09
5	Nigerseed	0.14	0.11	0.07
6	Mustard	0.03	0.02	0.02
7	Soyabean	2.19	2.56	2.68
8	Safflower	0.43	0.33	0.45
9	Linseed	0.06	0.05	0.05
	<b>Total Oilseeds:</b>	<b>14.10</b>	<b>13.73</b>	<b>12.46</b>
	<u>Annual Crops:</u>			
1	Cotton	6.62	8.75	5.84
2	Sugarcane (H)	4.20	4.80	4.30
3	Tobacco	1.09	0.94	0.85
	<b>Total</b>	<b>101.47</b>	<b>100.15</b>	<b>95.23</b>

Note: Figures for 2013-14, 2014-15 Final Advance Estimates 2015-16  
Second Advance Estimates by DE&S

**Appendix - 7.11 : Fertilizer Consumption and HYV Coverage in Karnataka**

Sl. No.	Area under HYV (Lakh hectares)	Fertilizer Consumption (Lakh Tonnes)			
		Nitrogen	Phosphorous	Potash	TOTAL
1970-71	5.30	0.92	0.37	0.24	1.53
1980-81	24.00	1.93	0.81	0.70	3.44
1990-91	31.56	4.12	2.56	1.65	8.33
2000-01	41.28	7.03	3.60	2.31	12.94
2001-02	39.34	6.71	3.60	2.18	12.49
2002-03	38.41	6.01	3.03	1.95	10.99
2003-04	38.74	4.93	2.40	1.86	9.19
2004-05	45.445	6.55	3.63	2.73	12.91
2005-06	47.99	9.85	4.96	3.25	18.06
2006-07	47.50	7.56	4.38	2.91	14.85
2007-08	48.52	7.92	3.93	3.43	15.28
2008-09	47.73	8.64	5.59	4.09	18.32
2009-10	49.06	9.63	6.30	4.66	20.59
2010-11	49.66	10.16	6.96	3.98	21.10
2011-12	46.84	11.04	7.87	3.33	22.23
2012-13	46.03#	8.92	3.89	2.49	15.30
2013-14	46.30#	<b>9.63</b>	<b>4.91</b>	<b>3.01</b>	<b>17.57</b>
2014-15	44.84#	<b>10.02</b>	<b>4.98</b>	<b>3.32</b>	<b>18.32</b>
2015-16	41.88*	<b>7.53</b>	<b>3.81</b>	<b>2.09</b>	<b>13.43 @</b>

# Provisional , \*Anticipated Achievement @ up to end of December 2015

Source: Department of Agriculture

**APPENDIX- 7.12 : MSP announced by GOI for the year 2015-16  
Minimum support price for different Kharif & Rabi crops for the year 2015-16**

Commodity	(Rs per quintal)
<b>KHARIF:</b>	
Paddy Common	1410
Paddy (F)Grade' A #	1450
Jowar-Hybrid	1570
Jowar-Maldandi	1590
Bajra	1275
Ragi	1650
Maize	1325
Tur (Arhar)	4625 £
Moong	4850 £
Urad	4625 £
Groundnut	4030
Sunflower Seed	3800
Soyabean Black	-
Soyabean Yellow	2600
Sesamum	4700
Nigerseed	3650
Cotton (F414/H777/J43 (Raj.))	3800
Cotton H-4 /S-6 (Bunny/Brahma from 08-09)	4100
<b>RABI -2015-16: (Marketing season 2016-17)</b>	
Wheat	1525
Barley	1225
Gram	3425
Lentil (Masur)	3425
Rapeseed/mustard	3350
Safflower	3300

£ Including Bonus of Rs.200/- per quintal.

Source: Agriculture Department. CACP Website



**Appendix - 7.13  
Area and production of selected fruit crops**

(Area in hectares, Production in metric tonnes)

crops	2000-01		2008-09		2009-10		2010-11		2011-12		2012-13		2013-14		2014-15 E	
	Area	prodn.	Area	prodn.	Area	prodn.	Area	prodn.	Area	prodn.	Area	prodn.	Area	prodn.	Area	prodn.
Mango	119172	1098547	140490	1607595	153875	1694051	162648	1762531	168723	1693462	170308	1656191	173080	1641165	175410	1646505
Banana	53377	1217169	75892	1890785	104436	2132320	87238	2239540	92718	2409166	97823	2548223	101532	2581752	102886	2593326
Citrus Fruits	15524	326324	15651	274249	15122	312541	17824	388993	17497	387386	16792	368197	17564	389797	18854	412444
Gauva	9087	157102	6882	132699	7168	138810	6944	132461	6690	132268	6306	140577	6558	139770	6632	136312
Sapota	20216	193737	27541	309740	29313	359828	28909	355896	29862	352210	29401	344952	29373	360805	29953	372130
Grapes	8509	150334	15461	278560	17356	317643	16286	278912	19058	310388	19764	292653	20353	391155	21761	420806
Pineapple	4873	272475	2909	180515	2857	177238	2228	130007	2631	164379	2642	155643	2452	153516	2472	156310
Pomogranate	10803	112241	14996	140682	13187	138488	14688	147312	14649	145914	16137	130270	18488	198676	23231	261816
Jack	7855	236524	5995	235144	5825	213817	5421	204204	5341	204759	5339	189867	5368	200748	5433	201227
Papaya	4889	332858	5117	419951	5830	419254	5829	422509	6333	442472	6495	457415	7225	504016	7564	528297
Ber	1023	26580	621	13713	392	10647	860	25065	905	25922	663	19014	638	18129	659	18450
Fig	352	2868	1498	13643	1179	12907	1167	13099	1192	14594	1262	8551	1247	14044	1266	14351
Seetaphal	2031	15975	1899	14405	1651	13868	1706	12892	1677	13306	1426	11931	1426	10976	1738	14444
Others	3022	21878	2641	22526	2054	21245	1980	19949	2004	21479	2230	23636	2052	21542	2167	22450
<b>Total</b>	<b>260733</b>	<b>4164612</b>	<b>317593</b>	<b>5534207</b>	<b>360245</b>	<b>5962657</b>	<b>353728</b>	<b>6133370</b>	<b>369279</b>	<b>6317704</b>	<b>376588</b>	<b>6347120</b>	<b>387356</b>	<b>6626091</b>	<b>400025</b>	<b>6798867</b>

E:Estimated, Source : Department of Horticulture

**Appendix 7.14  
Financial progress achieved under NHM**

Sl. No.	Year	Opening Balance	Releases			Accrued Interest	Total available Grants (3+6+7)	Grants utilized	Closing Balance
			GOI	GOK	Total				
			85%	15%					
1	2005-06	-	4455.17	0	4455.17	4455.17	56.49	4398.68	
2	2006-07	4398.68	8448.25	0	8448.25	12922.69	4450.59	8472.10	
3	2007-08	8472.10	8571.04	1499.90	10070.94	18956.47	17064.13	1892.34	
4	2008-09	1892.34	12536.88	1000.00	13536.88	15647.71	10953.65	4694.06	
5	2009-10	4694.06	8001.67	1499.00	9500.67	14423.20	13117.09	1306.11	
6	2010-11	1306.11	9325.00	2611.38	11936.38	13410.49	12522.02	888.47	
7	2011-12	888.47	9970.85	1954.58	11925.43	13060.26	12574.46	485.80	
8	2012-13	485.80	11303.81	2026.20	13330.01	14062.12	10556.14	3505.98	
9	2013-14	4283.33	6974.00	1868.85	8842.85	13126.18	11351.18	1775.00	
10	2014-15	1899.66	9608.13	1692.59	11300.72	13200.38	12400.02	800.36	
<b>11</b>	<b>* 2015-16</b>	1299.45	3269.29	3269.29	6538.58	7838.03	4852.44		
<b>Total</b>		-	<b>92464.09</b>	<b>17421.79</b>	<b>109885.88</b>	<b>141102.70</b>	<b>109898.21</b>		

(Rs.in lakhs)

\*Programme and progress for 2015-16 up to the end of December - 2015 and audited opening balance.

**Appendix 7.15**

**Year wise Livestock Population**

(in number)

Year	Cattle	Buffalo	Sheep	Goat	Pig	Others	Total livestock	Poultry
1951	8815269	2565959	4192078	2676408	161889	134580	18546183	5705132
1956	8965693	2668713	4059473	2583995	185493	102851	18566218	7667845
1961	9673001	3025890	4764972	2894355	206513	103456	20668187	8840927
1966	9685581	2946027	4747964	2813682	207078	115160	20485462	8276797
1972	10018717	3036873	4662420	3726016	261125	82211	21965362	10163177
1977	10221960	3278128	4536481	3388139	296368	79128	21800204	9696012
1983	11300223	3647967	4791650	4546928	318862	1542755	26148385	12096535
1990	10175501	4037193	4727238	3888799	303969	1835301	24968021	15693580
1997	10831134	4367184	8003078	4874759	405444	2206468	30688067	21398756
2003	9595930	4023832	7272241	4491473	320433	2654625	28358534	24450809
2007	10507325	4329076	9565696	6157134	279763	2044257	32883251	42433692
2012	9516484	3470505	9583761	4796147	304798	1329089	29000784	53442030
(Provisional)								
% of variation over the previous year 2007	-9.43	-19.83	0.19	-22.1	8.95	-34.98	-11.81	25.94

**Appendix 7.16**

**Target and Estimate of Milk, Egg, Wool and Meat Production from 2011-12 to 2015-16**

Sl. No.	Year	Milk (in'000 tones)		% of Achievements	Egg ( in lakhs)		% of Achievements
		Target	Production		Target	Production	
1	2011-12	4815	5448	113.15	19883	34699	174.52
2	2012-13	5639	5718	101.4	37475	36773	98.13
3	2013-14	5836	5997	102.36	40473	41223	101.85
4	2014-15	6040	6123	101.37	43711	43948	100.54
5	2015-16	6337	3718*	58.67	47208	27352*	57.94
	<b>Total</b>	<b>28667</b>	<b>27004</b>	<b>94.2</b>	<b>188750</b>	<b>183995</b>	<b>97.48</b>
Sl. No.	Year	Wool(in tones)		% of Achievement	Meat(in tones)		% of Achievement
		Target	Production		Target	Production	
1	2011-12	6300	7779	123.48	120341	139553	115.96
2	2012-13	8090	8020	99.13	145000	166059	114.52
3	2013-14	8414	7755	92.17	150941	169894	112.56
4	2014-15	8750	8822	100.82	157000	181312	115.49
5	2015-16	9100	3344*	36.75	188000	130050*	69.18
	<b>Total</b>	<b>40654</b>	<b>35720</b>	<b>87.86</b>	<b>761282</b>	<b>786868</b>	<b>103.36</b>

**Appendix 8.1 :Trends in Irrigation in Karnataka Cumulative Potential Created**

1

(Lakh hectares)

End of Plan/year	Major and Medium Projects	Minor (surface)	Total
<b>VII Plan (1985-1990)</b>			
1985-86	12.27	8.59	20.86
1986-87	12.75	8.65	21.40
1987-88	12.87	8.71	21.58
1988-89	12.97	8.82	21.79
1989-90	13.09	8.92	22.01
<b>Annual Plan</b>			
1990-91	13.36	8.95	22.31
1991-92	13.80	9.00	22.80
<b>VIII Plan</b>			
1992-93	14.25	9.06	23.31
1993-94	14.94	9.13	24.07
1994-95	15.28	9.18	24.46
1995-96	15.77	9.25	25.02
1996-97	16.13	9.30	25.43
<b>IX Plan</b>			
1997-98	16.58	9.35	25.93
1998-99	16.93	9.38	26.31
1999-00	17.41	9.43	26.84
2000-01	18.12	9.51	27.63
2001-02	19.05	9.58	28.63
<b>X Plan</b>			
2002-03	19.70	9.65	29.35
2003-04	20.38	9.71	30.09
2004-05	21.17	9.75	30.92
2005-06	21.97	9.82	31.79
2006-07	23.21	9.61	32.82
<b>XI Plan</b>			
2007-08	23.64	9.69	33.33
2008-09	24.28	9.81	34.09
2009-10	24.56	9.87	34.43
2010-11	25.06	10.06	35.12
2011-12	25.56	10.28	35.84
<b>XII Plan</b>			
2012-13	26.03	10.51	36.54
2013-14	26.97	10.89	37.86
2014-15	27.85	10.97	38.82
2015-16 (A)	28.61	11.16	39.77

A: Anticipated

Source: Water Resources Department, Government of Karnataka

**Appendix 8.2 Public Investment in Irrigation in Karnataka**

(Rs. in crores)

Year	Major and Medium projects*	Minor Irrigation works**	Total
1998-99	1719.80	89.17	1808.97
1999-00	2027.27	107.92	2135.19
2000-01	2595.09	121.18	2716.27
2001-02	2547.17	103.16	2650.33
2002-03	2689.96	110.58	2800.54
2003-04	2308.08	129.88	2437.96
2004-05	3531.24	203.96	3735.20
2005-06	3579.39	194.19	3773.58
2006-07	3951.75	354.70	4306.45
2007-08	2058.41	353.11	2411.52
2008-09	2020.85	395.94	2416.79
2009-10	2939.40	594.08	3533.48
2010-11	3470.17	823.85	4294.02
2011-12	4666.06	1100.38	5766.44
2012-13	6107.94	1027.10	7198.30
2013-14	8007.34	1025.43	9086.04
2014-15 (RE)	10000.90	1297.96	9032.77
2015-16 (BE)	9913.29	1249.31	11162.60

RE: Revised Estimates, BE: Budget Estimates

\* : Includes outlay on irrigation projects pending approval, \*\* : Surface water only

Source: Details of Provisions for Plan Expenditure 2014-15

**Appendix 8.3**

**Details of Progress achieved in the Projects in Upper Krishna Basin  
(Other than Upper Krishna Project)**

**(Financial Rs. in lakhs, Potential in hectares)**

Sl. No.	Name of the Project	Financial			Potential		
		Latest Estimated cost	Cum. Expt. Till 3/2015	Expected Expt. During 2015-16	Planned Potential	Potential created upto 3/2015	Anticipated Potential to be created in 2015-16
1	Bennithora	60024.00	45591.00	7500.00	20234	19978	-
2	Bhadra Modernisation	120000.00	118936.00	9000.00	-	-	-
3	Bhima Lift	58837.00	48859.00	2000.00	24292	21000	3292
4	Dudhganga	30980.00	17637.00	1000.00	15167	4800	-
5	Ghataprabha III	209577.00	200617.00	8000.00	171440	168943	-
6	Hipparagi	170000.00	169685.00	3000.00	74742	74212	530
7	TBLBC Modn.*	215250.00	151424.00	12500.00	-	-	-
8	Malaprabha	186010.00	159863.00	5000.00	220028	213537	-
9	Markandeya	40713.00	35732.00	200.00	19105	14383	-
10	Ramthal Lift (Marol)- 1 <sup>st</sup> stage	100000.00	81641.00	7852.00	14728	14493	-
11	Singatur	576804.00	131913.00	10000.00	107380	25887	20000
12	Upper Tunga	256188.00	193245.00	40000.00	80494	70558	5000
13	Upper Bhadra Stage-I	1234000.00	120209.00	26000.00	225515	-	-
14	Modified Sonthi LIS	67390.00	26443.00	3500.00	16000	4674	-
15	Timmapura LIS	17300.00	13707.00	500.00	20100	16923	-
16	Amarja	28000.00	25650.00	2000.00	8903	8729	-
17	Basapur Lift	2696.00	2319.00	200.00	2267	1983	1377
18	Gandhorinala	31058.00	30211.00	-	8094	7943	-
19	Lower Mullamari	24000.00	22864.00	1300.00	9713	9400	-
20	Harinala	9431.00	7629.00	-	3480	3480	-
21	Hirehalla	39600.00	33165.00	500.00	8206	8206	-
22	Kenchanagudda LIS	1360.00	-	100.00	-	-	-
23	Y-Kaggal	6325.00	225.00	500.00	-	-	-
24	Itagi Sasalwad Lift	2589.00	2223.00	-	1983	1983	-
25	Thimmapur LIS	13300.00	12255.00	1500.00	20100	16833	-
26	Bhakrihalla	-	-	-	-	-	-
27	Javalahalla	500.00	463.00	-	-	-	-
28	Bellarynala Lift	57601.00	17093.00	4000.00	8200	-	-
29	Guddadamallapur	11540.00	9979.00	350.00	5261	3801	1460
30	Srirameshwar LIS	36260.00	36103.00	1000.00	13800	13800	-
31	Hiranyakeshi LIS	3000.00	1889.00	1000.00	-	-	-
32	Bennihalla, Kolchi & Konnur	2573.00	2441.00	200.00	-	-	-
33	Ubrani Amrutapur	13000.00	12842.00	800.00	-	-	-
34	Sanyasikoppa	1500.00	1106.00	-	1791	1350	441
35	Shiggaon LIS	53100.00	27763.00	1200.00	13500	9900	1000
36	Dandavathi	27200.00	875.00	100.00	3642	-	-
37	Tiluvalli LIS	3400.00	1579.00	2000.00	10011	-	1011
38	Kalluvaddahalla Tank	2042.00	-	25.00	-	-	-
39	Teggi-Siddapur LIS	5000.00	4577.00	500.00	3000	3000	-
40	Sonna & Ronnimannikeri LIS	3200.00	2935.00	250.00	3500	3500	-
41	Rajanakollur LIS	1334.00	1193.00	250.00	1100	1100	-
42	Bhima Barrages	11243.00	11067.00	0	8375	8375	0
43	Manjra Barrages	28145.00	25028.00	1000.00	12672	12672	0
<b>TOTAL</b>		<b>3762070.00</b>	<b>1808976.00</b>	<b>154827.00</b>	<b>1156823</b>	<b>765443</b>	<b>34111</b>

Source: Water Resources Department

## **APPENDIX-8.4**

### **Paris Agreement on Climate Change**

**Article 1:** For the purpose of this Agreement, the definitions contained in Article 1 of the Convention shall apply. *In addition:*

1. “Convention” means the United Nations Framework Convention on Climate Change, adopted in New York on 9 May 1992.
2. “Conference of the Parties” means the Conference of the Parties to the Convention.
3. “Party” means a Party to this Agreement.

**Article 2:** 1. This Agreement, in enhancing the implementation of the Convention, including its objective, aims to strengthen the global response to the threat of climate change, in the context of sustainable development and efforts to eradicate poverty, including by:

- (a) Holding the increase in the global average temperature to well below 2 °C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5 °C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change;
- (b) Increasing the ability to adapt to the adverse impacts of climate change and foster climate resilience and low greenhouse gas emissions development, in a manner that does not threaten food production;
- (c) Making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development.

2. This Agreement will be implemented to reflect equity and the principle of common but differentiated responsibilities and respective capabilities, in the light of different national circumstances.

**Article 3:** As nationally determined contributions to the global response to climate change, all Parties are to undertake and communicate ambitious efforts as defined in Articles 4, 7, 9, 10, 11 and 13 with the view to achieving the purpose of this Agreement as set out in Article 2. The efforts of all Parties will represent a progression over time, while recognizing the need to support developing country Parties for the effective implementation of this Agreement.

**Article 4:** 1. In order to achieve the long-term temperature goal set out in Article 2, Parties aim to reach global peaking of greenhouse gas emissions as soon as possible, recognizing that peaking will take longer for developing country Parties, and to undertake rapid reductions thereafter in accordance with best available science, so as to achieve a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases in the second half of this century, on the basis of equity, and in the context of sustainable development and efforts to eradicate poverty.

2. Each Party shall prepare, communicate and maintain successive nationally determined contributions that it intends to achieve. Parties shall pursue domestic mitigation measures, with the aim of achieving the objectives of such contributions.

3. Each Party’s successive nationally determined contribution will represent a progression beyond the Party’s then current nationally determined contribution and reflect its highest possible ambition, reflecting its common but differentiated responsibilities and respective capabilities, in the light of different national circumstances.

4. Developed country Parties should continue taking the lead by undertaking economy-wide absolute emission reduction targets. Developing country Parties should continue enhancing their mitigation efforts, and are encouraged to move over time towards economy-wide emission reduction or limitation targets in the light of different national circumstances.

5. Support shall be provided to developing country Parties for the implementation of this Article, in accordance with Articles 9, 10 and 11, recognizing that enhanced support for developing country Parties will allow for higher ambition in their actions.

6. The least developed countries and small island developing States may prepare and communicate strategies, plans and actions for low greenhouse gas emissions development reflecting their special circumstances.

7. Mitigation co-benefits resulting from Parties' adaptation actions and/or economic diversification plans can contribute to mitigation outcomes under this Article.

8. In communicating their nationally determined contributions, all Parties shall provide the information necessary for clarity, transparency and understanding in accordance with decision 1/CP.21 and any relevant decisions of the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement.

9. Each Party shall communicate a nationally determined contribution every five years in accordance with decision 1/CP.21 and any relevant decisions of the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement and be informed by the outcomes of the global stocktake referred to in Article 14.

10. The Conference of the Parties serving as the meeting of the Parties to the Paris Agreement shall consider common time frames for nationally determined contributions at its first session.

11. A Party may at any time adjust its existing nationally determined contribution with a view to enhancing its level of ambition, in accordance with guidance adopted by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement.

12. Nationally determined contributions communicated by Parties shall be recorded in a public registry maintained by the secretariat.

13. Parties shall account for their nationally determined contributions. In accounting for anthropogenic emissions and removals corresponding to their nationally determined contributions, Parties shall promote environmental integrity, transparency, accuracy, completeness, comparability and consistency, and ensure the avoidance of double counting, in accordance with guidance adopted by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement.

14. In the context of their nationally determined contributions, when recognizing and implementing mitigation actions with respect to anthropogenic emissions and removals, Parties should take into account, as appropriate, existing methods and guidance under the Convention, in the light of the provisions of paragraph 13 of this Article.

15. Parties shall take into consideration in the implementation of this Agreement the concerns of Parties with economies most affected by the impacts of response measures, particularly developing country Parties.

16. Parties, including regional economic integration organizations and their member States, that have reached an agreement to act jointly under paragraph 2 of this Article shall notify the secretariat of the terms of that agreement, including the emission level allocated to each Party within the relevant time period, when they communicate their nationally determined contributions. The secretariat shall in turn inform the Parties and signatories to the Convention of the terms of that agreement.

17. Each party to such an agreement shall be responsible for its emission level as set out in the agreement referred to in paragraph 16 above in accordance with paragraphs 13 and 14 of this Article and Articles 13 and 15.

18. If Parties acting jointly do so in the framework of, and together with, a regional economic integration organization which is itself a Party to this Agreement, each member State of that regional economic integration organization individually, and together with the regional economic integration organization, shall be responsible for its emission level as set out in the agreement communicated under paragraph 16 of this Article in accordance with paragraphs 13 and 14 of this Article and Articles 13 and 15.

19. All Parties should strive to formulate and communicate long-term low greenhouse gas emission development strategies, mindful of Article 2 taking into account their common but differentiated responsibilities and respective capabilities, in the light of different national circumstances.

**Article 5:** 1. Parties should take action to conserve and enhance, as appropriate, sinks and reservoirs of greenhouse gases as referred to in Article 4, paragraph 1(d), of the Convention, including forests.

2. Parties are encouraged to take action to implement and support, including through results-based payments, the existing framework as set out in related guidance and decisions already agreed under the Convention for: policy approaches and positive incentives for activities relating to reducing emissions from deforestation and forest degradation, and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries; and alternative policy approaches, such as joint mitigation and adaptation approaches for the integral and sustainable management of forests, while reaffirming the importance of incentivizing, as appropriate, non-carbon benefits associated with such approaches.

**Article 6:** 1. Parties recognize that some Parties choose to pursue voluntary cooperation in the implementation of their nationally determined contributions to allow for higher ambition in their mitigation and adaptation actions and to promote sustainable development and environmental integrity.

2. Parties shall, where engaging on a voluntary basis in cooperative approaches that involve the use of internationally transferred mitigation outcomes towards nationally determined contributions, promote sustainable development and ensure environmental integrity and transparency, including in governance, and shall apply robust accounting to ensure, inter alia, the avoidance of double counting, consistent with guidance adopted by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement.

3. The use of internationally transferred mitigation outcomes to achieve nationally determined contributions under this Agreement shall be voluntary and authorized by participating Parties.

4. A mechanism to contribute to the mitigation of greenhouse gas emissions and support sustainable development is hereby established under the authority and guidance of the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement for use by Parties on a voluntary basis. It shall be supervised by a body designated by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement, and shall aim:

- (a) To promote the mitigation of greenhouse gas emissions while fostering sustainable development;
- (b) To incentivize and facilitate participation in the mitigation of greenhouse gas emissions by public and private entities authorized by a Party;
- (c) To contribute to the reduction of emission levels in the host Party, which will benefit from mitigation activities resulting in emission reductions that can also be used by another Party to fulfil its nationally determined contribution; and
- (d) To deliver an overall mitigation in global emissions.

5. Emission reductions resulting from the mechanism referred to in paragraph 4 of this Article shall not be used to demonstrate achievement of the host Party's nationally determined contribution if used by another Party to demonstrate achievement of its nationally determined contribution.

6. The Conference of the Parties serving as the meeting of the Parties to the Paris Agreement shall ensure that a share of the proceeds from activities under the mechanism referred to in paragraph 4 of this Article is used to cover administrative expenses as well as to assist developing country Parties that are particularly vulnerable to the adverse effects of climate change to meet the costs of adaptation.

7. The Conference of the Parties serving as the meeting of the Parties to the Paris Agreement shall adopt rules, modalities and procedures for the mechanism referred to in paragraph 4 of this Article at its first session.

8. Parties recognize the importance of integrated, holistic and balanced non-market approaches being available to Parties to assist in the implementation of their nationally determined contributions, in the context of sustainable development and poverty eradication, in a coordinated and effective manner, including through, inter alia, mitigation, adaptation, finance, technology transfer and capacity-building, as appropriate. These approaches shall aim to:

- (a) Promote mitigation and adaptation ambition;
- (b) Enhance public and private sector participation in the implementation of nationally determined contributions; and
- (c) Enable opportunities for coordination across instruments and relevant institutional arrangements.

9. A framework for non-market approaches to sustainable development is hereby defined to promote the non-market approaches referred to in paragraph 8 of this Article.

**Article 7:** 1. Parties hereby establish the global goal on adaptation of enhancing adaptive capacity, strengthening resilience and reducing vulnerability to climate change, with a view to contributing to sustainable development and ensuring an adequate adaptation response in the context of the temperature goal referred to in Article 2.

2. Parties recognize that adaptation is a global challenge faced by all with local, subnational, national, regional and international dimensions, and that it is a key



component of and makes a contribution to the long-term global response to climate change to protect people, livelihoods and ecosystems, taking into account the urgent and immediate needs of those developing country Parties that are particularly vulnerable to the adverse effects of climate change.

3. The adaptation efforts of developing country Parties shall be recognized, in accordance with the modalities to be adopted by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement at its first session.

4. Parties recognize that the current need for adaptation is significant and that greater levels of mitigation can reduce the need for additional adaptation efforts, and that greater adaptation needs can involve greater adaptation costs.

5. Parties acknowledge that adaptation action should follow a country-driven, gender-responsive, participatory and fully transparent approach, taking into consideration vulnerable groups, communities and ecosystems, and should be based on and guided by the best available science and, as appropriate, traditional knowledge, knowledge of indigenous peoples and local knowledge systems, with a view to integrating adaptation into relevant socioeconomic and environmental policies and actions, where appropriate.

6. Parties recognize the importance of support for and international cooperation on adaptation efforts and the importance of taking into account the needs of developing country Parties, especially those that are particularly vulnerable to the adverse effects of climate change.

7. Parties should strengthen their cooperation on enhancing action on adaptation, taking into account the Cancun Adaptation Framework, including with regard to:

(a) Sharing information, good practices, experiences and lessons learned, including, as appropriate, as these relate to science, planning, policies and implementation in relation to adaptation actions;

(b) Strengthening institutional arrangements, including those under the Convention that serve this Agreement, to support the synthesis of relevant information and knowledge, and the provision of technical support and guidance to Parties;

(c) Strengthening scientific knowledge on climate, including research, systematic observation of the climate system and early warning systems, in a manner that informs climate services and supports decision-making;

(d) Assisting developing country Parties in identifying effective adaptation practices, adaptation needs, priorities, support provided and received for adaptation actions and efforts, and challenges and gaps, in a manner consistent with encouraging good practices;

(e) Improving the effectiveness and durability of adaptation actions.

8. United Nations specialized organizations and agencies are encouraged to support the efforts of Parties to implement the actions referred to in paragraph 7 of this Article, taking into account the provisions of paragraph 5 of this Article.

9. Each Party shall, as appropriate, engage in adaptation planning processes and the implementation of actions, including the development or enhancement of relevant plans, policies and/or contributions, which may include:

(a) The implementation of adaptation actions, undertakings and/or efforts;

(b) The process to formulate and implement national adaptation plans;

- (c) The assessment of climate change impacts and vulnerability, with a view to formulating nationally determined prioritized actions, taking into account vulnerable people, places and ecosystems;
- (d) Monitoring and evaluating and learning from adaptation plans, policies, programmes and actions; and
- (e) Building the resilience of socioeconomic and ecological systems, including through economic diversification and sustainable management of natural resources.

10. Each Party should, as appropriate, submit and update periodically an adaptation communication, which may include its priorities, implementation and support needs, plans and actions, without creating any additional burden for developing country Parties.

11. The adaptation communication referred to in paragraph 10 of this Article shall be, as appropriate, submitted and updated periodically, as a component of or in conjunction with other communications or documents, including a national adaptation plan, a nationally determined contribution as referred to in Article 4, paragraph 2, and/or a national communication.

12. The adaptation communications referred to in paragraph 10 of this Article shall be recorded in a public registry maintained by the secretariat.

13. Continuous and enhanced international support shall be provided to developing country Parties for the implementation of paragraphs 7, 9, 10 and 11 of this Article, in accordance with the provisions of Articles 9, 10 and 11.

14. The global stocktake referred to in Article 14 shall, inter alia:

- (a) Recognize adaptation efforts of developing country Parties;
- (b) Enhance the implementation of adaptation action taking into account the adaptation communication referred to in paragraph 10 of this Article;
- (c) Review the adequacy and effectiveness of adaptation and support provided for adaptation; and
- (d) Review the overall progress made in achieving the global goal on adaptation referred to in paragraph 1 of this Article.

**Article 8:** 1. Parties recognize the importance of averting, minimizing and addressing loss and damage associated with the adverse effects of climate change, including extreme weather events and slow onset events, and the role of sustainable development in reducing the risk of loss and damage.

2. The Warsaw International Mechanism for Loss and Damage associated with Climate Change Impacts shall be subject to the authority and guidance of the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement and may be enhanced and strengthened, as determined by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement.

3. Parties should enhance understanding, action and support, including through the Warsaw International Mechanism, as appropriate, on a cooperative and facilitative basis with respect to loss and damage associated with the adverse effects of climate change.

4. Accordingly, areas of cooperation and facilitation to enhance understanding, action and support may include:

- (a) Early warning systems;

- (b) Emergency preparedness;
- (c) Slow onset events;
- (d) Events that may involve irreversible and permanent loss and damage;
- (e) Comprehensive risk assessment and management;
- (f) Risk insurance facilities, climate risk pooling and other insurance solutions;
- (g) Non-economic losses;
- (h) Resilience of communities, livelihoods and ecosystems.

5. The Warsaw International Mechanism shall collaborate with existing bodies and expert groups under the Agreement, as well as relevant organizations and expert bodies outside the Agreement.

**Article 9:** 1. Developed country Parties shall provide financial resources to assist developing country Parties with respect to both mitigation and adaptation in continuation of their existing obligations under the Convention.

2. Other Parties are encouraged to provide or continue to provide such support voluntarily.

3. As part of a global effort, developed country Parties should continue to take the lead in mobilizing climate finance from a wide variety of sources, instruments and channels, noting the significant role of public funds, through a variety of actions, including supporting country-driven strategies, and taking into account the needs and priorities of developing country Parties. Such mobilization of climate finance should represent a progression beyond previous efforts.

4. The provision of scaled-up financial resources should aim to achieve a balance between adaptation and mitigation, taking into account country-driven strategies, and the priorities and needs of developing country Parties, especially those that are particularly vulnerable to the adverse effects of climate change and have significant capacity constraints, such as the least developed countries and small island developing States, considering the need for public and grant-based resources for adaptation.

5. Developed country Parties shall biennially communicate indicative quantitative and qualitative information related to paragraphs 1 and 3 of this Article, as applicable, including, as available, projected levels of public financial resources to be provided to developing country Parties. Other Parties providing resources are encouraged to communicate biennially such information on a voluntary basis.

6. The global stocktake referred to in Article 14 shall take into account the relevant information provided by developed country Parties and/or Agreement bodies on efforts related to climate finance.

7. Developed country Parties shall provide transparent and consistent information on support for developing country Parties provided and mobilized through public interventions biennially in accordance with the modalities, procedures and guidelines to be adopted by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement, at its first session, as stipulated in Article 13, paragraph 13. Other Parties are encouraged to do so.

8. The Financial Mechanism of the Convention, including its operating entities, shall serve as the financial mechanism of this Agreement.

9. The institutions serving this Agreement, including the operating entities of the Financial Mechanism of the Convention, shall aim to ensure efficient access to financial resources through simplified approval procedures and enhanced readiness support for developing country Parties, in particular for the least developed countries and small island developing States, in the context of their national climate strategies and plans.

**Article 10:** 1. Parties share a long-term vision on the importance of fully realizing technology development and transfer in order to improve resilience to climate change and to reduce greenhouse gas emissions.

2. Parties, noting the importance of technology for the implementation of mitigation and adaptation actions under this Agreement and recognizing existing technology deployment and dissemination efforts, shall strengthen cooperative action on technology development and transfer.

3. The Technology Mechanism established under the Convention shall serve this Agreement.

4. A technology framework is hereby established to provide overarching guidance to the work of the Technology Mechanism in promoting and facilitating enhanced action on technology development and transfer in order to support the implementation of this Agreement, in pursuit of the long-term vision referred to in paragraph 1 of this Article.

5. Accelerating, encouraging and enabling innovation is critical for an effective, long-term global response to climate change and promoting economic growth and sustainable development. Such effort shall be, as appropriate, supported, including by the Technology Mechanism and, through financial means, by the Financial Mechanism of the Convention, for collaborative approaches to research and development, and facilitating access to technology, in particular for early stages of the technology cycle, to developing country Parties.

6. Support, including financial support, shall be provided to developing country Parties for the implementation of this Article, including for strengthening cooperative action on technology development and transfer at different stages of the technology cycle, with a view to achieving a balance between support for mitigation and adaptation. The global stocktake referred to in Article 14 shall take into account available information on efforts related to support on technology development and transfer for developing country Parties.

**Article 11:** 1. Capacity-building under this Agreement should enhance the capacity and ability of developing country Parties, in particular countries with the least capacity, such as the least developed countries, and those that are particularly vulnerable to the adverse effects of climate change, such as small island developing States, to take effective climate change action, including, inter alia, to implement adaptation and mitigation actions, and should facilitate technology development, dissemination and deployment, access to climate finance, relevant aspects of education, training and public awareness, and the transparent, timely and accurate communication of information.

2. Capacity-building should be country-driven, based on and responsive to national needs, and foster country ownership of Parties, in particular, for developing country Parties, including at the national, subnational and local levels. Capacity-building should be guided by lessons learned, including those from capacity-building activities under the Convention, and should be an effective, iterative process that is participatory, cross-cutting and gender-responsive.

3. All Parties should cooperate to enhance the capacity of developing country Parties to implement this Agreement. Developed country Parties should enhance support for capacity-building actions in developing country Parties.

4. All Parties enhancing the capacity of developing country Parties to implement this Agreement, including through regional, bilateral and multilateral approaches, shall regularly communicate on these actions or measures on capacity-building. Developing country Parties should regularly communicate progress made on implementing capacity-building plans, policies, actions or measures to implement this Agreement.

5. Capacity-building activities shall be enhanced through appropriate institutional arrangements to support the implementation of this Agreement, including the appropriate institutional arrangements established under the Convention that serve this Agreement. The Conference of the Parties serving as the meeting of the Parties to the Paris Agreement shall, at its first session, consider and adopt a decision on the initial institutional arrangements for capacity-building.

**Article 12:** Parties shall cooperate in taking measures, as appropriate, to enhance climate change education, training, public awareness, public participation and public access to information, recognizing the importance of these steps with respect to enhancing actions under this Agreement.

**Article 13:** 1. In order to build mutual trust and confidence and to promote effective implementation, an enhanced transparency framework for action and support, with built-in flexibility which takes into account Parties' different capacities and builds upon collective experience is hereby established.

2. The transparency framework shall provide flexibility in the implementation of the provisions of this Article to those developing country Parties that need it in the light of their capacities. The modalities, procedures and guidelines referred to in paragraph 13 of this Article shall reflect such flexibility.

3. The transparency framework shall build on and enhance the transparency arrangements under the Convention, recognizing the special circumstances of the least developed countries and small island developing States, and be implemented in a facilitative, non-intrusive, non-punitive manner, respectful of national sovereignty, and avoid placing undue burden on Parties.

4. The transparency arrangements under the Convention, including national communications, biennial reports and biennial update reports, international assessment and review and international consultation and analysis, shall form part of the experience drawn upon for the development of the modalities, procedures and guidelines under paragraph 13 of this Article.

5. The purpose of the framework for transparency of action is to provide a clear understanding of climate change action in the light of the objective of the Convention as set out in its Article 2, including clarity and tracking of progress towards achieving Parties' individual nationally determined contributions under Article 4, and Parties' adaptation actions under Article 7, including good practices, priorities, needs and gaps, to inform the global stocktake under Article 14.

6. The purpose of the framework for transparency of support is to provide clarity on support provided and received by relevant individual Parties in the context of climate change actions

under Articles 4, 7, 9, 10 and 11, and, to the extent possible, to provide a full overview of aggregate financial support provided, to inform the global stocktake under Article 14.

7. Each Party shall regularly provide the following information:

(a) A national inventory report of anthropogenic emissions by sources and removals by sinks of greenhouse gases, prepared using good practice methodologies accepted by the Intergovernmental Panel on Climate Change and agreed upon by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement;

(b) Information necessary to track progress made in implementing and achieving its nationally determined contribution under Article 4.

8. Each Party should also provide information related to climate change impacts and adaptation under Article 7, as appropriate.

9. Developed country Parties shall, and other Parties that provide support should, provide information on financial, technology transfer and capacity-building support provided to developing country Parties under Article 9, 10 and 11.

10. Developing country Parties should provide information on financial, technology transfer and capacity-building support needed and received under Articles 9, 10 and 11.

11. Information submitted by each Party under paragraphs 7 and 9 of this Article shall undergo a technical expert review, in accordance with decision 1/CP.21. For those developing country Parties that need it in the light of their capacities, the review process shall include assistance in identifying capacity-building needs. In addition, each Party shall participate in a facilitative, multilateral consideration of progress with respect to efforts under Article 9, and its respective implementation and achievement of its nationally determined contribution.

12. The technical expert review under this paragraph shall consist of a consideration of the Party's support provided, as relevant, and its implementation and achievement of its nationally determined contribution. The review shall also identify areas of improvement for the Party, and include a review of the consistency of the information with the modalities, procedures and guidelines referred to in paragraph 13 of this Article, taking into account the flexibility accorded to the Party under paragraph 2 of this Article. The review shall pay particular attention to the respective national capabilities and circumstances of developing country Parties.

13. The Conference of the Parties serving as the meeting of the Parties to the Paris Agreement shall, at its first session, building on experience from the arrangements related to transparency under the Convention, and elaborating on the provisions in this Article, adopt common modalities, procedures and guidelines, as appropriate, for the transparency of action and support.

14. Support shall be provided to developing countries for the implementation of this Article.

15. Support shall also be provided for the building of transparency-related capacity of developing country Parties on a continuous basis.

**Article 14:** 1. The Conference of the Parties serving as the meeting of the Parties to the Paris Agreement shall periodically take stock of the implementation of this Agreement to assess the collective progress towards achieving the purpose of this Agreement and its long-term goals (referred to as the "global stocktake"). It shall do so in a comprehensive and

facilitative manner, considering mitigation, adaptation and the means of implementation and support, and in the light of equity and the best available science.

2. The Conference of the Parties serving as the meeting of the Parties to the Paris Agreement shall undertake its first global stocktake in 2023 and every five years thereafter unless otherwise decided by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement.

3. The outcome of the global stocktake shall inform Parties in updating and enhancing, in a nationally determined manner, their actions and support in accordance with the relevant provisions of this Agreement, as well as in enhancing international cooperation for climate action.

**Article 15:** A mechanism to facilitate implementation of and promote compliance with the provisions of this Agreement is hereby established.

2. The mechanism referred to in paragraph 1 of this Article shall consist of a committee that shall be expert-based and facilitative in nature and function in a manner that is transparent, non-adversarial and non-punitive. The committee shall pay particular attention to the respective national capabilities and circumstances of Parties

3. The committee shall operate under the modalities and procedures adopted by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement at its first session and report annually to the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement.

**Article 16:** 1. The Conference of the Parties, the supreme body of the Convention, shall serve as the meeting of the Parties to this Agreement.

2. Parties to the Convention that are not Parties to this Agreement may participate as observers in the proceedings of any session of the Conference of the Parties serving as the meeting of the Parties to this Agreement. When the Conference of the Parties serves as the meeting of the Parties to this Agreement, decisions under this Agreement shall be taken only by those that are Parties to this Agreement.

3. When the Conference of the Parties serves as the meeting of the Parties to this Agreement, any member of the Bureau of the Conference of the Parties representing a Party to the Convention but, at that time, not a Party to this Agreement, shall be replaced by an additional member to be elected by and from amongst the Parties to this Agreement.

4. The Conference of the Parties serving as the meeting of the Parties to the Paris Agreement shall keep under regular review the implementation of this Agreement and shall make, within its mandate, the decisions necessary to promote its effective implementation. It shall perform the functions assigned to it by this Agreement and shall:

(a) Establish such subsidiary bodies as deemed necessary for the implementation of this Agreement; and

(b) Exercise such other functions as may be required for the implementation of this Agreement.

5. The rules of procedure of the Conference of the Parties and the financial procedures applied under the Convention shall be applied *mutatis mutandis* under this Agreement, except as may be otherwise decided by consensus by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement.

6. The first session of the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement shall be convened by the secretariat in conjunction with the first session of the Conference of the Parties that is scheduled after the date of entry into force of this Agreement. Subsequent ordinary sessions of the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement shall be held in conjunction with ordinary sessions of the Conference of the Parties, unless otherwise decided by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement.

7. Extraordinary sessions of the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement shall be held at such other times as may be deemed necessary by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement or at the written request of any Party, provided that, within six months of the request being communicated to the Parties by the secretariat, it is supported by at least one third of the Parties.

8. The United Nations and its specialized agencies and the International Atomic Energy Agency, as well as any State member thereof or observers thereto not party to the Convention, may be represented at sessions of the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement as observers. Any body or agency, whether national or international, governmental or non-governmental, which is qualified in matters covered by this Agreement and which has informed the secretariat of its wish to be represented at a session of the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement as an observer, may be so admitted unless at least one third of the Parties present object. The admission and participation of observers shall be subject to the rules of procedure referred to in paragraph 5 of this Article.

**Article 17:** 1. The secretariat established by Article 8 of the Convention shall serve as the secretariat of this Agreement.

2. Article 8, paragraph 2, of the Convention on the functions of the secretariat, and Article 8, paragraph 3, of the Convention, on the arrangements made for the functioning of the secretariat, shall apply *mutatis mutandis* to this Agreement. The secretariat shall, in addition, exercise the functions assigned to it under this Agreement and by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement.

**Article 18:** 1. The Subsidiary Body for Scientific and Technological Advice and the Subsidiary Body for Implementation established by Articles 9 and 10 of the Convention shall serve, respectively, as the Subsidiary Body for Scientific and Technological Advice and the Subsidiary Body for Implementation of this Agreement. The provisions of the Convention relating to the functioning of these two bodies shall apply *mutatis mutandis* to this Agreement. Sessions of the meetings of the Subsidiary Body for Scientific and Technological Advice and the Subsidiary Body for Implementation of this Agreement shall be held in conjunction with the meetings of, respectively, the Subsidiary Body for Scientific and Technological Advice and the Subsidiary Body for Implementation of the Convention.

2. Parties to the Convention that are not Parties to this Agreement may participate as observers in the proceedings of any session of the subsidiary bodies. When the subsidiary bodies serve as the subsidiary bodies of this Agreement, decisions under this Agreement shall be taken only by those that are Parties to this Agreement.

3. When the subsidiary bodies established by Articles 9 and 10 of the Convention exercise their functions with regard to matters concerning this Agreement, any member of the



bureaux of those subsidiary bodies representing a Party to the Convention but, at that time, not a Party to this Agreement, shall be replaced by an additional member to be elected by and from amongst the Parties to this Agreement.

**Article 19:** 1. Subsidiary bodies or other institutional arrangements established by or under the Convention, other than those referred to in this Agreement, shall serve this Agreement upon a decision of the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement. The Conference of the Parties serving as the meeting of the Parties to the Paris Agreement shall specify the functions to be exercised by such subsidiary bodies or arrangements.

2. The Conference of the Parties serving as the meeting of the Parties to the Paris Agreement may provide further guidance to such subsidiary bodies and institutional arrangements.

**Article 20:** 1. This Agreement shall be open for signature and subject to ratification, acceptance or approval by States and regional economic integration organizations that are Parties to the Convention. It shall be open for signature at the United Nations Headquarters in New York from 22 April 2016 to 21 April 2017. Thereafter, this Agreement shall be open for accession from the day following the date on which it is closed for signature. Instruments of ratification, acceptance, approval or accession shall be deposited with the Depositary.

2. Any regional economic integration organization that becomes a Party to this Agreement without any of its member States being a Party shall be bound by all the obligations under this Agreement. In the case of regional economic integration organizations with one or more member States that are Parties to this Agreement, the organization and its member States shall decide on their respective responsibilities for the performance of their obligations under this Agreement. In such cases, the organization and the member States shall not be entitled to exercise rights under this Agreement concurrently.

3. In their instruments of ratification, acceptance, approval or accession, regional economic integration organizations shall declare the extent of their competence with respect to the matters governed by this Agreement. These organizations shall also inform the Depositary, who shall in turn inform the Parties, of any substantial modification in the extent of their competence.

**Article 21:** 1. This Agreement shall enter into force on the thirtieth day after the date on which at least 55 Parties to the Convention accounting in total for at least an estimated 55 percent of the total global greenhouse gas emissions have deposited their instruments of ratification, acceptance, approval or accession.

2. Solely for the limited purpose of paragraph 1 of this Article, “total global greenhouse gas emissions” means the most up-to-date amount communicated on or before the date of adoption of this Agreement by the Parties to the Convention.

3. For each State or regional economic integration organization that ratifies, accepts or approves this Agreement or accedes thereto after the conditions set out in paragraph 1 of this Article for entry into force have been fulfilled, this Agreement shall enter into force on the thirtieth day after the date of deposit by such State or regional economic integration organization of its instrument of ratification, acceptance, approval or accession.

4. For the purposes of paragraph 1 of this Article, any instrument deposited by a regional economic integration organization shall not be counted as additional to those deposited by its member States.

**Article 22:** The provisions of Article 15 of the Convention on the adoption of amendments to the Convention shall apply mutatis mutandis to this Agreement.

**Article 23:** 1. The provisions of Article 16 of the Convention on the adoption and amendment of annexes to the Convention shall apply mutatis mutandis to this Agreement.

2. Annexes to this Agreement shall form an integral part thereof and, unless otherwise expressly provided for, a reference to this Agreement constitutes at the same time a reference to any annexes thereto. Such annexes shall be restricted to lists, forms and any other material of a descriptive nature that is of a scientific, technical, procedural or administrative character.

**Article 24:** The provisions of Article 14 of the Convention on settlement of disputes shall apply mutatis mutandis to this Agreement.

**Article 25:** 1. Each Party shall have one vote, except as provided for paragraph 2 of this Article.

2. Regional economic integration organizations, in matters within their competence, shall exercise their right to vote with a number of votes equal to the number of their member States that are Parties to this Agreement. Such an organization shall not exercise its right to vote if any of its member States exercises its right, and vice versa.

**Article 26:** The Secretary-General of the United Nations shall be the Depositary of this Agreement.

**Article 27:** No reservations may be made to this Agreement.

**Article 28:** 1. At any time after three years from the date on which this Agreement has entered into force for a Party, that Party may withdraw from this Agreement by giving written notification to the Depositary.

2. Any such withdrawal shall take effect upon expiry of one year from the date of receipt by the Depositary of the notification of withdrawal, or on such later date as may be specified in the notification of withdrawal.

3. Any Party that withdraws from the Convention shall be considered as also having withdrawn from this Agreement.

**Article 29:** The original of this Agreement, of which the Arabic, Chinese, English, French, Russian and Spanish texts are equally authentic, shall be deposited with the Secretary-General of the United Nations.

DONE at Paris this twelfth day of December two thousand and fifteen.

IN WITNESS WHEREOF, the undersigned, being duly authorized to that effect, have signed this Agreement.

**Appendix 9.1**  
**Sector-wise Growth in Index of Industrial Production (IIP): 2005-06 to 2014-15**

Base year: 2004-05

Sector	Weight	2005-06*	2006-07*	2007-08*	2008-09*	2009-10*	2010-11*	2011-12*	2012-13*	2013-14*	2014-15*	CAGR**
Mining	69.83	102.73	101.77	119.90	128.77	117.02	118.29	44.98	36.42	53.05	39.17	-8.95
			(-0.94)	(17.81)	(7.40)	(-9.12)	(1.09)	(-61.97)	(-26.85)	(45.66)	(-26.14)	
Manufacturing*	811.36	105.89	114.18	123.05	129.83	146.90	161.18	165.05	179.19	184.44	189.85	6.62
			(7.83)	(7.77)	(5.51)	(13.15)	(9.72)	(2.40)	(8.56)	(2.92)	(2.93)	
Electricity	118.81	104.93	118.37	126.24	126.33	146.27	147.96	170.85	180.59	201.34	205.19	7.45
			(12.81)	(6.64)	(0.08)	(15.79)	(1.15)	(15.47)	(5.70)	(11.49)	(1.91)	
General	1000.00	105.73	114.13	123.18	129.28	145.08	156.62	157.35	169.38	177.49	181.15	6.12
			(7.95)	(7.93)	(4.95)	(12.22)	(7.96)	(0.47)	(7.41)	(4.79)	(2.06)	

\* Provisional, \*\*CARG = Compound Average Rate of Growth

Note: Figures in brackets are percentage growth compared to the previous year, Source: Directorate of Economics and Statistics

**Appendix 9.2**

**Index of industrial production in the manufacturing sector in Karnataka by use-based groups : 2005-06 to 2014-15**

Base year: 2004-05

Sl. No	Industry Group	Weight	2005-06*	2006-07*	2007-08*	2008-09*	2009-10*	2010-11*	2011-12*	2012-13*	2013-14*	2014-15*	CAGR**
	Basic goods	219.8377	111.40	132.95	150.99	154.60	156.49	164.71	153.76	178.14	184.64	188.17	6.53
				(19.34)	(13.57)	(2.39)	(1.23)	(5.25)	(-6.64)	(15.86)	(3.65)	(1.91)	
2	Capital goods	132.8699	108.48	113.28	120.75	113.69	131.29	137.93	192.03	194.69	200.95	204.37	7.41
				(4.42)	(6.60)	(-5.85)	(15.47)	(5.06)	(39.22)	(1.39)	(3.22)	(1.70)	
3	Intermediate goods	173.5747	104.84	106.06	111.06	115.31	133.50	146.16	187.68	211.07	219.67	223.05	8.35
				(1.16)	(4.72)	(3.83)	(15.77)	(9.48)	(28.40)	(12.46)	(4.07)	(1.54)	
4	Consumer goods	285.0769	105.17	113.45	122.39	131.45	150.12	165.59	147.40	153.37	155.13	164.17	5.08
				(7.87)	(7.88)	(7.41)	(14.20)	(10.31)	(-10.98)	(4.05)	(1.15)	(5.83)	
	a) Consumer durables	37.4330	103.66	111.39	119.90	143.37	146.16	155.69	183.85	116.51	120.36	122.14	2.02
				(7.46)	(7.65)	(19.57)	(1.94)	(6.52)	(18.08)	(-36.63)	(3.30)	(1.48)	
	b) Consumer non-durables	247.6439	105.70	114.16	123.25	127.39	150.90	163.62	141.89	156.70	165.20	170.53	5.48
				(8.01)	(7.96)	(3.36)	(18.45)	(8.43)	(-13.28)	(10.44)	(5.42)	(3.22)	
	<b>Manufacturing Index*</b>	811.3591	105.89	114.18	123.05	129.83	146.90	161.18	165.15	179.19	184.44	189.85	6.62
				(7.83)	(7.77)	(5.51)	(13.51)	(9.72)	(2.40)	(8.57)	(2.93)	(2.93)	

\* Provisional, \*\*CARG = Compound Average Rate of Growth

Figures in the brackets indicate percentage change over the previous year, Source: Directorate of Economics and Statistics.

**Appendix 9.3**

**Annual indices of industrial production in Karnataka manufacturing division by groups : 2005-06 to 2014-15**

Base Year: 2004-05

Sl. No	NIC Code	Name of the Industry Group	Weight within divn.	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
1	15	Manufacture of Food Products & Beverages	71.2978	104.39	115.03	125.66	152.40	181.07	206.87	163.81	179.92	188.48	196.55
2	16	Manufacture of Tobacco Products	50.1473	114.40	101.72	109.60	89.97	128.38	153.33	130.00	142.44	148.32	153.74
3	17	Manufacture of Textiles	20.4432	92.89	93.39	96.36	112.51	119.70	128.78	150.88	167.95	175.76	182.79
4	18	Manufacture of Wearing Apparel	51.7851	88.64	103.67	109.94	96.00	122.95	137.30	136.61	150.29	158.45	165.61
5	19	Manufacture of Leather Goods	1.6970	72.95	80.95	86.73	124.45	133.95	139.00	134.84	145.24	149.24	152.54
6	20	Manufacture of Wood & Wood Products	0.9559	90.81	93.09	96.11	100.86	102.30	106.99	205.84	221.48	231.38	240.02
7	21	Manufacture of Paper & Paper products	13.4892	107.78	114.35	123.01	153.13	161.86	170.51	171.29	190.56	197.67	205.54
8	22	Manufacture of Publishing & Printing Materials	8.4155	98.96	103.30	109.04	211.50	219.71	241.83	200.12	307.06	315.23	328.99
9	23	Manufacture of Coke, Refined Petroleum Products & Nuclear fuel	68.0032	95.29	108.08	114.96	144.64	157.50	167.83	148.61	162.26	169.10	175.24
10	24	Manufacture of Chemical & Chemical Products	107.8921	112.00	123.34	133.36	106.14	113.59	119.93	137.42	153.31	156.61	162.37
11	25	Manufacture of Rubber & Plastic Products	12.4670	103.58	115.66	124.09	173.11	179.34	195.95	177.92	196.53	200.38	205.40
12	26	Manufacture of other Non-metallic Mineral products	37.0224	112.17	140.34	160.54	144.56	149.30	155.41	183.35	193.03	196.25	201.01
13	27	Manufacture of Basic Metals	119.9261	118.95	138.09	157.43	157.82	166.64	179.03	153.45	173.24	176.33	179.91
14	28	Manufacture of Fabricated metal products	13.0763	90.23	98.52	102.62	120.46	126.71	131.72	183.22	203.81	208.14	212.95
15	29	Manufacture of Machinery Equipments	50.4417	95.49	103.15	110.22	110.00	116.17	120.32	196.39	213.73	218.76	227.10
16	30	Manufacture of Office, Accounting & Computing Machinery	7.1733	103.58	115.66	124.09	171.71	181.52	197.51	187.20	189.46	196.97	201.75
17	31	Manufacture of Electrical Machinery & Apparatus	33.4176	107.77	119.49	128.71	117.19	125.15	130.30	209.24	209.75	214.17	216.45
18	32	Manufacture of Television and other Communication equipments	25.2076	112.09	132.13	147.41	144.99	163.62	182.61	194.96	198.43	203.04	206.40
19	33	Manufacture of Medical, Optical Instruments & Watches	36.0535	115.55	139.22	158.99	123.40	127.70	130.77	164.91	173.75	177.41	181.11
20	34	Manufacture of Motor Vehicles, Trailers and Semi-Trailers	54.2817	106.83	97.40	98.91	101.34	119.44	136.45	228.64	232.42	238.45	241.59
21	35	Manufacture of Other Transport Equipment	8.2089	105.25	106.27	111.15	59.04	61.59	71.02	201.39	204.58	213.05	219.26
22	36	Manufacture of Furniture	19.9570	90.59	87.40	92.95	135.64	148.60	151.74	161.56	163.39	167.25	169.74
		<b>Manufacturing Index*</b>	<b>811.3591</b>	105.89	114.18	123.05	129.83	146.90	161.18	165.05	179.19	184.44	189.85
				(7.83)	(7.77)	(5.51)	(13.15)	(9.72)	(2.40)	(8.56)	(2.93)	(2.93)	

\* Provisional figures, Note: Figures in brackets indicate percentage change over the previous year,

Source: Directorate of Economics and Statistics

**Appendix 9.4**  
**Two Digit Level (NIC-2008) Industrial Composition based on ASI 2012-13**

Sl. No.	Industrial Group (NIC-2008)	Value of Output (Rs. lakh)	Percentage
1.	Agriculture and related activities (01)	165123	0.41
2.	Manufacture of Food Products (10)	5405156	13.53
3.	Manufacture of Beverages (11)	473247	1.18
4.	Manufacture of Tobacco Products (12)	189449	0.47
5.	Manufacture of Textiles (13)	360922	0.90
6.	Manufacture of Wearing Apparels (14)	1245939	3.12
7.	Manufacture of Leather and Related Products (15)	119921	0.30
8.	Manufacture of Wood & Wood Products (16)	83394	0.21
9.	Manufacture of paper & Paper Products (17)	368250	0.92
10.	Manufacture of Printing & Reproduction of Recorded Media (18)	416605	1.04
11.	Manufacture of Coke & Refined Petroleum Products (19)	7020034	17.57
12.	Manufacture of Chemical & Chemical Products (20)	985707	2.47
13.	Manufacture of Pharmaceutical, medicinal chemical and Botanical products (21)	1232616	3.09
14.	Manufacture of Rubber products (22)	874662	2.19
15.	Manufacture of other non metallic mineral products (23)	1147239	2.87
16.	Manufacture of basic metals (24)	4604314	11.52
17.	Manufacture of Fabricated metal products (25)	635125	1.59
18.	Manufacture of Computer, electronic & optical products (26)	987229	2.47
19.	Manufacture of electrical equipment (27)	1739020	4.35
20.	Manufacture of machinery & equipment (28)	2789672	6.98
21.	Manufacture of motor vehicle, trailers & semi trailers (29)	3004733	7.52
22.	Manufacture of other transport equipment (30)	385984	0.97
23.	Manufacture of furniture (31)	77255	0.19
24.	Manufacture of other manufacturing materials (32)	3426761	8.58
25.	Manufacture of repair & installation of machinery (33)	9886	0.02
26.	Manufacture of waste collection treatment of disposal activities (38)	10442	0.03
27.	Others	2192196	5.49
	<b>State Total</b>	<b>39950881</b>	<b>100.00</b>

Source: Central Statistics Office (IS Wing), Kolkata

**Appendix 9.5**  
**Registration of Small-Scale Industrial units in Karnataka (Cumulative)**

Item	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
No. of SSI Units set up	298148	310368	321606	334386	346966	361950	377655	394850	413284	434305	458511	484549	513291
Investment (Rs. in lakh)	616374	653428	691969	735616	782158	894817	996434	1119250	1239873	1399514	1616365	1901082	2180373
Employment ('000s)	1723	1780	1830	1888	1946	2069	2174	2285	2396	2524	2680	2846	3022

Source: Directorate of Industries and Commerce

**Appendix 9.6**  
**Scheme wise details of Plan and Expenditure (XI & XII Five Year Plan)**

(Rs.lakh)

Name of the Scheme	2010-11		2011-12		2012-13		2013-14		2014-15		2015-16	
	Annual Plan	Actual Expenditure	Annual Plan	Actual Expenditure	Revised Annual Plan	Actual Expenditure	Annual Plan	Actual Expenditure	Annual Plan	Actual Expenditure	Annual Plan	Actual Expenditure (Up to December 2015)
Composite Scheme	210.00	193.76	250.00	143.44	1500	998.44	272.00	227.50	449.55	347.00	Scheme shifted to Non-plan	0
Training of Officers and Staff	3.00	2.10	5.00	0.81	250.29	203.46	5.00	4.85	5.00	4.85	5.00	1.09
Scheme for Establishment of Publication Wing in the Department	3.00	0.93	5.00	2.97	5.00	2.12	5.00	4.66	5.00	4.13	5.00	2.21
Creation of Mineral Conservation Cell of the Department	5.00	2.53	5.00	0.00	5.00	1.83	5.00	3.60	5.00	4.07	1000.00	0
Environmental Geological Wing of the Department	10.00	0.00	15.00	0.00	5.00	2.00	5.00	3.75	305.00	303.94	500.00	0.39
Modernization	169	99.4	800	270.84	5.00	0.00	1395.56	1183.77	3205.56	3046.95	5100.00	2441.15
Filling up of Stone Quarry Pits 2853-02-102-0-17	0	0	0	0	0	0	0	0	0	0	2000	0
<b>Total</b>	<b>400</b>	<b>298.72</b>	<b>1080</b>	<b>418.06</b>	<b>1770.29</b>	<b>1207.85</b>	<b>1687.56</b>	<b>1428.13</b>	<b>3975.11</b>	<b>3711.00</b>	<b>8610.00</b>	<b>2444.84</b>

Source: Planning section, Department of Mines and Geology

**Appendix 9.7**

**Departmental Target and Achievements (XI five year plan)**

**1- Iron & Steel**

SI No	Year	Targets		Achievement	
		Sales(MTs)	Value (Rs Lakhs)	Sales (MTs)	Value (Rs Lakhs)
1	2008-09	20500	9600	13525	6315
2	2009-10	15000	5400	18696	6723
3	2010-11	25000	10000	20502	8924
4	2011-12	27500	12600	19096	6642
5	2012-13	18500	8982	13795	8671
6	2013-14	15000	7283	11664	5396
7	2014-15	13800	6624	10196	4938
8	2015-16	12000	5650	6272 (Up to Dec-15)	2605

Source: KSSIDC

**2 - Coal**

SI No	Year	Targets		Achievement		Remarks
		Sales (MTs)	Value (Rs Lakhs)	Sales (MTs)	Value (Rs Lakhs)	
1	2008-09	16670	290	16670	290	Coal is an allocation material by M/s Coal India Ltd,. Due to change in policy regarding mode of transportation by M/s.WCL, Nagpur, coal transaction has not taken place during 2015-16
2	2009-10	39665	693	39665	693	
3	2010-11	36582	685	36582	685	
4	2011-12	40000	985	31702	726	
5	2012-13	40000	985	40781	1056	
6	2013-14	40000	1150	35415	969	
7	2014-15	27340	714	26294	746	
8	2015-16	27300	737	0 (Up to Dec-15)	0	

**3-Others Paraffin Wax**

SI No	Year	Targets		Achievement	
		Sales(MTs)	Value(Rs Lakhs)	Sales(MTs)	Value(Rs Lakhs)
1	2008-09	0	0	0	0
2	2009-10	0	0	0	0
3	2010-11	38	34	38	34
4	2011-12	200	200	124	120
5	2012-13	200	210	98	107
6	2013-14	200	210	69	76
7	2014-15	200	210	58	66
8	2015-16	200	210	07*	775

Note: KSSIDC has entered into a distributorship agreement with M/s Indian Oil Corporation Ltd, for distribution of Paraffin wax.

Source: KSSIDC, \*(Up to Dec-15)

**Appendix 9.8**

**Achievements made by KIADB in XI five year plan**

Particulars	Unit	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
		Achievements	Achievements	Achievements	Achievements	Achievements	Achievements	Achievements
Land acquired	Acres	3778.08	25058.50	7723.25	10012.20	5497.47	5932.50	894.90
Expenditure incurred on acquisition	Rs. in Crores	1375.00	1749.00	982.10	1731.00	1180.21	1409.19	1273.61
Expenditure incurred on development	Rs. in Crores	156.70	286.25	155.75	312.60	528.94	367.58	391.78
Total Expenditure	Rs. in Crores	1531.70	2035.25	1137.85	2043.60	1709.15	1776.78	1665.39
No. of Entrepreneurs	Nos.	1080	1009	458	481	369	241	231

Source: Karnataka State Industrial Areas Development Board, Bangalore

**Appendix 9.9**  
**Registered Factories by Industries**

NIC GROUP 2008	Description	2012-13	2013-14	2014-15	2015-16 (Apr - Dec 2015)
01	Cotton Ginning, Cleaning & Baling	326	358	320	33
11	Manufacture of Food Products and Beverages	2010	2190	1800	78
12	Manufacture of Tobacco Products	45	52	45	02
13	Manufacture of Textiles	215	357	191	13
14	Manufacture of Wearing Apparel; Dressing and Dyeing of Fur	297	439	849	74
15	Tanning and dressing of Leather; Manufacture of Luggage, Handbags, Saddlery, Harness and Footwear	52	73	60	12
16	Manufacture wood and of Products of wood & cork, Except Furniture; Manufacture of articles of straw and plaiting materials	997	1032	998	26
17	Manufacture of Paper & Paper Products	282	317	275	13
18	Printing, Publishing & allied Industries	317	450	410	14
19	Manufacture of Coke, Refined Petroleum Products & Nuclear Fuel	282	285	275	2
20	Manufacture of Chemicals & Chemical Products	517	601	597	18
22	Manufacture of Rubber and Plastic Products	545	616	600	27
23	Manufacture of other Non Metallic Mineral Products	332	365	350	30
24	Basic Metal metals	539	565	550	9
25	Manufacture of Fabricated Metal Products & Parts, Except machinery & Transport Equipments	1588	2128	1950	26
28	Manufacturing of Machinery and Equipment NEC*	1427	439	190	65
27	Manufacture of Electrical, Machinery & Apparatus NEC	504	567	570	26
26	Manufacture of Radio, Television and Communication Equipment and Apparatus	110	194	190	2
29	Manufacture of Motor Vehicles Trailers & Semi Trailers	125	133	130	2
30	Manufacture of other Transport Equipments	43	58	50	7
31	Manufacture of Furniture Manufacturing NEC	110	122	110	5
35	Electricity Gas Steam and Hot Water Supply	56	59	50	9
36	Collection Purification and Distribution of Water	32	37	35	2
45	Sale Maintenance and Repair of Motor Vehicles, Motor Cycles; retail sale of Automotive Fuel	575	725	697	45
46	Wholesale Trade and Commission Trade, Except of Motor Vehicles and Motor Cycles;	2	6	5	0
49	Land Transport; transport Via pipelines	1	4	6	0
	OTHERS	2561	2801	2600	218
	<b>Total</b>	<b>13890</b>	<b>15973</b>	<b>13903</b>	<b>758</b>

Source: Factories, Boilers, Industrial Safety & Health

**Appendix 9.10**  
**Assistance sanctioned and disbursed by Karnataka State Financial Corporation**

(Rs. Lakh)

Item	2000 - 01		2001 - 02		2002 - 03		2003 - 04		2004 - 05		2005-06		2006-07	
	No. of cases	Amount	No. of cases	Amount	No. of cases	Amount	No. of cases	Amount	No. of cases	Amount	No. of cases	Amount	No. of cases	Amount
Sanction	2677	44005	1625	30371	1352	34067	1309	30277	1244	24287	1161	31620	1326	42453
Disbursements	-	32878-	-	29242	-	26828	-	24879	-	24034	-	19986	-	31039

Item	2007-08		2008-09		2009-10		2010-11		2011-12		2012-13		2013-14		2014-15		2015-16 (April - Dec 15)	
	No. of cases	Amount	No. of cases	Amount	No. of cases	Amount	No. of cases	Amount	No. of cases	Amount	No. of cases	Amount	No. of cases	Amount	No. of cases	Amount	No. of cases	Amount
Sanction	1195	36815	1420	56524	1461	63149	1537	73163	1485	81732	1598	94406	1426	90926	1092	67514	763	44331
Disbursements	--	30313	-	38392	-	43439	-	58041	-	59708	-	73470	-	70747	-	55362	-	38863

Source: Karnataka State Financial Corporation.

**Appendix 9.11**  
**Departmental Target and Achievements**

PARTICULARS	FY 2009-10		FY 2010-11		FY 2011-12		FY 2012-13		FY 2013-14		FY 2014-15	
	Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement
<b>SOURCES:</b>												
Opening Balance of Cash/Bank	11849.2	12262.96	12237.36	12139.37	17156.02	17156.02	18945.32	18945.32	12353.33	12353.33	13457.60	13457.60
Increase in CRPS	0	0	0	0	0.00	0.00	0	0	0	0	0.00	0.00
Structured Obligation to GOK(HUDCO)	1090.32	1090.32	1090.32	1090.43	1090.32	1090.32	1090.32	1090.32	1090.32	1090.32	1090.32	1090.32
Government of Karnataka/BIA P cell	1687.24	78	1525	5025	25.00	25.00	25	6034.61	25	300	1645.34	1046.76
Bank loans/Int. accrued but not due	865	865	844.53	892.53	840.00	831.33	402.42	411.3	0	0	0.00	0.00
Bonds Subscription	0	0	0	0	0.00	0.00	0	0	0	0	0.00	0.00
Projects	870	517.15	523	637.45	3691.44	3192.03	7848.82	431.02	6410.26	1844.64	890.00	190.15
KITVEN fund	50	225	50	12.5	137.50	150.00	37.5	37.5	0	100	0.00	0.00
Government of India-Interest Arrears	13.73	13.73	13.73	13.73	13.73	13.73	13.73	13.73	13.73	13.73	13.73	9.48
Recovery from Staff Advance	60	64.83	60	62.17	50.00	55.12	50	45.87	40	39.08	35.00	28.01
Recovery from Operations	5430	4028.23	4924.64	5157.29	4376.5	4049.18	3276.5	2185.99	1786.91	5148.95	1375.05	1705.66
Revenue Receipts	5755.32	5343.65	4881	5156.12	4605.5	5384.46	4954.21	4523.61	5645.5	6283.1	5363.76	7634.75
Income tax refund	0	0	188.75	184.39	422.00	516.98	0	0	0	0	0.00	106.64
<b>Total</b>	<b>27670.81</b>	<b>24488.87</b>	<b>26338.33</b>	<b>30370.98</b>	<b>32408.01</b>	<b>32464.17</b>	<b>36643.82</b>	<b>33719.27</b>	<b>27365.05</b>	<b>27173.15</b>	<b>23870.80</b>	<b>25269.37</b>
<b>APPLICATIONS :</b>												
Investments	1999.24	200	1790	290	0	0	0	0	0	0	0.00	0.00
KITVEN fund	850	125	725	126	224	125	125	125	325	424	0.00	56.13
Repayments to HUDCO	1090.32	1090.32	1090.32	1090.43	1090.32	1090.32	1090.32	1090.32	1090.32	1090.32	1090.32	1090.32
Repayments to Banks	0	0	0	0	0	0	0	0	0	0	0.00	0.00
Redemption of Bonds	275	275	7740	520	4430.00	4430.00	9550	9550	5940	5940	0.00	0.00
Staff Advances	40.5	41.45	40	39.23	40.00	32.05	35	27.37	30	19.97	1060.00	18.49
Discharge of other liabilities	3010	5759.42	2674.5	4943.74	3965	3709.58	2115	1589.74	1075.34	2981.3	2291.34	2333.29
Capital Expenditure	50	18.94	60	11	20	16.31	20	5504.86	20	2.32	20.00	26.43
Project expenditure/Deployment	2299.25	1052.98	2420.09	2872.73	3847.94	941.45	9909.78	702.29	5804.92	195.09	2963.55	165.31
Current Assets	510	58.42	75	166.66	100.00	208.16	200	354.83	400	900.43	400.00	433.53
Income Tax/Sales Tax/FBT	75	399.34	0	231.13	200.00	192.79	184	353.18	300	863.34	300.00	1258.68
Revenue payments	2869.41	3328.63	3011.83	2924.04	3118.83	2772.69	2478.77	2068.35	1208.99	1298.78	1116.52	1182.92
Closing Balance of Cash/Bank	14602.09	12139.37	6711.59	17156.02	15371.92	18945.32	10935.95	12353.33	11170.48	13457.6	14629.07	18704.27
<b>Total</b>	<b>27670.81</b>	<b>24488.87</b>	<b>26338.33</b>	<b>30370.98</b>	<b>32408.01</b>	<b>32464.17</b>	<b>36643.82</b>	<b>33719.27</b>	<b>27365.05</b>	<b>27173.15</b>	<b>23870.80</b>	<b>25269.37</b>

CRPS = Cumulative redeemable preference shares

Source: Karnataka State Industrial & Infrastructure Development Corporation Limited

**Appendix 9.12**  
**Industrial approvals in Karnataka**

Item	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16 (Up to November)
Letter of Intent Issued	5	4	3	-	-	9	10	12	-	8	3	-	9	6	13
Industrial Licenses issued	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-

Source: Technical Consultancy Services Organisation of Karnataka (TECSOK)

**Appendix 9.13**

**Details of projects and District wise funds released during the year 2014-15**

(Rs. in Lakhs)

Sl. No.	District	No. of Works	Estimated Cost	Total amount released before 2014-15	Amount released in 2014-15
1	Ballari	25	2086.62	993.92	904.01
2	Gadag	13	1554.00	780.00	464.00
3	Belagavi	42	2823.31	510.47	1677.94
4	Dharwad	7	387.54	60.00	247.37
5	Bagalkot	15	1295.42	125.00	465.91
6	Vijayapura	25	1333.52	358.78	853.12
7	Haveri	11	1087.02	187.43	714.50
8	Davanagere	15	858.45	160.50	232.95
9	Bidar	2	160.00	40.00	120.00
10	Raichur	7	816.16	265.00	515.00
11	Koppal	15	1598.79	565.63	815.80
12	Kalaburagi	26	2197.91	557.13	1096.93
13	Yadagiri	15	1702.11	653.84	826.07
14	Tumkuru	21	1193.19	252.97	330.94
15	Kolar	4	208.47	20.00	115.88
16	Chikkaballapura	8	491.69	57.67	171.83
17	Kodagu	3	350.00	0	110.00
18	Udupi	4	389.50	189.33	200.17
19	Dakshina Kannada	3	225.00	30.00	171.00
20	Chamarajanagara	6	435.00	50.00	295.00
21	Chikkmagalur	11	938.00	365.85	476.63
22	Mandya	19	1343.02	554.56	705.75
23	Mysuru	15	1557.66	256.00	707.80
24	Hassana	8	380.92	100.65	170.58
25	Uttara Kannada	51	6617.67	1347.07	2871.74
26	Shivamoga	15	1921.21	641.58	434.45
27	Ramanagara	10	396.00	60.00	186.16
28	Bangaluru Urban	5	325.00	98.60	36.22
29	Bangaluru Rural	2	160.00	100.00	60.00
30	Chitradurga	10	1017.00	305.13	266.71
<b>Total</b>		<b>413</b>	<b>35850.18</b>	<b>9687.11</b>	<b>16244.46</b>

Source: Department of Tourism

**Appendix 9.14**

**Tourism Roads Taken up with NABARD Assistance**

RIDF No	Number of Roads	Length (KM)	Total Project Cost	Total Amount Released	Balance Amount to be released
RIDF- XIV	8	94.80	1704.78	1621.78	83.00
RIDF- XV	2	13.50	460.00	387.25	72.75
RIDF- XVI	7	38.85	1240.66	679.69	560.97
RIDF- XVII	11	59.83	2080.00	1203.71	876.97
RIDF- XVIII	12	16.98	1296.00	400.00	890.00
RIDF- XIX	28	76.11	4610.00	3536.00	1074.00
RIDF- XX	84	333.28	11775.57	3368.31	8407.26
<b>Total</b>	<b>152</b>	<b>633.35</b>	<b>23167.01</b>	<b>11196.74</b>	<b>11964.27</b>

Source: Department of Tourism



**APPENDIX 10.1 : Financial Performance Under MGNREGA during the Financial Year 2014-2015**

State:KARNATAKA

(Rs. in Lakhs)

Sl. No	District	Opening Balance(OB)		Release of Last FY but Received during the Current FY		Release from State Fund(*) to districts	Misc Receipt	Borrowed Fund		Inter-district		Total Availability
		CB as OB	Entered OB	Centre	State			From other	Refunded to	Fund transfer to	Fund received	
1	2	3	4	5	6	7	8	9	10	11	12	13=(4+5+6+7+8+9+12)-(10+11)
Phase I												
2	BAGALKOTE	179.73	154.70	0.00	0.00	7073.20	6054.29	0.00	0.00	0.00	0.00	13282.19
3	BANGALORE	342.82	372.85	0.00	0.00	221.60	2.79	0.00	0.00	0.00	0.00	597.25
4	BANGALORE RURAL	91.37	130.19	0.00	0.00	1936.90	0.50	0.00	0.00	0.00	0.00	2067.59
1	BELGAUM	298.39	268.11	0.00	0.00	10959.70	133.07	0.00	0.00	0.00	0.00	11360.88
5	BELLARY	173.40	222.75	0.00	0.00	4127.75	144.30	0.00	0.00	0.00	0.00	4494.80
6	BIDAR	210.21	93.79	0.00	0.00	4430.65	7.39	0.00	0.00	0.00	0.00	4531.83
7	BIJAPUR	612.05	192.43	0.00	0.00	9041.45	27.12	0.00	0.00	0.00	0.00	9261.00
8	CHAMARAJA NAGARA	200.49	133.56	0.00	0.00	4847.60	1.67	0.00	0.00	0.00	0.00	4982.83
9	CHIKKABALLAPURA	276.00	416.57	0.00	0.00	4496.60	0.33	0.00	0.00	0.00	0.00	4913.50
10	CHIKMAGALUR	128.02	92.81	0.00	0.00	4227.75	12.77	0.00	3.04	0.00	0.00	4330.29
11	CHITRADURGA	282.35	165.07	0.00	0.00	11896.60	3.00	0.00	0.00	0.00	0.00	12064.68
12	DAKSHINA KANNADA	102.85	105.74	0.00	0.00	1441.35	36.67	0.00	0.00	0.00	0.00	1583.76
13	DAVANAGERE	204.40	251.16	0.00	0.00	11716.60	89.40	0.00	0.00	0.00	0.00	12057.16
14	DHARWAR	117.73	174.65	0.00	0.00	5780.45	2.29	0.00	0.00	0.00	0.00	5957.39
15	GADAG	68.96	25.94	0.00	0.00	6365.05	5.00	0.00	0.00	0.00	0.00	6395.99
16	GULBARGA	892.90	566.98	0.00	0.00	8190.05	6.56	0.00	0.00	0.00	0.00	8763.59
17	HASSAN	185.42	105.80	0.00	0.00	8805.10	63.58	0.00	0.00	0.00	0.00	8974.48
18	HAVERI	235.09	313.31	0.00	0.00	5310.05	0.43	0.00	0.00	0.00	0.00	5623.79
19	KODAGU	82.06	73.80	0.00	0.00	977.15	256.96	0.00	0.00	0.00	0.00	1307.92
20	KOLAR	373.31	248.60	0.00	0.00	6804.55	6.90	0.00	0.00	0.00	0.00	7060.05
21	KOPPAL	354.72	169.85	0.00	0.00	6872.50	1.44	0.00	0.00	0.00	0.00	7043.79
22	MANDYA	139.69	119.59	0.00	0.00	6629.95	5.90	0.00	0.00	0.00	0.00	6755.44
23	MYSORE	238.46	220.85	0.00	0.00	4952.45	1.73	0.00	0.00	0.00	0.00	5175.03
24	RAICHUR	392.98	328.18	0.00	0.00	8632.95	6.76	0.00	0.00	0.00	0.00	8967.89
25	RAMANAGARA	166.99	119.98	0.00	0.00	11267.10	0.20	0.00	0.00	0.00	0.00	11387.29
26	SHIMOGA	189.72	155.37	0.00	0.00	5761.65	26.85	0.00	0.00	0.00	0.00	5943.87
27	TUMKUR	123.70	260.20	0.00	0.00	6582.40	13.51	0.00	0.00	0.00	0.00	6856.11
28	UDUPI	106.29	224.86	0.00	0.00	537.85	8.18	0.00	0.00	0.00	0.00	770.90
29	UTTARA KANNADA	104.28	133.22	0.00	0.00	3670.45	5.26	0.00	0.00	0.00	0.00	3808.93
30	YADAGIRI	804.70	980.27	0.00	0.00	2409.55	4.86	0.00	0.00	0.00	0.00	3394.68
Phase II Total		4639.22	4497.36	0.00	0.00	96241.05	6179.07	0.00	0.00	0.00	0.00	106917.48
All District Total		7679.08	6821.20	0.00	0.00	175967.00	6929.72	0.00	3.04	0.00	0.00	189714.89
State Fund		-96.05	-96.05	0.00	0.00		0.00					931.49
Grand Total of State		7583.03	6725.15	0.00	0.00	175967.00	6929.72	0.00	3.04	0.00	0.00	190646.38

**APPENDIX 10.1 Contd : Financial Performance Under MGNREGA during the Financial Year 2014-2015**

Sl. No	District	Cumulative LB	Cumulative Expenditure											Total	%age Utilization	Balance	Payment due**				Total
			Actual Expenditure			Adm. Exp			Total	On Unskilled Wage	On Semi-skilled and Skilled Wage	On Material	Tax								
			Unskilled Wage	Semi-skilled and Skilled Wage	Material	Tax	Rec Exp	Non-Rec Exp									Total Adm. Exp				
																		15	16	17	
1	2	14	15	16	17	18	19	20	21=19+20	22=15+16+17+18+21	23=(22/13)*100	24=13-22	25	26	27	28	29=24+25+26+28				
Phase I																					
2	BAGALKOTE	0.00	3753.60	18.36	2830.24	52.56	238.69	0.08	238.78	6893.53	51.90	6388.66	284.89	2.57	399.45	7.07	693.98				
3	BANGALORE	236.95	138.55	28.73	11.08	0.41	6.35	0.04	6.39	185.15	31.00	412.09	9.18	6.41	3.17	0.19	18.95				
4	BANGALORE RURAL	0.00	1021.85	10.06	600.44	49.40	91.33	3.74	95.07	1776.83	85.94	290.77	28.10	1.16	80.00	6.44	115.70				
1	BELGAUM	0.00	6579.06	352.80	3018.32	276.04	638.83	5.21	644.04	10870.26	95.58	490.63	108.06	44.72	318.38	25.75	496.91				
5	BELLARY	0.00	2573.02	1.98	1074.29	71.69	325.96	2.86	328.82	4049.80	90.10	445.00	93.57	0.00	63.60	4.62	161.79				
6	BIDAR	0.00	2506.19	0.00	1591.99	79.78	232.19	0.00	232.19	4410.16	97.32	1519.74	81.49	0.00	232.69	11.78	325.96				
7	BIJAPUR	0.00	4708.07	0.01	2812.75	0.52	216.69	3.23	219.91	7741.27	83.29	1519.74	586.19	0.00	1052.04	0.40	1638.63				
8	CHAMARAJA NAGARA	0.00	2433.08	17.56	2187.82	0.52	161.15	0.15	161.30	4800.29	96.34	182.53	143.03	1.61	338.15	0.09	482.88				
9	CHIKBALLAPURA	0.00	2572.17	0.00	1134.04	67.12	140.50	4.62	145.13	3918.46	79.75	995.03	494.20	0.00	361.17	28.11	883.48				
10	CHIKMAGALUR	5031.57	2430.43	55.02	1216.64	107.25	277.42	0.96	278.38	4087.71	94.40	242.58	62.10	4.62	28.12	2.15	96.99				
11	CHITRADURGA	0.00	7325.20	8.54	3909.19	10.61	372.96	0.21	373.17	11626.70	96.37	437.97	1057.95	0.11	1655.55	0.28	2713.89				
12	DAKSHINA KANNADA	0.00	956.40	11.02	198.29	1.90	145.18	1.37	146.55	1314.16	82.98	269.60	43.98	0.67	16.49	0.16	61.30				
13	DAVANAGERE	0.00	6765.92	32.19	3963.44	71.70	347.06	4.04	351.10	11184.36	92.76	872.80	741.93	10.75	1681.88	2.03	2436.59				
14	DHARWAR	10481.24	2747.56	318.47	1765.71	24.95	231.47	11.33	242.80	5099.49	85.60	857.89	229.77	36.83	241.36	0.30	508.26				
15	GADAG	0.00	3178.30	21.52	2735.45	3.18	133.11	0.08	133.19	6071.63	94.93	324.36	152.28	3.40	265.06	0.00	420.74				
16	GULBARGA	0.00	5522.15	138.05	2352.52	66.65	261.75	3.00	264.75	8348.12	95.26	415.47	292.40	189.85	1376.77	64.44	1923.46				
17	HASSAN	0.00	4836.37	48.78	3413.12	0.05	376.21	2.31	378.52	8676.83	96.58	297.65	148.82	7.67	381.33	0.02	537.84				
18	HAVERI	0.00	3130.76	39.22	1837.57	78.22	234.10	0.16	234.27	5320.03	94.60	303.76	67.77	1.22	245.61	11.36	325.96				
19	KODAGU	0.00	503.25	0.00	308.80	26.20	41.80	0.00	41.80	880.05	67.29	427.86	34.29	0.00	38.05	3.63	75.97				
20	KOLAR	0.00	4248.78	0.00	2106.14	150.97	40.13	2.75	42.88	6548.77	92.76	511.28	222.70	0.28	834.51	61.01	1118.50				
21	KOPPAL	0.00	3843.20	27.69	2630.27	158.87	204.55	54.83	259.38	6919.41	98.23	124.38	343.83	8.80	634.27	31.16	1018.06				
22	MANDYA	0.00	3863.03	494.33	1519.60	111.17	184.79	4.67	189.47	6177.60	91.45	577.84	172.85	91.88	131.95	10.98	407.66				
23	MYSORE	0.00	2212.73	111.25	2051.61	4.21	137.96	1.27	139.23	4519.02	87.32	656.01	174.54	13.98	245.73	0.95	435.20				
24	RAICHUR	0.00	5988.82	71.73	1880.84	145.83	155.52	0.40	155.92	8243.14	91.92	724.74	341.19	35.60	541.73	40.88	959.40				
25	RAMANAGARA	0.00	5699.00	70.16	4561.70	225.19	174.91	5.90	180.82	10736.86	94.29	650.42	437.41	8.42	388.35	19.66	853.84				
26	SHIMOGA	0.00	3105.92	305.14	1508.72	126.95	373.97	1.99	375.95	5422.68	91.23	521.19	218.45	42.30	147.75	11.74	420.24				
27	TUMKUR	0.00	3717.27	181.46	1696.14	22.14	345.85	0.38	346.23	5963.23	86.98	892.88	429.70	81.84	420.16	10.10	941.80				
28	UDUPI	0.00	395.91	1.96	61.69	0.87	64.12	0.33	64.45	524.89	68.09	246.01	5.42	0.04	2.92	0.03	8.41				
29	UTTARA KANNADA	0.00	2471.15	76.93	752.59	0.60	222.12	1.06	223.18	3524.44	92.53	284.48	111.72	18.02	128.22	0.09	258.05				
30	YADAGIRI	0.00	1242.12	0.00	682.66	9.51	247.49	0.00	247.49	2181.78	64.27	1212.90	571.66	0.00	500.85	29.36	1101.87				
Phase III Total		10718.19	52333.51	1428.73	32175.80	962.31	3220.51	96.00	3316.51	90216.86	84.38	16700.63	4509.22	277.13	6289.46	217.46	11293.27				
All District Total		15749.76	100473.86	2442.96	56413.66	1945.06	6624.19	116.97	6741.15	168016.68	88.56	21698.20	7689.47	612.75	12755.31	384.75	21442.28				
State Fund							348.69	0.00	348.69			582.80									
Grand Total of State		15749.76	100473.86	2442.96	56413.66	1945.06	6972.88	116.97	7089.84	168365.37	88.13	22281.00	7689.47	612.75	12755.31	384.75	21442.28				

\* Use of asterisk (\*) indicates that the figures are preliminary and subject to final audit. \*\* Payment due means MR Bills/Vouchers that have been entered but payment date has not been entered in the MIS. Note: These Figures are Cumulatively Displayed Col.3: OB-CB of last FY as per MIS Col.4: OB-CB entered initially in the MIS.

**APPENDIX 10.1 : Financial Performance Under MGNREGA during the Financial Year 2014-2015 (contd....)**

Sl. No	District	Employment Generated During The financial Year 2014-2015										10	11	12				
		3			4	5	6	7	8	9								
		a	b	c						d	e							
		Cumulative No. of HH issued jobcards (Till the reporting month)			Cumulative No. of HH demanded employment (Till the reporting month)	LB: HHs Projected upto the month	Cumulative No. of HH provided employment (Till the reporting month)	No. of HH working under NREGA during the reporting month	LB: Projected Persondays upto the month	Cumulative Persondays generate(Till the reporting month)			Cumulative No. of HH complete days (Till the reporting reform/AY	No. of HH which are beneficiary of land reform/AY	No. of Disabled beneficiary individuals			
		SCs	STs	Others						SCs	STs	Others				Total	Women	
<b>Phase I</b>																		
1	BIDAR	45071	23195	110978	179244	42734	0	23270	3141	14000	205736	681877	992396	445030	936	132	162	
2	CHITRADURGA	50019	46008	152680	248707	89898	0	63030	3729	38000	642405	1947500	3126145	1443746	2928	5143	211	
3	DAVANAGERE	47337	31822	155919	235078	76465	0	64064	4226	53000	574676	381415	2860894	1312107	3329	684	228	
4	GULBARGA	47252	5024	241608	293884	65834	0	38230	4701	38000	319650	23779	1996396	914104	1751	24	162	
5	RAICHUR	48379	51821	158652	258852	76139	0	57074	9989	32000	562953	1707814	2884364	1468946	2252	1394	519	
6	BELGAUM	53201	28317	412013	493531	106397	0	73825	20211	32000	316426	142424	3074372	1466451	2710	931	304	
7	BELLARY	44026	45532	123127	212685	43850	0	27962	3565	16000	266764	264935	719248	1250947	949	456	158	
8	CHIKMAGALUR	29909	5751	96597	132257	43079	200	30864	2804	10000	192307	37006	796208	1025521	449	1646	267	
9	HASSAN	38533	4051	185493	228077	67871	0	52068	4186	17000	287579	30538	1619860	1937977	1284	465	162	
10	KODAGU	6725	4559	53177	64461	10255	0	6351	579	5000	23697	198167	230930	109554	95	55	15	
11	SHIMOGA	34621	7857	138137	180615	79318	0	60014	13771	18000	230149	54604	1051631	1336384	578	941	228	
12	BAGALKOTE	29538	11229	165047	205814	52648	0	38409	8947	30000	208226	73901	1437361	1719488	2406	199	114	
13	BANGALORE	15129	1668	32994	49791	5215	2169	3381	109	9000	26904	2115	45885	74904	9	17	9	
14	BANGALORE RURAL	15152	4041	58894	78087	13085	0	10013	1801	16000	65957	15979	318288	400224	467	15	28	
15	BIJAPUR	36405	2856	181864	221125	67712	0	49535	5198	20000	316317	24073	1715650	2056040	1789	176	291	
16	CHAMARAJA NAGARA	26426	10051	97712	134189	28264	0	21998	5178	11000	267167	69846	617399	954412	1434	56	73	
17	CHIKKABALLAPURA	34989	21135	99622	155746	51064	0	38462	4242	8000	309748	216609	1052376	1578733	766589	1217	135	132
18	DAKSHINA KANNADA	5343	4210	61608	71161	14652	0	13725	2856	8000	29616	29335	441825	500776	418	189	67	
19	DHARWAR	9012	5700	110287	124999	43411	512	34549	5393	22000	101894	63389	1316934	1482217	1927	104	163	
20	GADAG	15225	7087	89475	111787	39611	0	29907	3486	13000	158998	78494	1056965	1294457	1311	1272	317	
21	HAVERI	24303	17283	138528	180114	56405	0	36676	4887	16000	171599	141419	1086010	1399028	608251	710	135	
22	KOLAR	51439	11986	128193	191618	48769	0	39519	17368	21000	450053	126195	1151109	1727357	828339	2570	116	445
23	KOPPAL	32124	22856	162774	217754	55325	0	39754	5580	16000	286307	209477	1341309	1837093	865571	2631	1200	366
24	MANDYA	23168	1645	205079	229892	102509	0	69842	10736	15000	123239	10602	1330925	1464766	668744	570	151	148
25	MYSORE	35216	20004	132524	187744	37319	0	24592	3136	13000	148973	98554	555504	803031	369122	528	328	67
26	RAMANAGARA	22825	3528	141815	168168	65047	0	52511	6679	17000	285134	43287	2346639	2675060	1253720	4630	1222	107
27	TUMKUR	49517	23178	241064	313759	56727	0	40467	9194	52000	131986	64487	983333	1179806	555196	658	238	197
28	UDUPI	4254	3758	37437	45449	11480	0	8434	1011	4000	19418	13506	171377	204301	132801	73	361	29
29	UTTARA KANNADA	10382	4292	133360	148034	40416	0	34077	10016	9000	51670	40461	837364	929495	448267	492	293	106
30	YADAGIRI	37907	20652	146339	204898	24799	0	14068	4063	33000	114535	322397	478287	228835	136	18	28	
TotalPhase III		478354	197159	2364616	3040129	814458	2681	599919	109880	333000	3267741	1363084	18128650	22759475	10592115	24426	6800	2822
<b>Total</b>		<b>923427</b>	<b>451096</b>	<b>4192997</b>	<b>5567520</b>	<b>1516298</b>	<b>2881</b>	<b>1096671</b>	<b>180782</b>	<b>606000</b>	<b>6890083</b>	<b>3561471</b>	<b>33023247</b>	<b>43474801</b>	<b>41687</b>	<b>18671</b>	<b>5238</b>	

**Appendix 10.2**  
**Progress achieved under MGNREGS since inception (up to the end of December 2015)**

Sl No	Districts	Available funds (Rs in lakhs)	Expenditure (Rs.in lakhs)	Person day generated (in lakhs)	Employment Provided (Households)	works		
						No. of works undertaken (Nos)	Completed (Nos)	Under progress
1	Bagalkot	3757.38	3607.18	920117	24804	22789	6360	16429
2	Bangalore Urban	456.59	53.29	16240	421	3516	580	2936
3	Bangalore Rural	772.14	623.24	169278	5118	11487	1972	9515
4	Belgaum	7619.87	7441.66	2546156	62482	66386	7633	58753
5	Bellary	2985.21	2872.83	866268	20290	25389	6349	19040
6	Bidar	2584.46	2612.13	674935	17505	32337	5857	26480
7	Bijapur	4402.24	4103.4	958663	22731	41481	5183	36298
8	Chamarajanagar	2109.07	2043.13	465415	12070	12130	2978	9152
9	Chickaballapur	2110.73	1822.59	457438	13075	29040	2444	26596
10	Chikmagalur	1570.27	1486.57	467457	15560	28754	2523	26231
11	Chitradurga	7481.85	7130.41	1372918	30001	30214	6283	23931
12	DakshinaKannada	1085.66	935.97	297077	8192	10084	1193	8891
13	Davanagere	5432.52	5249.17	647131	16518	31462	6761	24701
14	Dharwad	2509.47	2415.75	644453	19990	26317	7436	18881
15	Gadag	1952.95	1840.08	471548	20318	29042	9795	19247
16	Gulbarga	4053.56	3456.86	835939	22836	31512	11858	19654
17	Hassan	4059.39	3937.13	1160495	32767	36307	6597	29710
18	Haveri	3042.59	2883.39	896704	24313	23374	2309	21065
19	Kodagu	329.44	211.58	56927	2146	13235	405	12830
20	Kolar	5406.21	5148.77	1288178	29996	25728	5843	19885
21	Koppal	3178.61	3057.05	669402	18599	43590	6700	36890
22	Mandya	1601.27	1491.39	399360	17296	52719	7264	45455
23	Mysore	1587.35	1426.19	337093	10160	27659	3618	24041
24	Raichur	7115.45	6598.59	2315638	52292	36324	7129	29195
25	Ramanagara	5628.04	5517.06	1728332	32922	58329	9740	48589
26	Shimoga	3700.25	3580.43	1201024	68183	40626	13506	27120
27	Tumkur	3617.03	3082.49	747368	23227	76128	30996	45132
28	Udupi	415.25	235.96	92947	3771	9620	348	9272
29	UttaraKannada	2356.29	2185.25	650231	24003	13616	2200	11416
30	Yadgir	3874.03	2730.67	512083	13717	19034	2076	16958
<b>Total</b>		<b>96795.17</b>	<b>89780.21</b>	<b>23866815</b>	<b>665303</b>	<b>908229</b>	<b>183936</b>	<b>724293</b>

### Appendix 11.1

#### Generation, Imports, T&D Losses and Consumption of Power in Karnataka

Year	Power Generation installed capacity (MWs)	Electricity Generation in MUs	Import in MUs	Transmission & Distribution Loss (%)	Power Consumption in MUs
1999-00	4423.87	21092	6056	38.00	16151
2000-01	4525.14	21119	6621	35.50	17867
2001-02	4411.54	19214	7609	35.86	18639
2002-03	4699.03	18105	9043	31.95	19888
2003-04	4713.90	18032	13178	30.88	21526
2004-05	5836.00	22677	14375	29.44	23173
2005-06	6278.71	24070	11453	29.38	24463
2006-07	6563.08	30719	11174	29.68	28454
2007-08	7278.94	30344	11634	25.16	29988
2008-09	8524.28	30188	11600	24.03	32020
2009-10	8685.91	31566	11009	22.07	33810
2010-11	11366.00	30474	16798	21.27	37216
2011-12	12056.00	43726	13202	20.20	42356
2012-13	13934.00	41296	17489	20.09	45658
2013-14	14029.00	45767	14826	19.07	46849
2014-15	14816.73	60544.5	14340.31	18.52	49400.57
2015-16*	15720.43	36747	9311	18.52	37156.27

\*Up to December, 2015, Source: Karnataka Power Transmission Corporation Limited

### Appendix 11.2

#### Progress of Rural Electrification in Karnataka

(Lakhs)

End of Year	Pumpsets energised (cumulative)
1999-00	11.82
2000-01	12.64
2001-02	13.16
2002-03	14.02
2003-04	14.16
2004-05	14.34
2005-06	15.09
2006-07	17.05
2007-08	17.23
2008-09	17.53
2009-10	17.91
2010-11	18.23
2011-12	19.49
2012-13	20.50
2013-14	21.49
2014-15	22.03
2015-16 (A)	23.44

(A):Anticipated

Source: Karnataka Power Transmission Corporation Limited

**Appendix 11.3**  
**Investment in Power Development in Karnataka**

(Rs. in crore)

<b>Year</b>	<b>Power Corporation</b>	<b>Power Transmission Corporation</b>
<b>1</b>	<b>2</b>	<b>3</b>
1999-00	188	846.80
2000-01	354	892.50
2001-02	437	946.89
2002-03	301	1082.16
2003-04	429	959.01
2004-05	534	1199.73
2005-06	696	1320.70
2006-07	1063	869.55
2007-08	717	1755.12
2008-09	1238	1808.93
2009-10	952	1334.00
2010-11	1026	1094.69
2011-12	1206.00	1132.00
2012-13	2363.2	747.00
2013-14	2808.00	1250.00
2014-15	2588.55	797.86
2015-16 Up to Dec -2015	1385.49	684.51

Source 1. Karnataka Power Transmission Corporation Limited

2. Karnataka Power Corporation Limited

**Appendix 11.4**  
**Road length in Karnataka**

(in Kms)

<b>Year</b>	<b>National Highways</b>	<b>State Highways</b>	<b>Major District Roads</b>	<b>Other District Roads</b>	<b>Municipal Roads</b>	<b>Other Roads including Village Roads</b>	<b>All Roads (2 to 7)</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>
1999-00	3728	9829	28247	1644	8366	96775	148589
2000-01	3728	9829	28247		8366	104034	154204
2001-02	3728	9829	28247		8366	104034	154204
2002-03	3728	9829	28247		8366	104034	154204
2003-04	3967	9590	28247		8366	94034	144204
2004-05	3973	17228	30760		8366	115574	175901
2005-06	3958	17405	32572		8366	146713	209014
2006-07	3958	18642	37671		8366	147212\$	215849
2007-08	3958	20739	47763		8366	147212\$	228038
2008-09	3982	20905	47836		8366	147212\$	228301
2009-10	4490	20528	50436		8366	147212\$	231032
2010-11	4490	20528	50436		8366	147212\$	231032
2011-12	4490	20770	49959		8366	148412\$	231997
2012-13	4490	20770	49959		8366	148412\$	231997
2013-14	4688	20773	49683		8366	155545\$	239055
2014-15	6572	19720	49928		8366	155545\$	240131

Note: 1. Source: Public Works Department and RDPR Department

2. \$ includes ODR and village roads

**Appendix 11.5**

**Operational Performance Statistics of KSRTC**

Sl. No	Particulars	2013-14 upto (31-03-14)	2013-14 upto (31-12-13)	2014-15 upto (31-12-14)	2015-16 upto (31-12-15)	% Change to 2014-15 (upto Dec)
1	No. of buses as at the end of the year	8294	8320	8359	8173	-2.2
2	%over aged buses	22.9	17.4	5.9	8.3	--
3	Routes operated at the end of the year (No.)	5912	5833	5907	5922	0.3
4	Route length at the end of the year.(in kms)	5.63	5.66	5.70	5.63	-1.2
5	Avg. eff. Kms. operated /day ( in lakh)	27.07	27.01	27.10	26.36	-2.7
6	Avg. pass. carried/day( in lakh)	27.50	25.76	27.16	26.72	-1.6
7	Avg. number of buses held	8257.4	8201.1	8279.9	8145.6	-1.6
8	Avg. number of buses on road	7533.3	7511.7	7583.3	7390.7	-2.5
9	% Fleet utilization	91.7	91.6	91.6	90.7	-1.0
10	Avg. vehicle utilization (in kms.)	359	360	358	357	-0.3
11	Crew duty (in kms.)	97	97	100	101	1.0
12	Total traffic receipts(Rs. in crores)	2966.92	2123.44	2404.85	2196.73	-8.7
13	Avg. seating capacity.	52.1	52.0	52.0	51.4	--
14	% Load factor	68.9	69.3	69.7	69.9	0.3
15	Bus staff ratio (on sch.)	4.98	4.94	4.91	4.81	-2.0
16	Total vehicles (including scrapped vehicles)	8934	8820	8836	8391	-5.0

**Appendix 11.6**

**Financial Performance KSRTC**

(Rs. in crore)

Sl. No	Particulars	2013-14 upto (31-03-14)	2013-14 upto (31-12-13)	2014-15 upto (31-12-14)	2015-16 upto (31-12-15)	% Change to 2014-15 (upto Dec)
1	Total receipts	2966.92	2123.44	2404.85	2196.73*	-8.8
2	Total expenses (Ex. Taxes)					
	a) Operating expenses	2818.41	2060.59	2284.59	2096.55	-8.2
	b) Non-operating expenses	78.65	51.79	68.04	69.93	2.8
3	Profit/loss before taxes	-75.56	-96.89	-67.91	-74.65	--
4	Total taxes	1.67	--	--	--	--
	a) Passenger / other taxes	143.75	107.95	120.13	104.90	-12.7
	b) Motor vehicle & other taxes					
5	Total expenses	3042.48	2220.33	2472.76	2171.38	-12.2
6	Net profit/loss	-75.56	-96.89	-67.91	-74.65	--
7	Prior period adjustment (profit/loss)	--	--	--	--	--
8	Total profit/loss (Rs. Crore)	-75.56	-96.89	-67.91	-74.65	--

**Appendix 11.7**

**Operational Performance Statistics BMTC**

Sl. No	Particulars	2013-14	2014-15	2014-15 Upto 31-12-14	2015-16 upto 31-12-15	% Variation
1	Routes operated at the end of the year (No.)	2559	2288	2481	2420	-2.4
2	Route length at the end of the year.(Lakh Kms.)	0.66	0.55	0.59	0.58	-1.7
3	Average Effective kms. Operated per day (Lakhs)	13.14	12.90	12.92	12.22	-5.4
4	Avg. number of pass. carried/day ( in lakh)	50.25	53.06	50.25	51.30	2.1
5	Avg. number of buses held	6602.5	6655.7	6679.8	6447.5	-3.5
6	Avg. number of buses on road	6022.0	6017.6	6018.6	5856.2	-2.7
7	% Fleet utilization	91.2	90.5	90.1	90.8	0.8
8	Avg. Vehicle utilization (in kms.)	218.2	214.4	214.7	208.7	-2.8
9	Total traffic receipts(Rs. in crore)	1765.57	1994.11	1531.03	1460.25	-4.6
10	Avg. seating capacity.	43.5	42.1	43.5	42.1	-3.2
11	Average seat capacity utilization	797.84	788.30	601.11	593.93	-1.2
12	Bus staff ratio	5.4	5.8	5.9	5.9	--
13	Total vehicles (including scrapped vehicle) (Nos.)	7613	6972	6968	6521	-6.4

**Appendix 11.8**  
**Financial Performance of BMTC**

**(Rs. in crore)**

Sl. No.	Particulars	2013-14	2014-15	2014-15 upto 31-12-14	2015-16 upto 31-12-15	% Variation
1	Total receipts	2013.94	2256.84	1715.43	1641.03	-4.3
	a. Traffic revenue	1765.57	1994.11	1531.03	1460.24	-4.6
	b. Non Traffic revenue	248.37	262.73	184.40	180.79	-2.0
2	Total expenses (Ex. Taxes)	2063.17	2210.66	1640.89	1496.06	-8.8
	a. Operating expenses	1968.05	2100.83	1656.82	1539.02	-7.1
	b. Non-Operating expenses	95.12	109.83	69.04	38.08	-44.8
3	Profit before taxes	(-) 49.23	46.18	74.55	144.96	94.4
4	Total taxes					
	c) Passenger tax	0.37	0.40	--	--	--
	d) Motor vehicle & other taxes	97.99	110.68	84.97	81.04	-4.6
5	Total expenses	2161.53	2321.74	1725.86	1577.10	-8.6
6	Net profit/loss (inc. subsidy)	(-) 147.59	(-) 64.90	(-)10.42	63.93	--
7	Prior period adjustment (profit/loss)	--	--	--	--	--
8	Total profit/loss (Rs. Crore)	(-) 147.59	(-) 64.90	(-)10.42	63.93	--

BMTC is paying 5.55% of Motor vehicle tax on traffic revenue, during the year 2014-15 it has paid Motor vehicle tax of Rs.110.68 crore.

**Appendix 11.9**  
**Operational Performance Statistics NWKRTC**

Sl. No.	Particulars	2013-14	2014-15	2014-15 (up to 31-12-2014)	2015-16 (up to 31-12-2015)	% Variation
1	No. of buses at the end of the period	4803	4768	4751.0	4753.0	-0.3
2	% over aged buses	26.5	31.6	29.9	36.2	14.6
3	Routes operated at the end of the year (No.)	3902	3926	3915	3930	0.1
4	Route length at the end of the year (in lakhs)	96.69	97.73	96.95	97.78	0.1
5	Avg. Eff. Kms operated/ day (in lakhs)	15.08	15.71	15.64	15.95	1.5
6	Avg. passengers carried / day (in lakhs)	22.50	22.75	22.65	22.75	0.0
7	Avg. number of buses held	4614.5	4738.5	4742.4	4735.7	-0.1
8	Avg. number of buses on road	4385.1	4507.0	4498.1	4555.2	1.1
9	% Fleet utilisation	95.0	95.1	94.8	96.2	1.2
10	Avg. Vehicle Utilisation (in Kms.)	343.8	348.6	348	350	0.4
11	Total Traffic receipts (Rs. In Crores)	1351.59	1512.78	1153.76	1143.51	-24.4
12	Avg. Seating capacity.	51.8	51.9	51.0	51.0	-1.7
13	% Load Factor	62.9	61.3	62.3	60.7	-1.0
14	Bus Staff Ratio (on schedules)	4.99	5.15	4.87	5.00	-2.8
15	Total vehicles (including scrapped vehicles held)	5287	5126	5019	4966	-3.1

**Appendix 11.10**  
**Financial Performance of NWKRTC**

**(Rs. in Crores)**

Sl. No.	Particulars	2013-14	2014-15	2014-15 (up to 31-12-2014)	2015-16 (up to 31-12-2015)	% Variation
1	Total Receipts	1572.74	1728.57	1267.15	1233.45	-28.6
2	Total Expenses (Excl. Taxes)					
	a) Operating Expenses	1533.96	1660.49	1216.38	1162.76	-30.0
	b) Non Operating expenses	38.99	46.44	60.87	45.45	-2.1
3	Profit before taxes	-0.21	21.64	-10.10	25.24	
4	Total Taxes					
	a) Passenger tax	0.00	0.00	0.00	0.00	0.00
	b) Motor vehicle & other taxes	66.58	74.72	60.29	59.83	-19.9
5	Total expenses	1639.53	1781.65	1337.54	1268.04	-28.8
6	Net profit/ loss	-66.79	-53.08	-70.39	-34.59	
7	Prior period adjustment (profit / loss)	---	---	---	---	
8	Total profit / loss	-66.79	-53.08	-70.39	-34.59	-34.8



**Appendix- 11.11**  
**Operational Performance NEKRTC**

Sl. No.	Item	2013-14	2013-14 (up to 31-12-13)	2014-15 (up to 31-12-14)	2015-16 (up to 31-12-15)	% Variation.
1	Routes operated at the end of the year (No.)	3578	3435	3578	3706	3.6
2	Route length at the end of the year (Lakh Km.)	3.73	3.62	3.73	3.69	-1.1
3	Average Effective Kms. operated per day (Lakh)	12.54	12.51	12.53	13.06	4.2
4	Average number of passengers carried per day (Lakh)	13.35	13.30	13.35	13.40	0.4
5	Average number of buses held per day (No.)	4246.6	4234.0	4343.4	4447.5	2.4
6	Average number of buses on-road per day (No.)	3793.8	3791.7	3816.6	3972.8	4.1
7	Average Fleet Utilisation (%)	89.3	89.6	87.9	89.3	1.7
8	Avg. Vehicle Utilisation (in Kms.)	330	330	328	329	0.3
9	Total Traffic Receipts (Rs. in Crore)	1184.04	888.47	996.20	996.02	0.0
10	Average seating capacity	52.2	52.2	52.4	54.0	3.1
11	Average Seat Capacity Utilisation of buses on road (Load Factor) (%)	62.3	64.4	70.0	62.4	-10.9
12	Bus Staff Ratio (on schedule as on last day)	4.90	4.98	4.89	5.06	3.5
13	Total vehicles held (as on last day) (No.)	4755	4504	4550	4670	2.6
14	% age of over aged vehicles (above 9 lakh kms.)	27.0	15.8	15.3	25.6	67.3

**Appendix-11.12**  
**Financial Performance NEKRTC**

		<b>(Rs. in crore)</b>					
Sl. No.	Item	2013-14	2013-14 (up to 31-12-13)	2014-15 (up to 31-12-14)	2015-16 (up to 31-12-15)	% Variation	
1	Total receipts	1310.70	958.13	1077.89	1063.35	-1.3	
	a) Operating Revenue	1184.04	888.47	991.50	996.02	0.5	
	b) Non-Operating Revenue	126.66	69.66	86.39	67.33	-22.1	
2	Total expenses (Excl. taxes)	1288.42	945.66	1068.66	994.43	-6.9	
	a) Operating expenses	1025.14	757.23	817.44	757.13	-7.4	
	b) Non-Operating expenses	263.28	188.43	251.22	237.30	-5.5	
3	Profit before taxes	22.28	12.47	9.23	68.92		
4	Total taxes	62.00	46.48	51.80	51.69	-0.2	
	a) Passenger-tax	0.00	0.00	0.00	0.00	0.0	
	b) Motor vehicle & other taxes	62.00	46.48	51.80	51.69	-0.2	
5	Total expenses	1350.42	992.14	1120.46	1046.12	-6.6	
6	Net profit / Loss	-39.72	-34.01	-42.57	17.23		
7	Prior period adjustment (Profit / Loss)	0.00	0.00	0.00	0.00		
8	Total Profit / Loss	-39.72	-34.01	-42.57	17.23		

**Appendix : 11.13 Number of Post Offices**

<b>District/Year</b>	<b>2007-08</b>	<b>2008-09</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>
Bangalore(Urban)	345	294	289	251	184	289	222	275
Bangalore(Rural)	122	181	171	180	203	133	201	142
Ramanagara	180	290	290		172	181	181	180
Chitradurga	294	294	293	320	308	317	317	317
Davanagere	172	172	172		152	262	325	202
Kolar	224	223	223	274	401	218	269	218
Chikkaballapura	198	198	198		210	198	147	198
Shivamogga	476	475	475	357	471	355	355	355
Tumakuru	569	569	559	566	562	560	559	558
Chikkamagaluru	310	310	310		300	302	302	301
Dakshina Kannada	549	562	562	549	424	473	472	471
Udupi	263	258	254		286	334	334	334
Hassan	421	420	420	421	418	419	418	414
Kodagu	220	220	220		212	216	216	216
Mandya	364	364	364	364	350	352	352	352
Mysuru	285	285	285	282	436	392	388	183
Chamarajanagar	326	321	320		161	205	204	204
<b>Southern Karnataka</b>	<b>5318</b>	<b>5436</b>	<b>5405</b>	<b>5264</b>	<b>5250</b>	<b>5206</b>	<b>5262</b>	<b>4920</b>
Belagavi	726	545	541	727	719	727	728	730
Vijayapur	419	419	419	419	410	401	405	405
Bagalakote	330	430	430		327	339	335	335
Dharawad	218	218	218	217	210	213	213	213
Gadag	171	171	171	171	169	170	171	170
Haveri	259	259	260		257	259	259	259
Uttara kannada	525	496	490	496	489	491	491	491
Bellary	426	454	454		444	446	384	384
Bidar	304	304	304	305	304	305	305	304
Kalaburagi	622	622	620		411	333	428	429
Yadagiri				202	210	291	195	195
Rayachuru	290	290	290	290	286	287	286	287
Koppala	218	218	218		217	218	219	218
<b>Northern Karnataka</b>	<b>4508</b>	<b>4426</b>	<b>4415</b>	<b>4508</b>	<b>4453</b>	<b>4480</b>	<b>4419</b>	<b>4420</b>
<b>STATE</b>	<b>9826</b>	<b>9862</b>	<b>9820</b>	<b>9772</b>	<b>9703</b>	<b>9686</b>	<b>9681</b>	<b>9340</b>

Source: Chief Post Master General Karnataka Circle

**Appendix -11.14 Number of Telephone Exchanges**

<b>District/Year</b>	<b>2007-08</b>	<b>2008-09</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>
Bangalore(Urban)	139	159	169	183	183	196	199	212
Bangalore(Rural)	47	58	93	103	102	92	92	93
Ramanagara					12	12	12	10
Chitradurga	82	82	82	129	81	82	82	81
Davanagere					48	48	49	87
Kolar	144	144	143	143	73	73	73	73
Chikkaballapura					70	70	70	68
Shivamogga	141	118	117	140	140	140	140	140
Tumakuru	112	112	112	112	112	112	112	112
Chikkamagaluru	148	148	148		148	148	148	148
Dakshina Kannada	148	147	148	250	147	147	146	145
Udupi	103	103	103		103	103	103	104
Hassan	103	107	104	104	104	103	103	103
Kodagu	76	76	76		76	76	76	76
Mandya	65	65	65	64	64	63	63	63
Mysuru	97	97	100	141	100	98	99	100
Chamarajanagar	41	41	41		41	41	41	41
<b>Southern Karnataka</b>	<b>1446</b>	<b>1457</b>	<b>1501</b>	<b>1593</b>	<b>1604</b>	<b>1604</b>	<b>1608</b>	<b>1656</b>
Belagavi	189	190	189	189	189	189	190	190
Vijayapur	110	111	110	192	192	109	108	108
Bagalakote	82	82	82		81	82	82	82
Dharawad	50	51	50	171	53	55	55	64
Gadag	62	63	63	152	64	63	63	48
Haveri	57	55	56		55	55	55	59
Uttara kannada	152	152	152	152	152	152	152	152
Bellary	116	116	116		117	117	117	117
Bidar	80	80	81	81	81	81	81	81
Kalaburagi	160	160	160		148	125	125	119
Yadagiri				135	13	35	35	39
Rayachuru	65	72	72		72	72	72	66
Koppala	57	62	62	63	63	63	63	
<b>Northern Karnataka</b>	<b>1180</b>	<b>1194</b>	<b>1193</b>	<b>1196</b>	<b>1280</b>	<b>1198</b>	<b>1198</b>	<b>1188</b>
<b>STATE</b>	<b>2626</b>	<b>2651</b>	<b>2694</b>	<b>2789</b>	<b>2884</b>	<b>2802</b>	<b>2806</b>	<b>2844</b>

Source: General Manager, Karnataka Telecom Circle

**Appendix : 11.15 Number of Telephones**

<b>District/Year</b>	<b>2007-08</b>	<b>2008-09</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>
Bangalore(Urban)	880435	859281	917290	872095	868968	713963	666476	626909
Bangalore(Rural)	47073	39311	47953	57541	54610	22692	19455	10126
Ramanagara	44432	18011	8000		2413	1397	1200	1596
Chitradurga	40637	27765	28130	53640	19890	18802	22088	13561
Davanagere	36812	37858	37719		24651	23472	16080	22944
Kolar	52404	35967	52437	56402	26187	24229	19371	15979
Chikkaballapura	31674	23841	6722		14153	13044	10259	8378
Shivamogga	91372	59150	54816	55715	53000	49367	43619	37400
Tumakuru	65099	48156	42784	39420	36292	31358	29750	24791
Chikkamagaluru	61310	49236	44659	42336	41780	37400	31800	27706
Dakshina Kannada	186446	153139	144095	210797	130194	123868	115608	105320
Udupi	116502	88438	82480		70152	65745	62250	54094
Hassan	69482	48013	40962	38958	38046	32973	24918	21005
Kodagu	48591	39043	37160	36069	35450	31948	27932	25059
Mandya	33349	23267	22873	17314	18017	17148	15946	12593
Mysuru	91748	230877	87875	86578	76996	72567	65282	61062
Chamarajanagar	17389	12612	11274		10574	7932	8068	5821
<b>Southern Karnataka</b>	<b>1914755</b>	<b>1793965</b>	<b>1667229</b>	<b>1566865</b>	<b>1521373</b>	<b>1287905</b>	<b>1180102</b>	<b>1074344</b>
Belagavi	137509	113463	108483	99921	83387	77075	73477	63865
Vijayapur	43801	35098	29045	48669	24944	22059	21567	17284
Bagalakote	37437	28715	24977		22451	18290	13567	14364
Dharawad	74736	64856	62875	100232	61197	59686	62705	56116
Gadag	37448	24352	41938		19187	17130	13961	11876
Haveri	32206	21202	18896		14268	13241	10454	11487
Uttara kannada	93913	79758	76758	74094	68580	61274	56853	52093
Bellary	61465	43244	40143	38032	37641	32327	29279	26461
Bidar	34326	26441	23200	22389	21937	18435	16777	12774
Kalaburagi	79080	52786	51156	49527	40438	29358	27816	22404
Yadagiri					7631	4468	3793	3831
Rayachuru	35537	23623	24086	40727	13081	15691	14069	12425
Koppala	28140	19029	19016		15763	13439	11511	9868
<b>Northern Karnataka</b>	<b>695598</b>	<b>532567</b>	<b>520573</b>	<b>473591</b>	<b>430505</b>	<b>382473</b>	<b>355829</b>	<b>314848</b>
<b>STATE</b>	<b>2610353</b>	<b>2326532</b>	<b>2187802</b>	<b>2040456</b>	<b>1951878</b>	<b>1670378</b>	<b>1535931</b>	<b>1389192</b>

Source: General Manager, Karnataka Telecom Circle

**Appendix 11.16**  
**DISTRICT AND BANK GROUP-WISE DISTRIBUTION OF THE NUMBER OF REPORTING**  
**OFFICES, AGGREGATE DEPOSITS AND GROSS BANK CREDIT OF ALL SCHEDULED**  
**COMMERCIAL BANKS - September 2015**

(Amount in Crore)

Sl. No	District	TOTAL		
		OFFICES	DEPOSITS	CREDIT
1	Bagalkote	228	4948.53	6024.48
2	Bengaluru Rural	204	6787.01	3872.78
3	Bengaluru Urban	2155	417767.58	269449.86
4	Belagavi	544	17308.74	13874.02
5	Ballari	289	10257.24	8406.32
6	Bidar	159	3017.69	2444.89
7	Vijayapura	203	5240.79	5042.68
8	Chamarajanagar	108	1703.80	1901.85
9	Chikkaballapura	143	2987.69	2790.47
10	Chikmagalur	236	5594.12	4163.89
11	Chitradurga	198	3726.39	3562.00
12	Dakshina Kannada	560	32290.38	15720.23
13	Davangere	210	5246.59	5671.58
14	Dharwad	339	14549.63	10095.81
15	Gadag	142	3058.50	2519.59
16	Kalaburagi	239	7441.46	5383.07
17	Hassan	295	6138.75	5342.25
18	Haveri	182	3166.48	3380.27
19	Kodagu	148	3878.81	2452.12
20	Kolar	160	4003.31	3169.74
21	Koppal	144	2843.78	3145.92
22	Mandya	222	3869.20	3671.62
23	Mysuru	472	23251.07	14494.61
24	Raichur	201	4386.36	5120.17
25	Ramanagara	157	4458.90	2979.29
26	Shivamogga	278	9467.10	5800.66
27	Tumakuru	292	6678.92	7011.24
28	Udupi	349	16433.73	7594.00
29	Uttar Kannada	258	8753.41	2447.80
30	Yadgir	100	1610.83	1889.98
Total		<b>9215</b>	<b>640866.79</b>	<b>429423.19</b>

**Appendix 11.17**  
**Statement showing No. of Projects sanctioned, Project Cost, RIDF Loan and Disbursement under RIDF (Upto Tranche-20), as of 31.12.2015**

(Rs in lakh)

Sl. No.	Departments & Particulars of Projects	Total No. of Projects	No. of Projects completed	No. of PCRs submitted to NABARD	No. of PCRs to be submitted to NABARD	Project Cost	RIDF Loan	Expenditure made on Projects as at end of 31.12.2015	Disbursement as at end of 31.12.2015	Balance = Loan - Disbursement		Total Savings	Net Balance	Budget Estimate 2015-16
										3	4			
1	2	3	4	5	6	7	8	9	10	11	12	13	12	
1	Public Works Department - Rural Roads & Bridges	2,930	2,458	2,169	289	2,32,432.09	1,85,938.47	1,91,245.33	1,47,640.12	38,298.35	5,765.28	32,533.07	37,600.00	
2	Minor Irrigation - M.I. Works	2,950	2,090	1,997	93	1,33,553.87	1,26,876.18	99,069.81	89,660.66	37,215.52	4,547.77	32,667.75	25,998.00	
3	Rural Development & Panchayath Raj -Rural Roads/ Bridges & Rejuvenation of Lakes	2,946	1,856	1,674	182	1,09,797.56	88,395.60	77,459.03	60,865.03	27,530.57	1,498.69	26,031.88	21,000.00	
4	Major and Medium Irrigation- Ayacut Roads & rejuvenation of tanks	413	42	20	22	39,146.35	31,324.26	17,217.15	13,368.43	17,955.83	63.57	17,892.26	11,352.00	
5	Education - P.U. College Buildings	1,068	483	483	-	27,095.33	23,031.03	13,010.41	10,604.52	12,426.51	1,618.38	10,808.13	4,000.00	
6	Tourism - Link Roads	176	12	12	-	26,256.58	21,005.26	13,450.02	9,515.35	11,489.91	63.36	11,426.55	2,500.00	
7	Labour - I.T.I. Buildings	86	4	4	-	23,210.47	19,728.90	7,089.43	5,757.36	13,971.54	528.44	13,443.10	3,000.00	
8	Women and Child Development - Anganawadi Buildings	4,448	1,254	1,221	33	21,055.28	17,896.99	8,860.58	7,191.61	10,705.38	272.21	10,433.17	4,001.00	
9	Education - DPI	1,391	1,277	1,277	-	18,342.93	15,591.49	18,269.27	15,312.56	278.93	182.86	96.07	-	
10	Education - Polytechnic Buildings	45	-	-	-	17,907.76	15,221.60	6,522.00	5,441.70	9,779.90		9,779.90	5,000.00	
11	Co-operation - Godowns	149	127	127	-	15,601.09	14,821.04	15,549.28	14,720.32	100.72	100.72	0.00	5,600.00	
12	Commerce & Industries - GTTC	3	-	-	-	1,972.00	1,677.00	449.00	381.65	1,295.35		1,295.35	400.00	
13	Water Resource Department	59	58	58	-	15,157.79	14,399.90	15,579.86	11,304.92	3,094.98	3,094.98	(0.00)	-	
14	Education - First Grade College	124	39	39	-	12,726.99	10,817.94	12,650.75	10,575.11	242.83	0.02	242.81	-	
15	Animal Husbandary - Veterinary Institutions Health & Family Welfare - CHC/PHC/AMC/Taluk Level Hospital Buildings	516	171	129	42	11,083.02	10,728.87	3,950.50	3,677.25	7,051.62	64.44	6,987.18	3,000.00	
16	Health & Family Welfare - CHC/PHC/AMC/Taluk Level Hospital Buildings	32	8	8	-	11,789.45	10,021.03	2,466.24	2,087.87	7,933.16	148.96	7,784.20	2,500.00	
17	Agriculture - RSK	208	-	-	-	7,924.00	7,527.80	2,448.50	2,217.80	5,310.00		5,310.00	1,702.00	
18	Karnataka Agricultural Marketing Board - Improvement to Market Yards	233	214	214	-	7,839.40	7,447.43	7,929.43	6,664.85	782.58	108.27	674.31	3,559.00	
19	Fisheries - Jetties/Link Roads/ Bridges Fish Farms/Training Centres	48	8	8	-	6,755.60	6,417.82	2,260.46	2,093.77	4,324.05	49.19	4,274.86	1,014.00	
20	Social Welfare - Morarji Desai Boarding School	14	14	14	-	5,208.65	4,427.34	5,253.47	4,427.31	0.03	0.03	(0.00)	-	
21	Agriculture - Agriculture Universities	-	-	-	-	5,000.00	4,251.00	-	-	4,251.00	-	4,251.00	-	
22	Sericulture - Improvement to Market	23	11	11	-	2,249.55	2,137.10	678.07	644.18	1,492.92	45.26	1,447.66	379.00	
23	Backward Classes Welfare	24	3	3	-	2,223.59	1,890.05	1,724.89	1,417.67	472.38	-	472.38	-	
	<b>Total</b>	<b>17,881</b>	<b>10,129</b>	<b>9,448</b>	<b>661</b>	<b>7,54,329.35</b>	<b>6,41,574.10</b>	<b>5,23,133.48</b>	<b>4,25,570.04</b>	<b>2,16,004.06</b>	<b>18,152.43</b>	<b>1,97,851.63</b>	<b>1,32,605.00</b>	

Appendix 12.1

MANAGEMENT, CLASS AND GENDER - WISE ENROLLMENT [2015-16]

CLASS	EDUCATION		PRIVATE AIDED		PRIVATE UNAIDED		OTHERS		ALL	
	BOYS	GIRLS	BOYS	GIRLS	BOYS	GIRLS	BOYS	GIRLS	BOYS	GIRLS
I	2,46,470	2,76,625	47,738	46,173	2,89,226	2,22,504	42,440	36,499	7889	5,87,674
II	2,49,253	2,82,885	47,889	46,669	2,65,966	2,02,671	44,115	37,72	8187	5,67,523
III	2,54,806	2,87,023	50,585	47,601	2,44,755	1,85,853	44,86	37,95	8281	5,54,632
IV	2,60,205	2,88,902	52,206	48,831	2,26,073	1,77,746	45,94	40,52	8646	5,43,078
V	2,67,531	2,69,664	54,871	49,980	2,07,334	1,66,499	45,78	38,05	8383	5,34,314
VI	2,54,162	2,60,301	59,100	52,928	1,85,060	1,49,985	1,5838	1,6974	32812	5,14,160
VII	2,53,961	2,60,098	61,441	54,531	1,74,341	1,41,608	1,5627	1,6425	32052	5,05,370
VIII	1,96,689	2,01,411	1,24,822	1,15,003	2,39,825	1,28,568	2,89601	1,6437	1,7759	4,98,981
IX	1,69,202	1,64,857	3,34059	1,36,758	2,85,437	1,20,237	2,69602	1,5571	1,6959	4,82,817
X	1,49,561	1,52,240	3,01801	1,37,763	2,68,515	1,12,901	2,52664	1,4381	1,5275	4,41,468
I to V	12,78,265	14,05,099	2,68,336	2,53,289	2,39,254	4,92,543	2,18,862	2,23,13	1,90,73	4,13,86
VI to VII	5,08,123	5,20,399	1,02,852	1,07,459	2,28,000	3,59,401	65,099	3,33,99	64,864	1,01,953
I to VII	1,78,638	1,92,549	3,71,186	3,46,713	7,20,543	1,24,686	2,83,962	5,3778	5,2472	1,06,250
I to VIII	1,98,307	2,12,690	4,10,986	4,98,652	4,61,716	9,60,368	1,37,543	7,0231	1,40,446	4,30,573
VIII to X	5,15,452	5,18,508	10,39,960	4,11,264	3,82,513	7,93,777	8,11,867	4,63,89	4,99,93	1,42,326
I to X	2,30,184	2,44,406	4,74,584	7,29,226	15,14,320	16,08,572	3,65,148	1,00,167	1,02,465	2,02,632

Source: UDISE 2015-16(SSA)

Appendix 12.2

MANAGEMENT, CLASS WISE / CATEGORY WISE / SEX WISE ENROLLMENT - ALL MANAGEMENT [2015-16]

CLASS	GENERAL		SC		ST		OBC [MUSLIMS AND MINORITIES INCLUDED]		ALL	
	BOYS	GIRLS	BOYS	GIRLS	BOYS	GIRLS	BOYS	GIRLS	BOYS	GIRLS
I	61,521	53,973	1,15,494	1,06,316	2,18,096	89,851	3,68,148	3,45,036	7,13,184	5,48,951
II	58,620	51,976	1,10,596	1,04,809	2,13,275	86,758	3,56,228	3,36,663	6,92,891	5,35,997
III	56,942	49,878	1,06,820	1,01,924	2,07,844	85,584	3,48,151	3,30,505	6,78,656	5,24,272
IV	54,341	48,868	1,03,209	1,02,144	2,06,737	85,279	3,40,866	3,26,518	6,67,384	5,19,531
V	53,157	47,278	1,00,435	95,364	1,99,480	80,431	3,34,986	3,08,930	6,43,916	4,89,948
VI	52,574	46,463	99,037	92,583	1,92,035	77,498	3,22,467	3,03,311	6,25,778	4,80,188
VII	51,369	45,317	96,686	89,824	1,86,970	74,775	3,18,368	3,01,233	6,19,601	4,72,662
VIII	65,001	56,961	1,21,962	85,502	1,80,183	73,484	3,01,092	2,85,001	5,86,093	4,62,741
IX	68,491	59,674	1,28,165	79,434	1,69,019	67,692	2,88,633	2,68,119	5,56,752	4,38,811
X	65,345	58,052	1,23,397	71,512	1,51,030	58,871	2,65,429	2,53,909	5,19,338	4,11,168
I to V	2,84,581	2,51,973	5,36,554	5,10,557	10,45,432	4,27,903	17,48,379	16,47,652	33,96,031	2,78,721
VI to VII	1,03,943	91,780	1,95,723	1,82,407	3,79,005	152,273	6,40,835	6,04,544	12,45,379	1,01,953
VI to VIII	1,68,944	1,48,741	3,17,685	2,91,279	5,59,188	2,25,757	94,1927	8,89,545	1,831,472	1,51,851
I to VIII	3,88,524	3,43,753	7,32,277	7,31,473	6,92,964	1,42,443	2,97,540	2,82,636	5,80,176	4,64,140
I to VIII	4,53,525	4,00,714	8,54,239	7,78,466	1,60,462	3,17,913	6,53,660	2,69,030	5,22,750	4,30,573
VIII to X	1,98,837	1,74,687	3,73,524	2,36,448	5,00,232	1,05,491	8,55,154	8,07,029	1,66,218	1,42,326
I to X	5,87,361	5,18,440	11,05,801	9,92,527	1,92,4669	4,03,031	3,77,192	7,80,223	6,30,593	5,23,001

Source: UDISE 2015-16(SSA)



**Appendix: 12.3**  
**Incentives for children in schools**  
**A. PRIMARY EDUCATION**

Sl. No.	Particulars	2014-15	2015-16(A)
1	<b>Free Uniforms, Text Books and School Bags- (Number in lakhs)</b>		
	a) No. of students provided with Free Uniforms (I to X std.)	51.95	52.73
	b) No. of students provided with School Bags (I to VI std.)	-	7.45
	c) No. of students provided with Free Text Books (I to VII std.)	50.93	49.90
2	<b>Akshara Dasoha</b>		
a	No. of children provided with mid-day meal in school - I to X standard (Number in lakhs)		
	i) Government	46.61	46.59
	ii) Aided	14.38	13.97
	No. of Non-Government organisations involved	87	80
3	<b>Distribution of Bicycles to student for VIII standard (Number in lakhs)</b>		
	a) No. of Boys	2.77	2.63
	b) No. of Girls	2.69	2.57
	c) SC	1.83	1.80
	d) ST	0.76	0.73

A = Anticipated

**B. SECONDARY EDUCATION**

Sl. No.	Particulars	2014-15	2015-16(A)
1	a) No. of Secondary Schools	14937	15140
	b) No. of Teachers	121189	108195
	c) Enrolment in IX to X		
	i) Boys	920506	924285
	ii) Girls	846424	849979
	iii) Total	1766930	1774264
2	<b>Free Uniforms and Text Books provided for. (Number in lakhs)</b>		
	<b>a) Free Uniforms (VIII to X)</b>		
	i) Boys	5.43	6.03
	ii) Girls	5.42	6.01
	iii) Total	10.85	12.04
	<b>b) Free Text Books</b>		
	No. of students provided with Free Text Books (VIII to X std.)	14.37	14.07
3	<b>Reimbursement of Examination Fees studying in Xth Standard (Number in lakhs)</b>		
	a) No. of Girls Benefited	1.08	1.18
	b) No. of SCs Benefited	1.92	2.00
	c) No. of STs Benefited	0.68	0.69
	d) Amount (Rs. in Lakhs)	1165.92	1243.23

A = Anticipated, Source: Public Instruction Department, GOK

**Appendix -12.4**  
**Plan and Non-plan Expenditure on Education**

(Rs. in Lakhs)

<b>Year</b>	<b>Plan</b>	<b>Non- Plan</b>
<b>Primary Education</b>		
2008-2009	105736.76	366668.83
2009-2010	83151.11	365686.04
2010-2011	127541.13	407479.56
2011-2012	123872.83	481372.82
2012-2013	192439.23	555524.02
2013-2014	241961.73	605087.05
2014-2015 (RE)	378012.97	690084.21
2015-16(BE)	296042.00	652114.00
<b>Secondary Education</b>		
2008-2009	4044.12	215658.27
2009-2010	52923.64	214898.75
2010-2011	59930.77	249766.93
2011-2012	86632.84	278237.75
2012-2013	97088.21	326672.63
2013-2014	74283.39	390618.90
2014-2015 (RE)	181505.57	362247.06
2015-16(BE)	166015.00	384365.00
<b>Higher Education</b>		
2008-2009	11008.81	58629.87
2009-2010	14142.80	61079.13
2010-2011	36110.78	107945.45
2011-2012	30636.10	129759.96
2012-2013	38154.47	147539.47
2013-2014	55701.01	187467.75
2014-2015 (RE)	78081.93	174775.54
2015-16(BE)	75396.00	201813.00

RE- Revised Estimate  
BE- Budget Estimate.

**Annexure 12.5**  
**STATEMENT SHOWING THE CATERGORYWISE WHOLSALE POINTS**  
**AND F.P.D.EXISTING IN THE STATE.**

Sl. No	NAME OF THE DISTRICT	WHOLESALE POINT			FAIR PRICE SHOPS			
		KFCSC	CO.OP	Total	KFCSC	CO.OP	Individuals	TOTAL
1	North Range	3	1	4	16	155	124	295
2	South Range	4	2	6	25	108	126	259
3	East Range	3	0	3	23	75	86	184
4	West Range	3	1	4	21	184	120	325
5	Central Range	1	0	1	5	15	58	78
6	Bengaluru IR	14	4	18	90	537	514	1141
7	Bengaluru (U)	3	5	8	4	310	229	543
8	Bengaluru ( R )	0	5	5	0	231	153	384
9	Bagalkot	8	3	11	2	423	252	677
10	Belagavi	8	11	19	2	886	819	1707
11	Bellary	11	0	11	1	240	360	601
12	Bidar	6	0	6	0	143	600	743
13	Vijayapura	11	0	11	9	184	619	812
14	Chamarajnaragar	8	2	10	3	94	379	476
15	Chickballapur	4	2	6	0	164	401	565
16	Chickmagalur	6	4	10	5	337	190	532
17	Chitradurga	6	3	9	1	175	399	575
18	Davanagere	11	1	12	0	260	536	796
19	D.Kannada	5	3	8	1	315	162	478
20	Dharwad	7	1	8	8	205	301	514
21	Gadag	6	1	7	0	272	78	350
22	Kalaburugi	9	0	9	0	168	823	991
23	Hassan	15	0	15	4	358	532	894
24	Haveri	4	3	7	0	260	203	463
25	Kodagu	2	4	6	4	167	118	289
26	Kolar	6	1	7	0	351	288	639
27	Koppala	4	0	4	1	124	316	441
28	Mandya	4	7	11	3	321	403	727
29	Mysuru	10	7	17	2	365	690	1057
30	Ramnagar	4	4	8	0	159	411	570
31	Raichur	5	0	5	1	89	616	706
32	Shivamogga	10	1	11	0	218	385	603
33	Tumakuru	11	4	15	3	401	668	1072
34	Udupi	0	3	3	0	272	19	291
35	U.Kannada	5	8	13	12	293	143	448
36	Yadgir	2	1	3	0	48	350	398
	<b>TOTAL</b>	<b>205</b>	<b>88</b>	<b>293</b>	<b>156</b>	<b>8370</b>	<b>11957</b>	<b>20483</b>

**Appendix 12.6**

**GODOWN DETAILS OF THE STATE**

<b>Sl. No</b>	<b>DISTRICT</b>	<b>KFCSC</b>	<b>CO-OPERATIVE</b>	<b>CAPACITY IN MTS</b>
1	BAGALAKOTE	8	4	10027
2	BENGALURU (U)	0	6	12650
3	BENGALURU ( R)	1	5	5050
4	BELAGAVI	7	11	18250
5	BELLARY	11	0	6800
6	BIDAR	6	0	5400
7	VIJAYAPURA	10	2	7400
8	CHAMARAJA NAGAR	6	2	6450
9	CHIKAMAGALURU	6	2	8200
10	CHIKKABALLAPURA	5	2	5200
11	CHITRADURGA	6	4	7440
12	DAKSHINA KANNADA	5	4	3800
13	DAVANAGERE	11	1	11105
14	DHARWAD	7	1	4550
15	GADAG	6	1	7200
16	KALABURGI	9	0	18000
17	HAVERI	4	3	8100
18	HASSAN	11	0	7390
19	KODAGU	0	4	3620
20	KOLAR	6	1	9040
21	KOPPAL	4	0	43500
22	MANDYA	6	7	13880
23	MYSURU	13	7	12164
24	RAMANAGARA	4	3	7545
25	RAICHUR	5	0	7250
26	SHIMOGA	10	1	14640
27	TUMKURU	9	4	18560
28	UDUPI	0	3	2250
29	UTTARA KANNADA	4	10	6010
30	YADAGIR	2	1	60000
31	BENGALURU IRA	16	8	127700
	<b>TOTAL</b>	<b>198</b>	<b>97</b>	<b>479171</b>

**Appendix -12.7**  
**Details of Kerosene wholesalers and Retailers in the State.**

Sl. No	DISTRICT	Wholesalers				Retailers			
		KFCSC	Co-operative	others	Total	KFCSC	Co-operative	others	Total
1	BAGALAKOTE	0	0	10	10	0	359	509	868
2	BENGALURU (U)	0	0	8	8	4	48	982	1034
3	BENGALURU ( R)	0	0	6	6	0	153	314	467
4	BELAGAVI	0	0	23	23	0	0	81	81
5	BELLARY	0	0	13	13	0	96	1169	1265
6	BIDAR	0	0	10	10	0	27	776	803
7	VIJAYAPURA	0	0	14	14	7	179	716	902
8	CHAMARAJA NAGAR	0	0	5	5	0	78	781	859
9	CHIKAMAGALURU	0	0	6	6	0	1	273	274
10	CHIKKABALLAPURA	0	0	6	6	0	67	827	894
11	CHITRADURGA	0	0	6	6	0	165	754	919
12	DAKSHINA KANNADA	0	0	12	12	0	2	1	3
13	DAVANAGERE	0	0	11	11	0	140	1133	1273
14	DHARWAD	0	2	8	10	2	68	1010	1080
15	GADAG	0	1	0	1	0	3	312	315
16	KALABURGI	0	0	13	13	0	102	853	955
17	HAVERI	0	1	7	8	0	39	727	766
18	HASSAN	0	0	7	7	0	0	138	138
19	KODAGU	0	0	4	4	0	0	3	3
20	KOLAR	0	0	6	6	0	44	902	946
21	KOPPAL	0	0	3	3	1	48	492	541
22	MANDYA	1	1	7	9	3	13	195	211
23	MYSURU	0	0	15	15	0	4	910	914
24	RAMANAGARA	0	0	5	5	0	0	197	197
25	RAICHUR	0	0	6	6	1	89	640	730
26	SHIMOGA	0	0	9	9	0	5	391	396
27	TUMKURU	3	0	9	12	0	0	401	401
28	UDUPI	1	0	8	9	0	0	0	0
29	UTTARA KANNADA	1	0	14	15	0	0	4	4
30	YADAGIR	0	0	4	4	0	12	342	354
31	BENGALURU IRA	1	0	23	24	21	543	1011	1575
	TOTAL	7	5	278	290	39	2285	16844	19168

Appendix 12.8: District wise Ration Cards Statement for the month of DECEMBER 2015

Sl. No.	Name of the District	AAY						BPL						APL					
		AAY WITH CYLINDER			AAY WITHOUT CYLINDER			BPL WITH CYLINDER			BPL WITHOUT CYLINDER			APL WITH CYLINDER			APL WITHOUT CYLINDER		
		URBAN	RURAL	TOTAL	URBAN	RURAL	TOTAL	URBAN	RURAL	TOTAL	URBAN	RURAL	TOTAL	URBAN	RURAL	TOTAL	URBAN	RURAL	TOTAL
1	BAGALKOTE	395	239	634	7982	29564	37546	18223	82823	193082	275905	221	46	267	2844	22260	25104		
2	BENGALURU URBAN	620	560	1180	2821	2992	5813	210692	125499	120061	245560	3292	467	3759	1609	823	2432		
3	BENGALURU RURAL	132	392	524	1212	5718	6930	43990	32858	123562	156420	493	189	682	872	3986	4858		
4	BELAGAVI	542	1034	1576	3717	41143	44860	103153	96459	584082	680541	9654	1740	11394	7154	91551	98705		
5	BELLARY	700	1094	1794	10282	43440	53722	39350	83790	200143	283933	531	67	598	2065	13577	15642		
6	BIDAR	179	143	322	4705	30913	35618	8996	51238	185312	236550	227	21	248	2731	19367	22098		
7	VIJAYAPURA	368	686	1054	4769	30278	35047	22929	68152	247579	315731	307	24	331	2803	23590	26393		
8	CHAMARAJA NAGARA	378	1306	1684	1447	15179	16626	44315	21079	149407	170486	134	83	217	566	4089	4655		
9	CHIKAMAGALURU	527	1499	2026	1029	9761	10790	67753	17296	123702	140998	1881	419	2300	459	7186	7645		
10	CHITRADURGA	748	689	1437	2391	24281	26672	44906	31073	241734	272807	461	123	584	623	5457	6080		
11	DAKSHINA KANNADA	1732	4665	6397	1589	16752	18341	69481	10448	101788	112236	20077	9610	29687	2730	30344	33074		
12	DAVANAGERE	1384	2098	3482	5149	26783	31932	85983	54185	211283	265468	779	99	878	578	7275	7853		
13	DHARWAR	639	164	803	6596	15052	21648	55350	103467	145710	249177	2508	30	2538	3319	12308	15627		
14	GADAG	280	179	459	2745	18509	21254	13467	56390	125722	182112	82	27	109	1627	11745	13372		
15	KALABURGI	701	336	1037	8399	45250	53649	25726	122070	270481	392551	472	30	502	5913	18047	23960		
16	HASSAN	232	609	841	1341	9581	10922	81184	30950	279489	310439	1486	382	1868	492	5741	6233		
17	HAVERI	1051	1150	2201	5065	24087	29152	34897	36412	220070	256482	447	70	517	897	14429	15326		
18	KODAGU	105	356	461	422	6592	7014	30055	4682	55064	59746	1470	5782	7252	372	6051	6423		
19	KOLAR	414	1082	1496	2520	16181	18701	50568	44601	180584	225185	1514	418	1932	1133	3246	4379		
20	KOPPAL	100	220	320	3120	34305	37425	8263	33456	183766	217222	102	25	127	1271	9193	10464		
21	MANDYA	210	777	987	2524	16444	18968	74056	38209	294056	332265	665	115	780	1059	12585	13644		
22	MYSORE	968	1764	2732	1611	15550	17161	197882	61782	298837	360619	6481	480	6961	1736	8870	10606		
23	RAICHUR	122	322	444	8815	40145	48960	10425	65630	224160	289790	137	10	147	1557	15297	16854		
24	SHIVAMOGGA	2299	2743	5042	2477	9775	12252	127787	34735	140442	175177	1900	321	2221	678	11899	12577		
25	TUMKURU	442	616	1058	1973	26370	28343	79787	71996	396015	468011	3517	793	4310	1804	12740	14544		
26	UDUPI	804	3086	3890	1844	23811	25655	39375	10208	76295	86503	3911	2970	6881	1619	11460	13079		
27	UTTARA KANNADA	105	721	826	530	8969	9499	46476	31632	166485	198117	4802	3163	7965	1106	22648	23754		
28	CHIKKABALLAPURA	151	521	672	1205	14595	15800	36245	34362	191342	225704	994	303	1297	655	3845	4500		
29	RAMANAGARA	256	412	668	1477	10316	11793	30248	39193	196117	235310	316	257	573	1035	8140	9175		
30	YADGIR	204	199	403	3775	23817	27592	5355	24804	141328	166132	82	21	103	1169	5540	6709		
31	BANGALORE CENTRAL	324	0	324	1104	0	1104	11884	0	11884	11432	0	0	216	509	0	509		
32	BANGALORE EAST	120	0	120	2634	0	2634	17991	0	17991	24443	0	0	2222	2447	0	2447		
33	BANGALORE NORTH	283	0	283	2199	0	2199	30889	0	30889	30606	0	0	2840	2273	0	2273		
34	BANGALORE SOUTH	433	0	433	4402	0	4402	26102	0	26102	42440	0	0	3166	1320	0	1320		
35	BANGALORE WEST	268	0	268	4043	0	4043	65332	0	65332	44097	0	0	3995	3483	0	3483		
	<b>TOTAL</b>	<b>18216</b>	<b>29662</b>	<b>47878</b>	<b>117914</b>	<b>636153</b>	<b>754067</b>	<b>1859115</b>	<b>1672497</b>	<b>6067698</b>	<b>7740195</b>	<b>81382</b>	<b>28085</b>	<b>109467</b>	<b>62508</b>	<b>423289</b>	<b>485797</b>		

**Appendix 12.9 Health Institutions in Karnataka as on 31-12-2015**

Sl. No.	District	District Hospital		Other Hospitals		Autonomous & Teaching		Community Health Centres				Primary Health		PHU with Maternity		Urban PHCs		Health Centres under IPP	Sub-Centres	Total Beds	
		Nos.	Beds	Nos.	Beds	Nos.	Beds	Taluk	Nos.	Beds	Others	Nos.	Beds	Nos.	Beds	Nos.	Beds				Nos.
	<b>BANGALORE</b>																				
1	BANGALORE (U)			6	1475	13	5724	3	300	5	220	8	520	104	604		2	12	55	195	8335
2	BANGALORE (R)							4	400	2	60	6	460	48	328					167	788
3	CHIKBALLAPUR	1	100					5	510	2	60	7	570	59	405	2	20			199	1095
4	CHITRADURGA	1	450					5	500	11	330	16	830	81	474					283	1754
5	DAVANAGERE	1	1030					5	500	6	180	11	680	101	668			3	301	301	2378
6	KOLAR	1	400	2	305			4	400	2	60	6	460	65	376		3	18	275	275	1559
7	RAMANAGARA	1	100					3	300	5	150	8	450	62	426	1	10			230	986
8	SHIMOGA					1	650	6	650	7	210	13	860	110	700	2	20	1	6	305	2236
9	TUMKUR	1	400					9	900	5	150	14	1050	146	900	2	20	1	6	487	2376
	<b>BELGAUM</b>																				
10	BAGALKOTE	1	300					5	500	7	230	12	730	48	320		1	6		234	1356
11	BELGAUM					1	740	9	900	16	500	25	1400	148	884	1	10	2	12	549	3046
12	BJAPUR	1	400					4	400	9	270	13	670	67	360					309	1430
13	DHARWAD	1	250			2	1575	3	300	0	0	3	300	45	198		1	6	11	194	2329
14	GADAG	1	304			1	300	4	400	3	90	7	490	39	238					168	1332
15	HAVERI	1	250					6	600	5	150	11	750	69	412	2	20			303	1432
16	U. KANNADA	1	400			1	410	10	1000	3	110	13	1110	83	506	1	20	2	12	343	2458
	<b>GULBARGA</b>																				
17	BELLARY			1	288	1	1017	6	600	11	350	17	950	73	438		1	6	3	272	2699
18	BIDAR					1	500	4	400	8	240	12	640	58	352	3	30	1	6	280	1528
19	GULBARGA	1	750			1	430	6	600	16	480	22	1080	91	572		2	12	7	347	2844
20	KOPPAL	1	250			1	300	3	300	9	270	12	570	48	280		1	6		185	1406
21	RAICHUR					2	850	4	400	6	180	10	580	52	316	1	10	1	6	223	1762
22	YADGIR	1	100					2	200	6	180	8	380	42	296					176	776
	<b>MYSORE</b>													0							
23	CH'NAGAR	1	250			1	300	3	350	2	60	5	410	64	450	1	16			245	1426
24	CHIKMAGALUR	1	400					6	600	5	170	11	770	90	668	3	40	2	12	375	1890
25	D. KANNADA	1	965	1	100			4	400	8	240	12	640	71	396					440	2101
26	HASSAN					1	550	7	950	14	420	21	1370	136	946	5	54	1	6	456	2926
27	KODAGU	1	410			1	410	2	360	7	290	9	650	29	216		1	6	206	1692	
28	MANDYA					1	550	6	600	10	300	16	900	115	940	3	26	2	12	385	2428
29	MYSORE			1	50	3	1940	6	600	10	300	16	900	147	1042	6	120	2	12	438	4064
30	UDUPI	1	350					2	200	6	180	8	380	62	380	1	10			301	1120
	<b>State Total</b>	<b>20</b>	<b>7859</b>	<b>11</b>	<b>2218</b>	<b>32</b>	<b>16246</b>	<b>146</b>	<b>15120</b>	<b>206</b>	<b>6430</b>	<b>352</b>	<b>21550</b>	<b>2353</b>	<b>15091</b>	<b>34</b>	<b>426</b>	<b>27</b>	<b>162</b>	<b>8871</b>	<b>63552</b>

**Appendix 13.1 Departmentwise Financial & Physical progress under Karnataka Mahila Abhivridi Yojane for the month of December 2015**

Sl. No.	Name of the Department	Annual Allocation (Rs.in lakhs)		Min. 1/3 allocation for women (Rs.in lakhs)		Progress for the Month of Dec.2015		Cumulative Progress towards the end of Dec.2015		Percentage	No. of Schemes
		Fin.	Phy	Fin.	Phy	Fin.	Phy	Fin.	Phy		
		1	Agriculture Dept.	60716.97	37192	20238.99	1068182	0.00	0		
2	Watershed Development Dept.	18902.00	0	6300.00	52500	17.00	0	470.90	2774	7.47	1
3	Sericulture Dept.	631.15	0	200.81	12357	23.73	3834	92.13	39527	45.88	2
4	Industries & Commerce	287176.24	52784	94768.17	17422	9983.81	1662	35220	5042	37.16	3
5	Dept. of Handlooms and Textiles	7728.00	0	2576.00	38981	347.37	14884	14884	14884	577.80	7
6	Forest	3874.20	13.900	1278.49	4.590	83.664	0.300	282.548	2.103	22.10	4
7	Youth Empowerment & Sports	9055.00	59655	3011.00	19994	6163.05	19948.00	6194.33	4612	205.72	15
8	Dept. for the Empowerment of the Differently Abled & Senior Citizen's	84520.00	794912	28198.46	263326	1928.23	249852	4462.72	249852	15.83	7
9	Backward Classes Welfare	112954.43	0	35275.27	363381	4226.02	82748	4226.02	82748	11.98	13
10	Social Welfare	298338.94	185017	107681.33	875694	22442.98	168250	40577.23	168254	37.68	25
11	D.Devaraj Ars Backward Classes Development Corporation Ltd.	15000.00	24272	4951.67	8091	458.77	1312	1292.01	2914	26.09	3
12	Minorities Development Corporation Ltd.	18500.00	0	7713.00	43580	913.14	9202	4818.07	39827	62.47	8
13	Dept. of Schedule Tribes	28602.40	0	13323.97	122106	2758.79	365	5647.96	28	42.39	12
14	Minorities Dept.	49805.10	1094845	16608.70	358457	1376.22	5635	1376.22	5635	8.29	27
15	Dr.B.R.Ambedkar Dvelopment Corporation Ltd.	45100.00	56749	16893.00	32114	1564.54	1656	5110.40	15464	30.25	6
16	Fisheries Dept.	1111.00	48000	369.00	15990	0.00	4177	0.00	4180	0.00	3
17	Animal Husbandry	268.26	59210	112.73	58453	0.00	0	0.00	0	0.00	4
18	Horticulture	8509.43	124805	2808.11	41185	62.06	1398	132.06	4947	4.70	6
19	Employment and Training	48119.00	155783	15029.53	57882	1252.25	17084	6273.83	17384	41.74	14
20	Dept. of Municipality	5628.49	85961	2196.14	32525	0.00	0	520.93	12405	23.72	6
21	RDPR	151000.00	182696.98	60400.00	73079.59	5423.56	11468	13097.16	22957.39	21.68	4
22	Dept. of Co-operative Societies	24733.00	1197038	13840.02	567025	0.00	0	749.18	21651	5.41	12
23	Education Dept.	126270.00	0	44256.67	0	0.00	0	812.50	0	1.84	13
24	Housing Dept.	389228.03	320000	118545.26	105600	19241.89	30430	146216.35	145136	123.34	8
25	Health and Family Welfare	258002.30	2941721	100100.10	2930815	5903.40	25611	38546.44	110258	38.51	48
	<b>Total</b>	<b>2053773.94</b>	<b>7420655</b>	<b>716676.42</b>	<b>7158744</b>	<b>84170.47</b>	<b>649516</b>	<b>331002.99</b>	<b>970481</b>	<b>46.19</b>	<b>264</b>

Note: Since the Physical Targets of the Departments shown at Sl.No.6 and 21 are in lakh human days. So physical progress has not been taken into consideration.







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