



सत्यमेव जयते

# ECONOMIC SURVEY

## ASSAM 2014-2015

DIRECTORATE OF ECONOMICS AND STATISTICS, ASSAM  
PLANNING AND DEVELOPMENT DEPARTMENT  
GOVERNMENT OF ASSAM

Maniyan  
23/5/2015

# ECONOMIC SURVEY ASSAM

2014-2015

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PLANNING AND DEVELOPMENT DEPARTMENT  
GOVERNMENT OF ASSAM

## FOREWORD

The Directorate of Economics and Statistics, Assam has been publishing the "Economic Survey, Assam" annually with a view to focus the trends of performance based development of the economy of State of Assam.

In the current issue of the report efforts have been made to depict and analyze the latest economic situation, sectoral performance of the economy of the State and the achievements of various measures/programmes undertaken by the State Government for all-round socio-economic development through collated data made available by different Government Departments, Organisations, Institutions and Agencies. I gratefully acknowledge the co-operation extended by the Government Departments and Organisations on their respective sectors.

The Report is greatly benefited from the inputs provided by the officers and staff of different Divisions of the Directorate. I do gratefully acknowledge their co-ordination.

Apart from the above, I do specifically acknowledge the team work of the officers and staff of 'Economic Studies Division' and 'Statistical Data Division' of the Directorate associated in compiling, composing and designing the "Economic Survey, Assam, 2014-15" whose sincere and incessant efforts make it possible in bringing out the report.

I hope this edition would be of immense help to the administrators, researchers, planners, academicians, students etc.

Comments and suggestions for improvement of the future issues of this publication are most welcome.

Dated, March, 2015.



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## ASSAM AT A GLANCE

## 1. AREA, ADMINISTRATIVE UNIT AND POPULATION

Sl. No.	ITEM	Particulars
A.	<b>AREA</b>	
(a)	Geographical area (in sq. Km.) as per 2011 Census	78438
B.	<b>ADMINISTRATIVE UNITS</b>	
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(c)	Revenue Circle (as per 2011 Census)	184
(d)	C.D. Blocks (as on March 2012)	219
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(f)	Villages (Census, 2011)	26395
(g)	Total Towns (2011 Census)	214
	(i) Statutory Towns	88
	(ii) Census Towns	126
(h)	Police Station (2014)	311
(i)	Police Out Post (2014)	196
C.	<b>POPULATION as per 2011 Census</b>	
(a)	(i) Total Population	31205576
	(ii) Male	15939443
	(iii) Female	15266133
	(iv) Percentage of Rural Population	86
	(v) Percentage of Urban Population	14
	(vi) Sex-Ratio (Female per thousand male)	958
	(vii) Density of Population (per Sq. Km.)	398
	(viii) Decadal percentage variation (2001-2011)	17.07
(b)	Population of age group (0-6 years)	
	(i) Male	2363485
	(ii) Female	2274645
	(iii) Total	4638130
	(iv) Sex-Ratio	962
(c)	Literacy Rate	
	(i) Male	77.85
	(ii) Female	66.27
	(iii) Total	72.19
(d)	Vital Statistics: (2013)	
	(i) Birth rate (per thousand)	22.4
	(ii) Death rate (per thousand)	7.8
	(iii) Infant mortality rate (per thousand)	54
	(iv) M.M.R. (2007-2009) (death per lakh live birth) 2010-12	328
(e)	BPL Population (2011-12) using Tendulkar methodology (in percentage)	
	(i) Rural	33.89
	(ii) Urban	20.49
	(iii) Total	31.98

2. SECTORAL STATISTICS				
Sl. No.	ITEM	Ref. Year	Unit	Particulars
<b>I</b>				<b>AGRICULTURE</b>
	<b>A.</b>			<b>Land Utilisation</b>
	(a)	2011-12	000 Hectare	2811
	(b)	"	"	1363
	(c)	"	"	4174
	(d)	"	Percent	35.80
				Geographical Area
	(e)	"	"	48.51
	<b>B.</b>			<b>Area under important crops</b>
	(a)	2013-14 (P)	000 Hectare	223
	(b)	"	"	1881
	(c)	"	"	399
	(d)	"	"	2503
	(e)	"	"	31
	(f)	"	"	150
	(g)	"	"	5
	(h)	"	"	24
	(i)	"	"	2714
	(j)	"	"	29
	(k)	"	"	70
	(l)	"	"	325
	<b>C.</b>			<b>Production of important crops</b>
	(a)	2013-14 (P)	000 tonnes	294
	(b)	"	"	3709
	(c)	"	"	1190
	(d)	"	"	5193
	(e)	"	"	40
	(f)	"	"	88
	(g)	"	"	77
	(h)	"	"	3
	(i)	"	"	5402
	(j)	"	"	186
	(k)	"	"	1075
	(l)	"	"	717
	<b>D.</b>			<b>Yield rate</b>
	(a)	2013-14 (P)	Kg/Hectare	1340
	(b)	"	"	2002
	(c)	"	"	2981
	(d)	"	"	2101
	(e)	"	"	1292

Sl. No.	ITEM	Ref. Year	Unit	Particulars
	(f) Maize	2013-14 (P)	Kg/Hectare	3199
	(g) Total Pulses	"	"	589
	(h) Total Food grains	"	"	2007
	(i) Total Oilseed	"	"	611
	(j) Sugarcane (cane)	"	"	36969
	(k) Jute (Dry fibres)	"	"	1849
E.	<b>Index of Agricultural Production</b> (All commodities) (Base Triennium ending 2007-08=100)	2013-14	-	141.56
F.	<b>Per capita Food Grain Production</b>	2013-14	Kg.	173
<b>AGRICULTURE CENSUS</b>				
G.	<b>Number of operational holdings</b>			
	(a) Size Marginal (below 1 hectare)	2010-11	000 Nos.	1831
	(b) Size Small (1.0 to 2.0 hectare)	"	"	497
	(c) Size Semi Medium (2.0 to 4.0 hectare)	"	"	303
	(d) Size Medium (4.0 to 10.0 hectare)	"	"	85
	(e) Size Large (above 10 hectare)	"	"	4
	(f) All size	"	"	2720
H.	<b>Area under operational holdings</b>			
	(a) Size Marginal (below 1 hectare)	2010-11	000 Hectare	775
	(b) Size Small (1.0 to 2.0 hectare)	"	"	687
	(c) Size Semi Medium (2.0 to 4.0 hectare)	"	"	818
	(d) Size Medium (4.0 to 10.0 hectare)	"	"	437
	(e) Size Large (above 10 hectare)	"	"	282
	(f) All size	"	"	2999
I.	<b>Average size of operational holdings</b>	"	Hectare	1.10
<b>LIVESTOCK AND VETERINARY</b>				
<b>Livestock and Poultry Population (Sample Survey)</b>				
A.	Livestock:			
	(i) Crossed Breed Cattle	2013-14	000 Nos.	484
	(ii) Indigenous Cattle	"	"	8755
	(iii) Buffaloes	"	"	496
	(iv) Goat	"	"	3231
B.	Poultry:			
	(i) Fowls	"	"	11118
	(ii) Ducks	"	"	4341
C.	Hospitals, Dispensaries & Block Dispensaris	"	"	500
D.	(a) Production of Milk	"	Million Ltrs.	857.39
	(b) Production of Egg	"	Million Nos.	472
	(c) Production of Meat	"	000 Tonnes	38.34

Sl. No.	ITEM	Ref. Year	Unit	Particulars
<b>III.</b>	<b>FOREST</b>			
	(a) Area under Reserved Forest	30-1-2013	000 Hectare	1397
	(b) Area under proposed Reserved Forest	"	"	176
	(c) Total Forest excluding unclassified State Forest	"	"	1935
	(d) Number of National Parks	"	Nos.	5
	(e) Number of Wildlife Sanctuaries	"	"	18
	(f) Total Forest revenue	2013	₹ in lakh	3350.15
<b>IV.</b>	<b>FISHERY</b>			
	(a) Beel Fisheries (Registered and Unregistered)	2013-14	Number	1197
	(b) Area under Beel Fisheries	"	Hectare	100817
	(c) Ponds and Tanks	"	Number	367701
	(d) Area under Ponds and Tanks	"	Hectare	60230
	(e) Total Area under Fisheries	"	"	285061
	(f) Production of Fish Seed	"	Million Nos.	4546
	(g) Production of Fish	"	000 Tonnes	267
<b>V.</b>	<b>SERICULTURE</b>			
A.	<b>Sericulture Villages</b>	2013-14	Nos.	11411
B.	<b>Families engaged in Sericulture</b>			
	(a) Eri	"	"	191566
	(b) Muga	"	"	57966
	(c) Mulberry	"	"	32541
C.	<b>Total area under Silk worm's food plants</b>			
	(a) Eri	"	Hectare	15796
	(b) Muga	"	"	10371
	(c) Mulberry	"	"	7623
D.	<b>Yield of Cocoons</b>			
	(a) Eri Cut Cocoon	2013-14	M.T	3182
	(b) Muga Cocoon	"	Lakh Nos.	6361
	(c) Mulberry reeling Cocoon	"	M.T	341
E.	<b>Production of Silk Yarn</b>			
	(a) Eri Raw Silk	2013-14	M.T	2546
	(b) Muga Raw Silk	"	"	127
	(c) Mulberry Raw Silk	"	"	27
F.	<b>Number of Spinning Charkhas</b>	"	Nos.	4548

<b>Sl. No.</b>	<b>ITEM</b>	<b>Ref. Year</b>	<b>Unit</b>	<b>Particulars</b>
<b>VI.</b>	<b>POWER</b>			
	(a) Total Installed Capacity	2013-14	M.W	376.7
	(b) Total Unit Generation	"	MU	1845.2
	(c) Availability	"	"	6965
	(d) Total unit Billed to ultimate consumers	"	"	4763
	(e) Energy Requirement	"	"	7434
	(f) Total villages electrified	"	Nos.	22587
<b>VII.</b>	<b>INDUSTRY AND MINERALS</b>			
	<b>A. Production of some Selected Industries</b>			
	(a) Petroleum (Crude)	2013-14	000 M. T	4718
	(b) Coal	"	"	665
	(c) Jute	"	"	26
	(d) Fertilizer	"	"	515
	(e) Cement	"	"	1107
	(f) Wheat Flour	"	"	1003
	(g) Lime Stone	"	"	198
	(h) Natural Gas (Utilized)	"	MCM	2649
	<b>B. Registered Factories</b>	2013	Nos.	5271
	<b>C. Workers in Registered Factories</b>	"	Nos.	192543
	<b>D. (i) Index of Industrial Production (Base 2004-2005=100)</b>	2013-14(P)	-	137.69
	<b>(ii) Index of Mineral Production (Base 2004-2005=100)</b>	2013-14	-	102.48
<b>VIII.</b>	<b>TEA , COFFEE &amp; RUBBER INDUSTRY</b>			
	(i) Tea Gardens	2013	Nos.	69220
	(ii) Area under Tea Cultivation	2013	000'Hectare	322
	(iii) Production of Tea	"	tonnes	629050
	(iv) Area under coffee cultivation	2013-14	Hectare	1010.29
	(v) Production of coffee	"	M.T	38.00
	(vii) Area under Rubber Cultivation	"	Hectare	49001
	(viii) Production of Rubber	"	M. T	13700
<b>IX.</b>	<b>TRANSPORT &amp; COMMUNICATION</b>			
	<b>A. Vehicle</b>			
	(i) Total Vehicles Registered	2013-14	Nos.	249564
	(ii) Total Vehicles on Road	"	Nos.	1984880
	(iii) Total Revenue earned during the year	2013-14	₹ in Crore	361.54

Sl. No.	ITEM	Ref. Year	Unit	Particulars
B.	<b>ROAD</b>			
	<b>Total P.W.D. Road Length (including N.H.)</b>	2013-14	Km.	49239.67
(a)	Surfaced (Black topped)	"	"	23747
(b)	Un-Surfaced	"	"	21753
(c)	National Highway	"	"	3739.67
(d)	State Highway	"	"	3134
	<b>Railway route Length (Total)</b>	2013-14	Km.	2467.65
(a)	Broad Gauge	"	"	1763.81
(b)	Meter Gauge	"	"	703.84
C.	<b>Air Transport</b>			
(a)	Air Traffic Movement	2013-14	Nos.	29426
(b)	Passenger Handled	"	"	2442613
(c)	Freight(Loaded + Unloaded)	"	Tonne	8160
(d)	Average flight per day	"	Nos.	81
(e)	Average Passenger Handled per day	"	Nos.	6692
(f)	Average Cargo Handled per day	"	Tonne	22.36
D.	<b>Inland Water Transport</b>			
(i)	Total No. of Ferry Services	2013-14	Nos.	67
(ii)	Passengers Transported	"	('000 Nos.)	7039
(iii)	Goods Transported	"	M.T.	356552
E.	<b>POSTAL</b>			
(a)	Post Office	2013-14	Nos.	4013
(b)	Letter Boxes	"	"	16386
F.	<b>TELEPHONE</b>			
(a)	No. of Telephone Exchanges	2013-14	Nos.	584
(b)	Direct Exchange lines (Fixed+WLL+MTS)	"	"	1463773
(c)	Villages covered by Public Telephones (VPTs)	"	"	24692
(d)	Wire line phones (Fixed DELs)	"	"	96166
(e)	Wireless Phones (GSM+CDMA)	"	"	1280869
(f)	Public Call offices	"	"	11207
(g)	Teledensity(%)per 100 population(overall)	"	percent	4.7
X.	<b>TOURISM</b>			
(a)	Number of Tourists using Tourist lodges			
(i)	Indian Tourist	2013-14	Nos.	26394
(ii)	Foreign Tourist	"	"	726
(b)	Number of Tourist using other accommodation like Hotel etc.			
(i)	Indian Tourist	2013-14	"	4417999
(ii)	Foreign Tourist	"	"	18360
(c)	Revenue earned from Tourist lodges	"	₹in Lakh	191.32

Sl. No.	ITEM	Ref. Year	Unit	Particulars
<b>XI.</b>	<b>EMPLOYMENT</b>			
	(a) Total No. of Employment Exchanges	2013	Nos.	82
	(b) Employment in Organised Sector	"	"	1138832
	(i) Employment in Public Sector	"	"	529314
	(ii) Employment in Private Sector	"	"	609518
	(c) Educated Applicants in Live Register	"	"	1472859
	(d) Total Applicants in Live Register	"	"	1677192
<b>XII.</b>	<b>HEALTH</b>			
	(a) Government Hospitals	2013	Nos.	25
	(b) Primary Health Centres	"	"	986
	(c) Sub-divisional Civil Hospitals	"	"	13
	(d) Sub Centres	"	"	4609
	(e) Community Health centre	"	"	110
	(f) MBBS Doctors(Govt.+ NHM)	"	"	2453
	(g) Specialist Doctors (Govt.+ NHM)	"	"	1121
<b>XIII.</b>	<b>EDUCATION</b>			
	<b>A. Institution</b>			
	(a) No. of Primary School(Govt.Prov)	2013-14	Nos.	40355
	(b) No. of Middle School	"	"	7646
	(c) No. of High School	"	"	5743
	<b>B. Enrolment</b>			
	(a) Primary School	2013-14	000 Nos.	3301
	(b) Middle School	"	"	1580
	(c) High School	2012-13	"	864
<b>XIV.</b>	<b>BANKING</b>			
	(i) Scheduled Commercial Banks (Reporting offices)	March/2014	Nos.	1861
	(ii) Total deposit	"	₹ in crore	85070
	(iii) Total credit	"	"	31714
	(iv) Credit-Deposit Ratio	"	Percent	37.28
	(v) Population served per Bank	"	000 Nos.	5.96
	(vi) Regional Rural Bank	"	Nos.	408
	(vii) Deposit of Regional Rural Banks	"	₹ in crore	6849
	(viii) Credit of Regional Rural Banks	"	"	3824
<b>XV.</b>	<b>PANCHAYAT AND RURAL DEVELOPMENT PROGRAMME</b>			
	<b>A. SHGs</b>			
	(a) Physical Achievement			
	(i) Total No. Village Organisations formed	2013-14	Nos.	1463
	(ii) Women SHGs formed	"	"	28354
	(b) Financial Performance			
	(i) No. of SHGs provided with Revolving Fund	2013-14	Nos.	7761
	(ii) No. Village Organisations provided with Community Investment Fund	"	"	59

Sl. No.	ITEM	Ref. Year	Unit	Particulars
	<b>B. IAY</b>			
	(a) Annual Target	2013-14	Nos.	138695
	(b) Physical Achievements	"	"	66298
	(c) Percentage of Achievements	"	Percent	47.80
	<b>C. MGNREGA</b>			
	(i) Total Fund Available	2013-14	₹ in lakh	73062.56
	(ii) Total Expenditure	2013-14	"	66199.71
	(iii) Person days generated	"	Lakh Mandays	29847
<b>XVI.</b>	<b>STATE INCOME</b>			
	<b>A. Net State Domestic Product</b>			
	(i) At Current Prices	2013-14(Q)	₹ in crore	139604
	(ii) At Constant (2004-05) Prices	"	"	73779
	<b>B. Per Capita Net State Domestic Product</b>			
	(i) At Current Prices	2013-14(Q)	In Rupees	44263
	(ii) At Constant (2004-2005) Prices	"	"	23392
<b>XVII.</b>	<b>STATE GOVT. RECEIPTS AND EXPENDITURE</b>			
	<b>A. Total Revenue Receipts</b>	2014-15 (BE)	₹ in lakh	5269681
	(i) Central Taxes	"	"	1410509
	(ii) State Taxes	"	"	1134542
	(iii) Non-Tax Revenue (Collection by the State)	"	"	429825
	(iv) Non-Tax Revenue (Contribution from Centre)	"	"	2294805
	<b>B. Total Revenue Expenditure</b>	2014-15(BE)	₹ in lakh	4863131
	(i) General Services	"	"	1224917
	(ii) Social and Community Services	"	"	2093288
	(iii) Economic Services	"	"	1066874
	(iv) Grants-in-aid & Contribution	"	"	478052
<b>XVIII.</b>	<b>STATE PLAN</b>			
	(i) Twelfth Plan (Projected at 2011-12 prices)	2012-17	₹ in lakh	9867188
	(ii) Annual Plan (Revised)	2012-13	₹ in lakh	1050000
	(iii) Annual Plan (Approved)	2013-14	₹ in lakh	1250000
	(iv) Annual Plan (Approved)	2014-15	₹ in lakh	2100690
	<b>Actual Expenditure</b>			
	(i) Annual Plan	2012-13	₹ in lakh	723914
	(ii) Annual Plan	2013-14	₹ in lakh	809682

P : Provisional; E : Estimated; Q : Quick; BE: Budget Estimate.

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COMPARATIVE STATEMENT OF KEY INDICATORS OF ASSAM AND INDIA

Sl. No.	Item	Year	Unit	India	Assam
<b>DEMOGRAPHIC AND HUMAN DEVELOPMENT INDICATORS</b>					
1	Decadal Growth Rate	2001-2011	Percent	17.7	17.07
2	Density of population	Census 2011	Per Sq. Km.	382	398
3	Sex Ratio	Census 2011	Per'000' male	943	958
4	Child sex ratio (0-6 years)	Census 2011	Per'000' male	919	962
5	Percentage of Urban Population	Census 2011	Percent	31.2	14.1
6	Literacy Rate(Person)	Census 2011	Percent	72.99	72.19
7	Per Capita Income (At current prices)	2013-14	In Rupees	74920	46354
8	(8a) Per Capita NSDP Income (At constant (2004-05) prices)	2013-14	In Rupees	39904	24533
	(8b) Growth over previous year	2013-14	In percent	2.70	4.63
9	Population Below Poverty Line:				
	9.1) Total	2011-12	Percent	21.92	31.98
	9.2) Rural	2011-12	Percent	25.70	33.89
	9.3) Urban	2011-12	Percent	13.70	20.49
Source : Census 2011.					
<b>VITAL STATISTICS</b>					
10	Birth Rate	2013	Per '000'	21.4	22.4
11	Death Rate	2013	Per '000'	7.0	7.8
12	<b>Infant Mortality Rate</b>				
	12(a) Male	2013	Per '000'	39	53
	12(b) Female	2013	Per '000'	42	55
	12 ( c) Total	2013	Per '000'	40	54
13	Maternal Mortality Rate	2010-12	Per lakh live birth	178	328
14	Total Fertility Rate	2012		2.4	2.4
15	Under 5 Mortality Rate	2012		52	75
16	<b>GOVT. HOSPITALS</b>				
	16(a) Average population served per Govt. hospitals	As on 1/1/2013	-	34163	30556
	16 (b) Average population per bed in hospital	As on 1/1/2013		879	3062
	16 ( c) No. of doctors	2010-11	per lakh population	9.2	12.56
	16 (d) Percent of live births where the mothers received medical attention at delivery at Govt. or private hospitals	2011	-	66.6	61.8
17	<b>DRINKING WATER FACILITY</b>				
	17 (A) Good quality drinking water				
	Rural	2012	Per '000' population	877	580
	Urban			881	638
	17 B) Drinking Water within premises		Per '000' household		
	Rural			405	791
	Urban			745	922

Sl. No.	Item	Year	Unit	India	Assam
18	Rural households with access to toilets	2011	Percent	33	62
19	Households got daily supply of water				
	Rural	2012	Per '000' households	NA	908
	Urban			NA	923
20	Education				
	(A) Gross Enrolment Ratio Classes 1-V (6-10years)				
	Boys	2010-11	Percent	114.9	93.1
	Girls			116.3	95.6
	Total			115.5	94.3
21	(B) Gross Enrolment Ratio Classes 1-VIII (6-10years)				
	Boys	2010-11	Percent	104.5	83.0
	Girls			103.3	85.1
	Total			103.9	84.0
22	(C) Drop Out Ratio Classes I-V (6-11 years)				
	Boys	2009-10	Percent	30.25	38.99
	Girls			27.25	32.67
	Total			28.86	35.89
23	(D) Drop Out Ratio Classes I-X (6-16 years)				
	Boys	2009-10	Percent	53.38	77.41
	Girls			51.97	77.82
	Total			52.76	77.60
Source : SRS Bulletin, Registrar General of India					
<b>AGRICULTURE</b>					
24	Area of food grains under irrigation	2010-11	Percent	47.80	4.60
25	Av. Yield of total food grains	2011-12	Kg/hectare	2078	1704
26	Av. Yield of total oil seeds	2011-12	Kg/hectare	1133	557
27	Cost of production of paddy	2010-11	Rs./quintal	NA	824.34
Source : Agriculture Statistics at a Glance, 2013					
28	Cropping Intensity	2009-10	Percent	137.2	145.8
29	Growth rate of GSDP in agriculture and allied sector	Average 2005-06 to 2013-14	Constant (2004-05) prices	3.97	3.65
30	Growth rate of GSDP only in agriculture sector	Average 2005-06 to 2013-14	Constant (2004-05) prices	4.10	3.47
31	Share of Employment in agriculture sector	2009-10	In percent	52	63
<b>MISCELLANEOUS</b>					
32	Road Length (in Km.)	2011-12	per lakh population	402	146
33	Railway route length (IN km.)	2011-12 (P)	Per '000' Sq. Km	19.65	31.36
34	Credit-Deposit Ratio	2014	-	78.0	37.3
35	Share of Employment in major sectors (excluding agriculture)	2009-10	In percent	48	37
Source Statistical Abstract, India 2012.					

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CHAPTER – I

ASSAM ECONOMY – AN OVERVIEW

AREA AND POPULATION

Assam is situated in the North-East region of India – bordering seven States viz. Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Tripura and West Bengal and two countries viz. Bangladesh and Bhutan. The geographical area of the State is 78,438 sq. km of which 98.4 percent area is rural. Assam shares about 2.4 percent of the country's total geographical area and provides shelter to 2.6 percent population of the Country.

Assam is a state of heterogeneous population with socio-cultural and ethnic diversity. According to the Census of India, 2011 the population of Assam stands at 312.06 lakh of which 1,59.39 are males and 1,52.66 are females. The decadal growth of the State's population works out at 17.07 percent during the decade 2001-2011 as against 17.68 percent for the country as a whole. Out of the total 312.06 lakh population, 86 percent population live in rural areas and 14 percent population live in urban areas of the State. While the percentage of rural population of the State stands much higher compared to All-India average (69 percent), the proportion of urban population in the State has increased from 12.9 percent in 2001 to 14 percent in 2011.

The density of the population of Assam has increased to 398 persons in 2011 from 340 persons in 2001 Census or on an average, 58 more people inhabit every square kilometer in the State as compared to a decade ago.

The sex ratio of Assam has increased to 958 female per 1000 male in 2011 from 935 in 2001. Compared to overall sex ratio of the State, the Child sex ratio (age-group 0-6 years) has gradually declined from 975 in 1991 to 967 in 2001 and further to 962 in 2011. On the other hand, sex ratio at birth (0-1 year) in Assam as per 2011 Census was calculated at 957 female per 1000 male.

STATE DOMESTIC PRODUCT

Analysis of sectoral contribution to GSDP at constant (2004-05) prices from 2004-05 to 2014-15 reveal that other than Service sector, the percentage contribution of Agriculture and Allied activities and Industry sector recorded steady decline.

The contribution of Agriculture and allied activities is expected to decrease from the level of 25.5 percent in 2004-05 to 20.2 percent level in 2014-15. The "Agriculture sector" although the major contributor of Agriculture and Allied activities, the percentage contribution of this sector towards the State economy has been declining steadily and expected to reach the level of 16.5 percent in 2014-15 from 21.7 percent in 2004-05. The percentage contribution of the Industry Sector to the State economy is also shown the same declining trend and expected to fall from 27.54 percent in 2004-05 to 23.0 percent in 2014-15 but would show slight recovery over the previous year. The of "Mining & Quarrying" Sector's contribution (being the most potential sector within the 'Industry Sector' of the State) towards state economy has also recorded decline from 8.76 percent in 2004-05 to 4.58 percent in 2014-15. The contribution of "Mining and Quarrying" towards Industry Sector has also declined from 31.8 percent in 2004-05 to 20.0 percent in 2014-15. On the other hand, the percentage contribution of Service sector towards the State economy is expected to increase from 46.9 percent in 2004-05 to 56.8 percent in 2014-15.

The 'Industry' sector comprising of Mining & Quarrying, Manufacturing (Registered and unregistered), Electricity, Gas & Water Supply and Construction sectors is expecting a growth to be achieved at 7.37 per cent in 2014-15 against estimated growth of 5.51 per cent in the previous year (2013-14). Amongst the sub-sectors of Industry sector favourable growth rate is expected in the "Construction" sector and "Unregistered Manufacturing" sector. The growth of "Construction" sector alone is estimated to be achieved at 14.41 percent in 2014-15. In respect of "Unregistered" manufacturing sector the estimated growth is expected to be at 6.08 percent in 2014-15 against estimated growth of 1.29 percent in 2013-14.

The state of economy in terms of Rupee value of the GSDP at constant (2004-05) prices for the year 2014-15 (Advance Estimates) is estimated at ₹92573.03 crore as against ₹86969.72 crore for 2013-14 (Quick Estimates) reflecting a growth of 6.44 per cent which is lower than the estimated growth of 7.30 per cent in 2013-14(Quick Estimates). The expectation of growth of 6.44 per cent in GSDP of the State for 2014-15 comprises of the estimated growth of 3.53 per cent in Agriculture and Allied sector, 7.37 per cent in Industry sector and 7.08 per cent in Services sector.

During the financial year 2014-15, the growth of 'Forestry' sector displayed a positive growth of 4.25 percent but expected slightly lower growth against the growth of 4.39 per cent experienced in 2013-14. The growth of 'Agriculture' is estimated marginally low with 3.16 percent during 2014-15 over 4.36 percent in 2013-14. The 'Fishing' sector, on the other hand, expected to be displayed higher growth with 6.69 percent in 2014-15 against 4.08 percent growth in the previous year. The lower growth of 'Agriculture' will effected upon the overall estimated growth rate of 'Agriculture and Allied' sector and expected to remain marginally lower with 3.53 percent in 2014-15 compared to 4.34 per cent in 2013-14.

The overall performance of the 'Industry' sector has improved and the growth is expected to be achieved the level of 7.37 per cent in 2014-15 against 5.51 per cent growth estimated in the previous year 2013-14 and this is due to favourable performance of Manufacturing Sector especially Unregistered Manufacturing Sector and Construction sector during 2014-15 compared to 2013-14. The growth of "Construction" sector alone is estimated to be achieved at 14.41 percent in 2014-15. On the other hand, the estimated growth of "Unregistered" manufacturing sector is expected to be at 6.08 percent in 2014-15 against estimated growth of 1.29 percent in 2013-14. Amongst the sub-sectors of Industry sector, the estimated growth rate of Mining and Quarrying, Manufacturing (Registered), Electricity, Gas & Water Supply is not very encouraging and expected to be remained lower during 2014-15 over the growth of previous year.

The Services sector comprising of Trade, Hotels & Restaurants, Transport by other means, Storage, Real Estate & Business Services and Communications, Banking & Insurance, Social & Personal and Other services is expected to grow by 7.08 per cent during 2014-15 as compared to 9.56 per cent growth achieved in 2013-14 due to comparatively lower performance is likely to be shown by the sub sectors of the Services Sector viz., 'Public administration', 'Other Services', 'Storage' and 'Railways'. On the other hand, the growth of the sub sectors 'Banking & Insurance', 'Communication' and 'Transport by other means' is expected to be remain lower during 2014-15 compared to the previous year.

The Net State Domestic Product (NSDP), also known as State Income, at 2004-05 prices is expected to be displayed lower growth with 4.90 percent in 2014-15 (Advance Estimate) compared to the estimated growth of 6.28 percent during 2013-14. Measured on the basis of Net State Domestic Product, the Per Capita Income of the State will attain the level of ₹23968.00 at constant (2004-05) prices and ₹49480.00 at current prices as per advance estimates for 2014-15 as against ₹23392.00 and ₹44263.00 at constant (2004-05) prices and current prices in the previous year 2013-14 respectively. In terms of growth rate, the per capita income at constant (2004-05) prices is likely to be 2.46 percent higher in 2014-15 over 2013-14.

## STATE FINANCE

The Assam Government Budget 2014-15 reveals that the receipt under the consolidated fund of the State is expected to be ₹57311.40 crore comprising of ₹52696.81 crore on Revenue Account and ₹4614.59 crore under Capital Account. Considering the estimated receipt of ₹329365.94 crore under Public Accounts and ₹50.00 crore under Contingency Fund, the aggregate receipts amount is expected to be ₹386727.34 crore. The total expenditure from the consolidated fund of the State in 2014-15 is estimated at ₹58104.55 crore, of which ₹48631.31 crore is on Revenue Account and ₹9473.24 crore is on Capital Account. Out of the total estimated expenditure of ₹388113.11 crore for the year 2014-15, ₹329958.56 crore will be spent from Public Account and ₹50.00 crore under Contingency Fund. Thus, during the year 2014-15, it is expected to have a deficit of ₹1385.77 crore which together with the opening deficit of ₹972.14 crore for the year 2014-15 will lead to an estimated closing deficit of ₹2357.91 crore.

The fiscal scenario in the State took a positive turn in 2005-06 as a result of fiscal reform measures adopted by the State in 2004-05 and continued up to 2008-09. However, in 2009-10, revenue deficit increased to ₹1347.71 crore and Non-plan revenue deficit and fiscal deficit escalated to ₹2457.05 crore and ₹4043.42 crore respectively due to the revision of pay and pension as per revision of Assam Pay Rules, 2010 as per recommendations of the 6<sup>th</sup> Assam Pay Commission. Thereafter, the revenue deficit turned into surplus with ₹53.12 crore in 2010-11 and ₹926.85 crore, ₹1554.06 crore and ₹222.91 crore in 2011-12, 2012-13 and 2013-14 respectively. The Budget estimate of 2014-15 shows revenue surplus of ₹4065.51 crore.

The Budget estimates for the year 2014-15 shows that the State's Own Resources is expected to increase by 34 percent of which, State Own Tax Revenues is expected to increase by 26 percent and Non-Tax Revenues by 59 percent. During the budget year, transfer from the Centre is expected to increase by 80 percent of which share in Central Taxes is expected to increase by 22 percent, Plan grants by 153 percent and Non-Plan Grants by 205 percent.

Plan expenditure as a percentage of total expenditure has increased from 24 percent in 2006-07 to 28 percent in 2012-13 and to 29 percent during 2013-14. However, revenue expenditure still continues to remain above 80 percent of total expenditure during the period from 2006-07 to 2013-14 and capital expenditure is less than 3 percent of GSDP. Capital expenditure, which was 2.37 percent of GSDP in 2006-07 increased to 3.04 percent in 2008-09 and again went on a decreasing trend to reach 1.84 percent in 2010-11. During the last three years the non-debt capital expenditure is on an increasing trend reaching 2.52 percent of GSDP in 2013-14.

### CLIMATE AND RAINFALL

The climate of the State is of humid sub-tropical in nature with warm and humid summer and cool and dry winter. On an average the temperature of the State varies between 8° Celsius (winter season) and 36° Celsius (summer season). The humidity is high primarily during summer season. Due to unique geographical location coupled with varied physiography, the State has array of climatic conditions.

Assam is situated in the high rainfall zone. The monsoons are Assam's life line as the agricultural activity is predominantly depended on it. The southwest monsoon brought shower for which the State receives average annual rainfall of 2580 mm on the Brahmaputra valley and its surrounding region. The State normally receives 2 percent rainfall in Winter Season (January – February), 25 percent in Summer Season (March – May), 65 percent in Monsoon Season (June – September) and 7 percent in Post-monsoon Season (October – December).

During 2013-14 the State had experienced 1706.8 mm rainfall during 2013-14 against normal rainfall of 2311.1 mm. During the kharif crop season only 1529.5 mm [against the normal rainfall of 2016.3 mm] was occurred in the State. Thus, according to the State Agriculture Department, the pattern of overall rainfall in the State was deficient during the kharif season both in terms of total rainfall [(-) 24.0 percent below normal] and its spread. However, the State has experienced **"Normal"** rainfall in the months of May, July and August, 2013. During the Rabi season overall rainfall in the State was **"Deficient" with deviation of (-) 40.0 percent from normal.** Although the occurrence of overall rainfall throughout the State was 'deficient' during the year 2013-14, according to the State Agriculture Department, the spread and pattern of rainfall varies from district to district during the period.

### AGRICULTURE AND FOOD GRAINS PRODUCTION

Agriculture is the principal occupation of majority of the rural population in the state in terms of employment and livelihood. Agriculture sector continues to providing employment of more than 50 percent of the total workforce and support more than 75 percent population of the State directly or indirectly. The contribution of Agriculture Sector towards State economy registered gradual fall [GSDP at constant (2004-05) prices] during the period 2005-06 to 2014-15. The trend of growth of Agriculture Sector, on the other hand, was erratic [GSDP (at constant 2004-05 prices)] during the same period. The growth rate is expected to show some remarkable recovery in 2013-14 as per Quick estimate.

The net cultivated area of the State is 28.11 lakh hectares (2011-12) which is about 87.4 percent of the total land available for agricultural cultivation in the State. According to the Agricultural Census, Assam, 2010-11, the average operational holding is 1.10 hectare only and more than 85 percent of the farmer family is small and marginal farmers with average land holding of only 0.63 hectare but in a scattered manner.

The soil, topography, rainfall and climate in general are conducive for an agricultural activity mainly for paddy cultivation in Assam and therefore concentration is high on paddy production both for farmers and the State Agriculture Department. As per final estimates, the total area under paddy cultivation during the year 2013-14 was 25.13 lakh hectare or 92.2 percent of the total area under food grains in the State. The area covered under paddy cultivation was 0.15 lakh hectare more during the year 2013-14 over 2012-13. The Paddy cultivation, during the year 2013-14 occupies 89.0 percent of the net cropped area and 60.0 percent of the gross cropped area in the State. The area coverage under Pulses and Oilseeds in 2013-14 as per final estimates has been expected to increase to the level of 1.50 lakh and 3.25 lakh hectares respectively compared to 1.42 lakh hectares and 3.05 lakh hectares respectively in 2012-13. Analysis of area under pulses and Oilseeds reveal that the area under Pulses and oilseeds has been gradually increasing. In respect of pulses, the area under cultivation has increased from 1.00 lakh hectares in 2005-06 to 1.50 lakh hectares in 2013-14 and the area under Oilseeds recorded increase from 2.53 lakh hectares in 2008-09 to 3.25 lakh hectares in 2013-14.

As per final estimates, total food grains production in the State was 54.02 lakh MT in 2013-14 compared to 52.79 lakh MT in 2012-13. Total food production in the State was 2.33 percent more during the year 2013-14 compared to the previous year's production. During the year 2011-12, total production of food grains in the State was 48.57 lakh MT. It is pertinent to note that the total foodgrains production in the State was the highest in 2013-14 compared to last twelve years.

The total production of Rice in the State was 51.93 MT in 2013-14 compared to 51.28 lakh MT in 2012-13. Total production of rice in the State, thus, marginally 1.27 percent more during 2013-14 compared to previous year production despite overall rainfall in the State was (-) 24.0 percent deviated from normal during the kharif season.

The production of total Pulses reported 5.1 percent increase with 0.88 lakh MT in 2013-14 compared to 0.84 lakh MT in 2012-13. This increasing trend of production of total Pulses continued since 2005-06. The total Oilseeds production, on the other hand, recorded slight decrease during 2013-14 compared to previous year's production. The production of oilseeds in the State was affected by due to overall "deficient" rainfall experienced by the State during the Rabi season.

### **IRRIGATION**

The achievements made by Irrigation Department in creation of additional irrigation potential as well as potential utilised was not much encouraging. Out of the Gross Cropped Area of 41.74 lakh hectares of the State, the Irrigation Department alone created potential of 8.52 (appox) lakh hectares up to March, 2014 by operating both completed and ongoing irrigation schemes of which 2.63 lakh hectares through both Major and Medium Irrigation Projects and the rest 5.89 lakh hectares through Minor Irrigation Schemes. Out of the 5.89 lakh hectares of created potential under Minor Irrigation Sector, a potential of 4.40 lakh hectares was created through the Govt. Minor Irrigation Schemes executed by the State Irrigation Department and the rest 1.49 lakh hectares through Shallow Tube Wells (STWs) and Low Lift points (LLPs) installed by the Assam State Minor Irrigation Development Corporation (ASMIDC) Limited [Now merged with the State Irrigation Department]. The State Agriculture Department has also created irrigation Potential of 9.77 lakh hectares till the end of 2013-14 through the Shallow Tube wells and Low Lift Points of which 5.84 lakh hectare area under utilisable/assured irrigation.

### **FISHERY**

The contribution of Fishery sector to State Domestic Product is very nominal and it is estimated at around 2.0 percent. Despite existence of vast water resources suitable for pisciculture in the State covering an area of 4.77 lakh hectares (including River Fisheries) the fish production is showing a sluggish growth. Fish production in the State has reached the level of 266.7 thousand tonne in 2013-14 which is about 5.0 percent more than the previous year. However, against the current economic demand of 279.53 thousand tonne, there is a shortfall of 12.83 thousand tonne. The gap between present production and requirement is partially met by importing fish from other states. From the point of minimum nutritional requirement the present fish production in the State [the current estimated requirement of fish is 318.1 thousand tonne calculated on the basis of minimum nutritional requirement of 11 kg per capita per annum] is far below. The present per capita availability of fish is about 9 Kg.

With a view to increase per capita availability of fish and to narrow down the production-requirement gap, State Fisheries Department has adopted a number of positive interventions and has given special emphasis for scientific fish farming in beels and community tanks through awareness, training, government support and subsequent bank linkage. Strategies have also been formulated for sustainable development of the fisheries sector.

### **MILK AND MEAT PRODUCTION**

The volume of total milk production of the State for the year 2013-14 was estimated at 857.39 million liters as against 844.9 million liters in the previous year. The growth of milk production, thus, increased by 1.48 percent over the previous year. Despite increase in milk production in the State over the years, the estimated per capita/per day milk availability remained more or less at the same level due increase in population. The estimated per capita/per day milk availability of milk was 74 ml during the year 2013-14 which was at the same level when compared with the per capita/per day availability of milk during the previous year. Of the total volume of milk production indigenous cattle milk is observed to have constituted 54.31percent of the total milk production of the State while the contribution of crossbreed cattle milk is 28.82 percent and thus the cattle milk together contributes 83.12 percent to the total milk. Buffalo and goat milk contributes 14.99 percent and 1.88 percent respectively to the total milk production.

According to the Animal Husbandry and Veterinary Department, Assam, the estimated layer population of fowl and duck for the year 2013-14 is estimated at 2988.95 and 1196.99 thousand numbers respectively. Thus, the growth of layer population in respect of fowl and duck was 0.62 percent and (-) 3.08 percent respectively during the year 2013-14 compared to the previous year. Total egg production in the State was estimated at 4717 lakh numbers compared to estimated 4712 lakh numbers during the previous year. Annual average yield rate of Fowl egg was 110 and 181 numbers per layer/ year for local and improved fowl respectively during the year.

The total meat production during 2013-14 was estimated at 38.34 thousand tons as against estimated 36.63 thousand tons meat production in 2012-13 showing about 4.7 percent increase in meat production over the previous year.

### **INDUSTRY AND INDUSTRIAL GROWTH**

The industrial scenario of the State is confined within the growth of employment oriented SSI, MSME Sector, which comprises of manufacturing and processing industries. Assam is still making desperate efforts for gearing up industrial activities by harnessing the un-tapped resources available in the State by introducing growth-inducing factors and by removing the infrastructure inadequacies primarily in the power sector. Creation of environment for industrialization by setting up Industrial infrastructure in the perspective of industrial development and attract investment through proper planning is the prime objective before the State Government. The declaration of the North East Industrial Investment Promotion Policy, 2007 supplemented by State Industrial Policy, 2008 has been another important feature for industrialization of the State. To achieve the goal the department is creating a good numbers of infrastructural facilities as well as upgrading the existing ones located in different districts of the state. Infrastructural facilities in the form of EPIP, IIDC, Growth Centers, Food Processing Industrial Park, Industrial Estates, Industrial Areas, and Commercial Estates etc are spreading throughout the State.

At present, there are 19 Industrial Estates, 8 Mini Industrial Estates, 17 Industrial Areas and 12 Growth Centres in the State where all total 638 numbers of Industrial units are functioning. One Export Promotion Industrial Park (EPIP) has also been established with world class infrastructure at Amingaon in Kamrup district where 40 numbers of industrial units are producing some export quality product of various kinds. In addition, 11 nos. of Industrial Infrastructure Development (IID) Centre in 11 different districts and 3 numbers of Industrial Growth Centre and one Food Park at Chaygaon in Kamrup District are under implementation. Most of the IID projects are completed. At present a total of 683 numbers of industrial units are functioning in the industrial infrastructures created in the State.

The performance of annual growth of industrial sector, a combination of Manufacturing, Mining & Quarrying, Electricity Gas & Water Supply and Construction sectors, showed some recovery during the last three years (2011-2014) after sudden slow down in the year 2010-11. However, the contribution of Industrial sector to the state economy remained 24.0 percent annually during the period 2004-05 to 2013-14. Poor performance of individual sectors like Mining & Quarrying and erratic growth of Electricity, Gas & Water supply sector has some impact on the growth of industrial sector. Impact of slow down in the production of mining sector during the year 2013-14 compared to the previous year is one of the major contributing factor for weak industrial performance in Assam despite the State is richly endowed with mineral resources. On the other hand, Construction sector has claimed remarkable growth during the last two years i.e., 2012-13 and 2013-14.

There are 39028 SSI/MSME units in Assam and provided employment to 2.16 lakh persons till the end of March 2014. The Annual Survey of Industries results reveal that Assam has 2795 number of functioning Registered Factories during the year 2010-11 with 141274 employees as against 2211 number of functioning Registered Factories with 149256 employees in 2008-09. The results also show that the value of output and, net income of the factories has increased considerably by more than 15.0 percent and 142.0 percent respectively during the year 2010-11 over 2008-09.

### **TEA –THE PLANTATION CROP**

The Tea Industry of Assam plays a vital role in the State as well as in the national economy. The Tea industry of Assam also possesses a significant reputation in the global economy. Assam alone produces more than half of India's tea production. The total area under Tea Gardens in the State is 322 thousand Hectares. Assam alone produces more than half of India's total tea production. Assam alone produces more than half of India's tea production. The estimated production of tea in Assam was 629.1 thousand tonnes in 2013 compared to estimated production of 590.12 thousand tonnes in 2012. The tea industry in Assam also provided average daily employment to more than 6.86 lakh persons in the State, which is around 50 percent of the total average daily number of labour employed [on an average 11.1 lakh labour employed per day] in the country. Assam has

witnessed a spurt in the growth of small holdings during the last three decades and there is more than 1.0 lakh small holdings accounting for 200 hundred million kgs of made tea. Most of the STGs are first generation young and educated entrepreneurs who have started contributing immensely towards transformation of socio-economic life of rural Assam. According to the Tea Board of India, there are about 68.5 thousand registered small tea growers [STG] in Assam producing about 106881 thousand KG in 88674 hectares of land in Assam.

### **RUBBER PLANTATION**

Among the other Plantation crops, Rubber cultivation is also gaining its popularity in the State due to congenial agro climate as well as its eco-friendly activity. The Rubber Board of India has identified Assam as a "Potential State" from the "productivity" point of view as there has huge scope of rubber plantation. The area under rubber cultivation has grown from 16.5 thousand hectares in 2006-07 to 49.0 thousand hectares in 2013-14. The tapping area as well as production of rubber has also been increased considerably during the same period. The production of rubber has also been increased considerably from 3050 MT in 2006-07 to 13700 MT 2013-14. Considering the growing national demand, the Rubber Board of India has planned to enhance rubber plantation area in the State to 2 lakh hectares at the end of Twelfth Five Year Plan.

### **HANDLOOM AND SERICULTURE**

The handicraft industry occupies an important place in the economy of the State. The traditional silk products which are associated with the rituals and traditions of the Assamese society have won worldwide acclaim, for its design, craftsmanship and quality. Silk, therefore, has great importance both from its production and use in the Assamese society. As per handloom census more than 14.01 lakh weavers and 11.11 lakh looms available in Assam. Besides more than 16.43 lakh handloom workers are working in handloom sector. Thus, about 30.44 lakh weavers and allied workers involved with handloom activities in the State.

Although the production of Mulberry Yarn is not as high as expected, Assam has the monopoly in the world in respect of Muga, the "Golden Silk" production as more than 97 percent of Muga Silk is produced in Assam. Assam has also achieved the right of 'Geographical Indication' for Muga thread. The State is also a Major producer of Eri Silk (about 65 percent) in the country. The total area under Silkworm Food Plants recorded increase to 33790 hectare in 2013-14 from 26826.5 hectare [+26.0 percent] during 2012-13.

The production of silk in the State was 2700 MT during the year 2013-14 which is 31.0 percent more than the previous year. The State recorded highest production (2545.6 MT) of Eri raw silk during the year. Considerable increase of production has been noticed in respect of Muga raw silk (17.0 percent) and Mulberry raw silk (9.0 percent) during the year 2013-14 over the previous year.

At present, the Directorate of Handloom and Textiles cover 13576 villages of the State under its 209 Handloom Demonstration Circles with 1316163 weavers for its Handloom activities. The 98 Weavers' Extension units and 20 Handloom Production Centres produces 65.3 thousand mtrs Handloom fabrics during the year 2013-14.

### **FOREST**

The forest cover in the state, as per India State Forest Report 2013 is 27671 sq.km which is 35.28 percent of total geographical area of the State. The total forest cover of the state is 2 sq.km less in 2013 compared to the figure published in the State Forest Report 2011 [According to the State Forest Report 2011 the forest cover of Assam was 27,673 sq km of the State's geographical area]. This decrease in forest cover in the State, according to the assessment report, is due to encroachment in forest land, biotic pressure and shifting cultivation.

The Report also shows that of the total forest area, Reserved Forests and unclassed forests constitute 66.58 percent and 33.42 percent respectively. The reserved forest area constitutes around 18 per cent and total forest area excluding unclassed forest constitutes around 25 per cent of the total geographical area of the State.

In terms of forest canopy density classes, the State has 1,444 sq km very dense forest, 11,345 sq km moderately dense forest and 14,825 sq km open forest. It reveals from the table below that while there was depletion of 59.0 sq.km of moderately dense forest cover in the State, there was addition of 57.0 sq.km open forest during the assessment period 2011 and 2013. Besides forest cover there is 1582 sq.km tree cover in the state according to the report and thus total of forest cover and tree cover is calculated at 37.29 percent of the total geographical area of the State and 3.70 percent of the total forest and tree cover of the country. The per capita forest cover and tree cover in the state is also calculated at 0.094 hectare.

## MINES AND MINERALS

Assam is richly endowed with mineral resources. However, the contribution of the "Mining and Quarrying" sector towards State economy is gradually declining over the years. The reason behind low production is due to existence of deposits in disadvantageous locations. During the year 2013-14, except production of Sulphur, the production of coal was 40.0 percent less compared to the production in 2010-11, production of Crude Oil was 6.1 percent less over 2011-12, Natural Gas production was 2.6 percent less over 2011-12, Lime Stone production was 28.8 percent less over 2012-13. The production of Sulphur, on the other hand, recorded 44.0 percent increase during the year 2013-14 over the previous year. The index of mineral production in Assam (Base 2004-2005=100) has been worked out at 102.48 in 2013-14 as against 105.15 in 2012-13.

## POWER

Growth in the consumption of energy is linked to the growth of the economy, modernisation, urbanisation and improvement of quality of life of the people living in a State or a Country. The Central Electricity Authority (CEA) data shows that the Northeast of India has hydro power potential of 63,257 MW or 43 percent of the total assessed hydro power of the Country. Among the north-eastern states, Assam has a capacity to produce 680 MW hydro power. The 18th Electric Power Survey of India conducted by Central Electricity Authority have made year wise forecast for electric Energy Requirement and Electric Load and Power Station Bus Bars (Utilities only) for the Twelfth Five Plan (2012-13 to 2016-17) for all States/Union Territories of India. The Survey report reveals that by the end of 12<sup>TH</sup> Plan the projected energy requirement for Assam is 8947 MU and Peak Electric Load is 1817 MW.

The population census of India, 2011 report reveal that 37.0 percent households of Assam are using electricity as a source of lighting compared to 67.0 percent households of all India. The rural-urban differential of use of electricity as a source is very high in Assam. Only 28.0 percent rural households compared to 84.1 percent urban households in Assam are using electricity as source of lighting. According to the Assam Power Distribution Company Limited the total number of consumers in the State during the year 2013-14 were 2498260 of which 2330093 were domestic consumers and 168167 commercial consumers. The number of consumers in the State has increased by 37.0 percent during the period 2010-14. The growth of domestic consumers during the same period was 41.0 percent.

The status of power generation in the state is not satisfactory from the point of power requirement of consumers is concerned. The installed capacity of generating plants at present in the State is 376.7 MW which include Coal, Hydel and Gas plants of the State. The installed capacity for generating power has come down due to de-commissioning of Bongaigaon Thermal Power Station (BTPS) and Mobile Generating Sets and de-rating of age-old units of Namrup (NTPS). However, gross power generation in the State during the year 2013-14 has shown some improvement and generated 1845.3 MU or 4.5 percent more compared to gross power generated in the previous year i.e., 2012-13[1765.30 MU].

The energy requirement in the State has been worked out at 7434 Million Units (MU) during the year 2013-14 against 6392 Million Unit (MU) in the previous year but the availability of energy during the periods was 6965 MU and 5895MU respectively. However, the power generation was 1845 MU and 1765 MU during the years 2013-14 and 2012-13 respectively. The peak electricity demand in the State while recorded increase by 146.0 percent during the period 2010-2014. The shortage was minimized from 218 MW in 2012-13 to 144 MW in 2013-14 by increasing generation of electricity by 4.5 percent (Gross generation) and by purchasing power from other public and private sources. However, for better improvement of the power supply position in the State, various projects have been undertaken and are in progress.

As regards to rural households electrification Assam is also lagging behind. Till the end of the 2013-14 the State could be complete electrification of 86 percent.

Energy loss during transmission and distribution is a matter of concern for an energy deficit State like Assam. The aggregate transmission and commercial losses in the State is gradually come down from 30.48 percent in 2011-12 to 28.60 percent during 2013-14. The situation has been gradually improving with the adoption of some precautionary measures.

## EMPLOYMENT SCENARIO

The employment scenario according to the last three Population Census reports recorded that the proportion of main workers to total population in Assam has decreased from 31 percent in 1991 to 28 percent in 2011 although the figures in absolute number has increased by 24 percent between the period 1991 to 2011. On the other hand, the proportion of marginal workers shows an

increasing trend both in percentage share and absolute number during the same period. The size of the educated job seekers in the State is considerably growing higher is a major areas of concern. As per records of the live register of Employment Exchanges the registered educated job seekers stood at 1472859 during 2013 and recorded an increase of 4.31 percent over 2012. The percentage of educated job seekers constitutes about 88 percent of the total job-seekers.

The Report of the Fourth Annual Employment and Unemployment survey published by the Labour Bureau, Government of India reveals that as per Usual Principal and Subsidiary status approach (ps+ss) 61 percent of employed persons in the age group 15-17 years in the State are self employed against 53 percent at the All India level. The percentage of self employed in the age group 18-29 years and 30 years and above in the State is 56 percent and 62 percent respectively in the State as against 44 percent and 53 percent at all India level respectively. The report also shows that in rural areas there are 61 percent, 57 percent and 63 percent self employed persons in the age group 15-17 years, 18-29 years and 30 years and above as against 52 percent, 50 percent and 49 percent in the urban areas respectively. In the same age groups in rural areas there are 8 percent, 15 percent and 18 percent wage/ salaried persons in comparison to 3 percent, 33 percent and 42 percent in the urban areas of the State.

### **RURAL DEVELOPMENT**

Poverty alleviation and economic upliftment of rural poor is the basic objective of the Panchayat and Rural Development Department of Assam for which various national and State level flagship schemes have been implementing by the this department. For eradication of poverty the Panchayat wing has been implementing various National and State level flagship schemes viz. Indira Gandhi National Old Age Pension Scheme, National Family Benefit Scheme, Annapurna, Chief Minister's Assam Bikash Yojana, Backward Region Grant Fund, etc. The Rural Development, on the other hand, is also implementing programmes like IAY, MGNREGA etc for upliftment life and generate and employment of the rural poor of the State.

During 2013-14 more than 144583 numbers of IAY houses were constructed which includes the houses under construction in the previous year. Out of the total houses constructed during the year 66298 nos. of IAY houses constructed against the target of 138698 of 2013-14. As far as a financial achievement is concerned an amount of ₹587.32 crore has been utilised during 2013-14 against the total available fund of ₹1389.36 crore.

Under the MGNREGA, the flagship programme for employment generation an amount of ₹662.00 crore have been utilised in 2013-14 as compared to the utilisation of ₹651.00 crore in the previous year. More than 60 percent works have been completed in 2013-14. Towards employment front, a total of 12.62 lakh households were provided job under MGNREGA and out of them 15505 households got 100 days employment during 2013-14 against 9807 households provided 100 days work in the previous year. In 2013-14, a total of 10786 women have been engaged as mates under this programme compared to 3000 women mates engaged in 2012-13. Till the end of March 2014, 41.48 lakh rural households (cumulative from 2006-07) have been provided with job cards in the State. During the year 2013-14, 299.16 lakh mandays have been generated, out of which 73.87 lakh mandays was generated by women.

### **BANKING**

According to the Reserve Bank of India, the number of reporting Bank Offices of all Scheduled Commercial Banks in Assam has been increased to 1861 as on March 2014 from 1262 as on March 2007. With the increase in the bank networking, the dependence per bank offices in Assam has been considerably decreased over the years and reduced from 62.15 Sq.km as on March 2007 to 42.14 Sq.km as on March 2014. However, average population covered per bank branch office in Assam was calculated at 16.8 thousand (based on Population Census 2011) as on March, 2014 compared to All India average of 10.5 thousand during the same period.

The expansion of banking facilities in the State has augmented not only in respect of volume of deposits but also in respect of disbursement of credit. The aggregate deposit with Scheduled Commercial Banks in Assam, which was ₹77730 crore in March 2013, has increased to ₹85069 crore in March 2014. The total volume of credit disbursed by the banks has been increased to ₹31713 crore in March 2014 from ₹28576 crore in March 2013 thereby recorded an impressive growth of 11.0 percent. Considering the growth of deposits and credit the per capita deposit in the State has recorded 9.4 percent and 11.0 percent increase in March 2014 compared to the previous year.

The Credit-Deposit ratio of all Scheduled Commercial Banks in Assam is marginally increased to 37.3 in 2013-14 (ending March 2014) compared to 36.8 percent during the year 2012-13.

## ROADS AND TRANSPORT

Road infrastructure is bare necessity for speedy development of a State. The road network in Assam comprises of total 55435 Km. of roads consisting of 3069.22 Km. National Highways, 3134 Km. State Highways, 4413 Km. Major District roads, 2496 Km. Urban roads, 36544 Km. Rural Roads and the rest are Panchayats & Other Non PWD Roads. At present 48569.22 Km. road network including 3069.22 Km. National Highways [of which 129.20 Km. under construction and 219.85 Km. newly declared NH Way] is maintained by the State PWD. Excluding the National Highways, 23747 Km. out of the total 45500 Km. road length maintained by the PWD is blacktopped. As against availability of large road net work in the State, the existence of large number of semi-permanent timber bridges hamper all weather road communication in many areas within the State territory. The effort of the State PWD helps to bring down the number of semi-permanent timber bridges from 5450 in 2001 to 1618 in 2014. In addition construction of the number of RCC bridges has been increased from 479 in 2002 to 3257 in 2013. At present 1329 RCC bridges are under construction.

With the improvement of road connectivity and road conditions the rapid increase of the number of motor vehicles on road in Assam has been observed over the past few years. The on road vehicle population in the State has reached 1984880 as on March 2014 compared to 1725222 as on March 2013. An additional of 259658 or 15.1 percent on road motor vehicles was added during the year 2013-14 over 2012-13. The density of motor vehicles in Assam was 25.3 per Sq. Km during the year 2013-14 as against 22.0 vehicles per Sq. Km during the year 2012-13.

## TELECOMMUNICATION

The status of telecom facilities in Assam has shown considerable improvement over the years. It is evident from the status of telecom facilities in Assam that the overall tele-density (Telephone per 100 of population) of the State as on March 2014 was 48.74 as against the national average 75.23. During the year 2012-13, the overall tele-density of Assam was 46.51 as against the national average of 73.32. While the urban tele-density of Assam stood at 126.27 as on March 2014 compared to 130.92 as on March 2013, the rural tele-density was only 34.36 as on March 2014 and seems to be slightly higher over the previous year (31.13). However, in respect of overall tele-density as well as urban tele density the position of Assam stood far below the national average [overall 75.23 and urban 145.46 as on March 2014. In respect of rural segments also tele-density of Assam was considerably below the national average (rural-44.01) during the same period.

According to the Annual Report 2013-14 of the Department of Telecommunications, Govt. of India, there were 15462192 telephones in Assam out of which 59.48 percent were in rural areas. , the total telephones in Assam as on March 2014 share only 1.66 percent total telephones in the Country.

In respect of wireless phone [mobile segment] connections, there were 1.53 crore mobile subscribers in Assam as on March 2014. BSNL alone provides around 8.4 percent of the total mobile connections in the State till March 2014. The private mobile service operators, on the other hand, provided about 1.40 crore mobile connections as on March 2014. The share of mobile connections provided by the private operators has been increased from 91.4 percent as on March 2013 to 91.6 percent as on March 2014.

## PRICE AND PRICE SITUATION

The State of Assam in particular and the Country as a whole is experiencing price rise in varying degrees in the last few years. The country is going through high inflation, at times hovering around the double digit forcing the Government to take various price controlling measures. The All India Wholesale Price Index for all commodities (Base: 2004-05) during 2013-14 was 177.64 in 2013-14 as against 167.62 in 2012-13 showing an increase of 5.98 percent against an increase 7.36 percent in 2012-13 over 2011-12. The WPI for food articles was 238.85 percent in 2013-14, an increase of 12.76 percent over 211.82 in 2012-13 as against an increase of 9.90 percent in 2012-13 over the previous year. The Wholesale Price Index of Agricultural Commodities in Assam [with base 1993-94=100] compiled by the Directorate of Economics and Statistics, Assam reveal that during 2013-14 the WPI was 336 as compared to 296 in 2012-13 showing an increase of 13.51 percent against an increase of 3.14 percent in 2012-13 over the previous year. The WPI during the financial year, 2014-15 up to the month of September shows an increase of 21.36 percent over the corresponding period of the previous year.

The Consumer Price index number with base 2001=100 for working class population for the State is compiled by the Directorate of Economics and Statistics, Assam taking into account the weighted average of the indices of the three centres viz. Guwahati, Silchar and Tinsukia. The annual average of Consumer price Index for Working Class Population (Base 2001=100) in Assam increased by 13.20 percent in 2014 over 2013 as compared to 4.79 percent in 2013 over 2012. During 2014, the Centre-wise increase is comparatively high in Silchar (16.83%) followed by Tinsukia (12.11%) and Guwahati (10.88%).

## PUBLIC DISTRIBUTION SYSTEM

Public Distribution System is a major instrument of the Government's economic policy to ensure availability of food grains at affordable prices as well as to provide food security to the poor. Number of fair price shops in the State as on 31<sup>st</sup> March 2014 was 36977, which increased by 72 numbers against 36905 number of fair price shops as on 31<sup>st</sup> March 2013. This 36977 fair price shops besides distributing food articles to APL card holders, presently giving service to 7,04,000 AAY and 12,02,000 BPL card holders also. The margin money paid to the Fair Price Shops dealers up to June 2014 is ₹54.00 per quintal and ₹41.00 per quintal for APL Rice and APL wheat respectively and ₹38.00 per quintal for BPL rice.

During the year 2013-14 total allocation of Wheat and Rice for APL, BPL, AAY families under all the schemes was 20.97 lakh tonnes for Assam of which 14.95 lakh tonnes were Rice and 6.02 lakh tonnes were Wheat. It is seen that during the year 2013-14 the total offtake of wheat has increased by 0.52 lakh tonnes and in case of rice it has decreased by 2.99 lakh tonnes in Assam as compared to the total offtake during 2012-13.

At present 40.92 lakh APL families are provided with APL rice, S.K. Oil, L/Sugar and Iodized salt as per quantum of allocation in each month. Besides the State has achieved the target of selecting 19.06 lakh beneficiaries from BPL families and provided distinct ration cards for issuance of PDS items at subsidized rates. Out of 19.06 lakh selected beneficiaries, 12.02 lakh of beneficiaries have FIC cards and take benefits as BPL families and the rest 7.04 lakh of beneficiaries are brought under AAY category families as per directions and guidelines of the Central Government.

## EDUCATION

The role of education for socio-economic development of the society is well recognized. With the help of target oriented interventions, the number of educational institutions has increased over the years. Literacy Rate of Assam is 72.19 with male literacy rate 77.85, which is behind the National rate of 72.99 and male literacy rate of 80.89 respectively. The female literacy rate with 66.27 stood above the National rate of 64.64.

The Gross Enrolment Ratio (GER) at Primary Level during 2012-13 and 2013-14 in Assam is 109.56 and 113.43 against 105.98 and 101.36 respectively for all States during the same period. The GER at Upper Primary Level during 2012-13 and 2013-14 in Assam is 76.68 and 93.13 compared to 82.50 and 89.33 for all States respectively.

The Pupil-Teacher Ratio in the Primary and Upper Primary Levels of the State during the year 2013-14 was 24 and 14 respectively as against the all States ratio of 25 and 17 respectively. The DISE 2013-14, Flash Statistics, shows that two district of the State have Pupil Teacher Ratio above 30 and also reflects that 39 percent of Govt. primary schools and 12 percent of Govt. upper primary schools have PTR greater than 30. The average annual drop-out rate at Primary level in the State during 2012-13 as per DISE, 2013-14 was 6.24 in total with 7.02 for boys and 5.46 for girls as against the all India drop-out rates of 4.67, 4.68 and 4.66 respectively. At the Upper Primary level the average dropout rate in the State during 2012-13 was 7.20 in total, 7.89 for boys and 6.55 for girls against the all India rate of 3.13, 2.30 and 4.01 respectively. The drop-out rate at the Elementary Level (Class I to Class-VIII) in the age group 6 years to 14 years in the State was 6.54 as against the all India rate of 4.17 in 2012-13.

The percentage of Single-Teacher Primary Schools with 15 and more students in the State during 2013-14 was 9.71 compared to 19.39 in 2011-12 and 9.14 in 2012-13. The percentage for all Schools during the same periods was 7.31, 14.55 and 6.87 respectively.

## HEALTH AND FAMILY WELFARE

The status of Health infrastructure in the State is improving over the years. At present there are 25 Civil Hospitals, 13 Sub-Divisional Civil Hospitals, 986 PHCs, 38 FRUs, 110 CHCs and 4609 Sub Centres with 11459 numbers of total beds in the State at the end of 2013. The number of available Government doctors in the State is 5631 including Ayurvedic and Homeopathic doctors in 2013.

**MDGs** laid down a set of numerical & time bound targets including improvement of maternal health and reduction of infant mortality as a measure of human and social development achievements in the world. The Maternal Mortality Ratio of Assam State [328 per 1, 00,000 live birth (2010-12)] is the highest in the country against the corresponding national figure 178 for the same period. Increasing medical attention at the time of delivery either at Govt. hospitals or at private hospitals helps to lower the maternal deaths in the State. During the period (1997-2012), the relative overall decline of MMR in Assam is 42 percent as against 55 percent in the Country. Though the rate is still very high than that of the Country but due to some improvement in maternal health at birth in the State, the gap between the relative overall decline of MMR of the State and the Country during the period 2004-12 has minimised. The Infant Mortality Rate (IMR) of the State is also showing consistent downward trend from 74 in 2001 to 54 in 2013. However, the IMR of Assam stands higher compared to the national level figure of 42 in 2012. In respect of under 5 mortality rate Assam is far behind the national average. The Under 5 Mortality Rate for Assam is 73 in 2013 compared to all India 49 during the same period.

The overall economy of the state although shown consistent improvement, the continued law and order situation due to prolonged insurgency, debt burden, unemployment problems, power shortage, recurrence of natural calamities in the shape of flood, drought etc., stands as constraints towards achieving expected development. However, the State Government is pursuing for all round development by adopting various precautionary interventions so that the State economy can grow towards positive direction.

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## CHAPTER – II

## POPULATION

Assam is situated in the North-East region of India – bordering seven States viz. Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Tripura and West Bengal and two countries viz. Bangladesh and Bhutan. The geographical area of the State is 78,438 sq. km of which 98.4 percent area is rural. Assam shares about 2.4 percent of the country's total geographical area and provides shelter to 2.6 percent population of the Country. Most of the State's population lives in the lush and verdant valleys of its two major river systems in the twenty four districts of the Brahmaputra valley and the three districts of the Barak valley. Less densely populated two hill districts - Karbi-Anglong and the Dima Hasao, separated the two valleys. For administrative and revenue purposes, the State has 27 districts including Kamrup (Metro) district and four districts under the Bodoland Territorial Council (BTC) areas viz. Kokrajhar, Baska, Chirang and Udalguri.

According to the Census of India, 2011 the population of Assam stands at 3,12,05,576 of which 1,59,39,443 are males and 1,52,66,133 are females. The decadal growth of the State's population works out at 17.07 percent during the decade 2001-2011 as against 17.68 percent for the country as a whole.

The density of the population of Assam has increased to 398 persons in 2011 which was 340 persons in 2001 Census. Thus, on an average, 58 more people inhabit every square kilometer in the State as compared to a decade ago. The population density of India has gone up to 368 persons in 2011 Census per square kilometer from 325 persons in 2001.

TABLE – 2.1

## POPULATION TREND IN ASSAM AND INDIA

Year	Population (in lakh)		Percentage Decadal Variation		Density (Person per Sq.Km.)	
	ASSAM	INDIA	ASSAM	INDIA	ASSAM	INDIA
1901	33	2384	-	-	42	77
1911	38	2521	17.0	5.8	49	82
1921	46	2513	20.5	0.3	59	81
1931	56	2789	19.9	11.0	71	90
1941	67	3186	20.4	14.2	85	103
1951	80	3611	19.9	13.3	102	117
1961	108	4392	35.0	21.5	138	142
1971	146	5481	35.0	24.8	186	177
1981	*180	6833	*23.4	24.7	*230	230
1991	224	8463	24.2	23.9	286	267
2001	266	10270	18.9	21.5	340	325
2011	312	12106	17.1	17.7	398	368

\*Interpolated.

Source: Census of India 2011

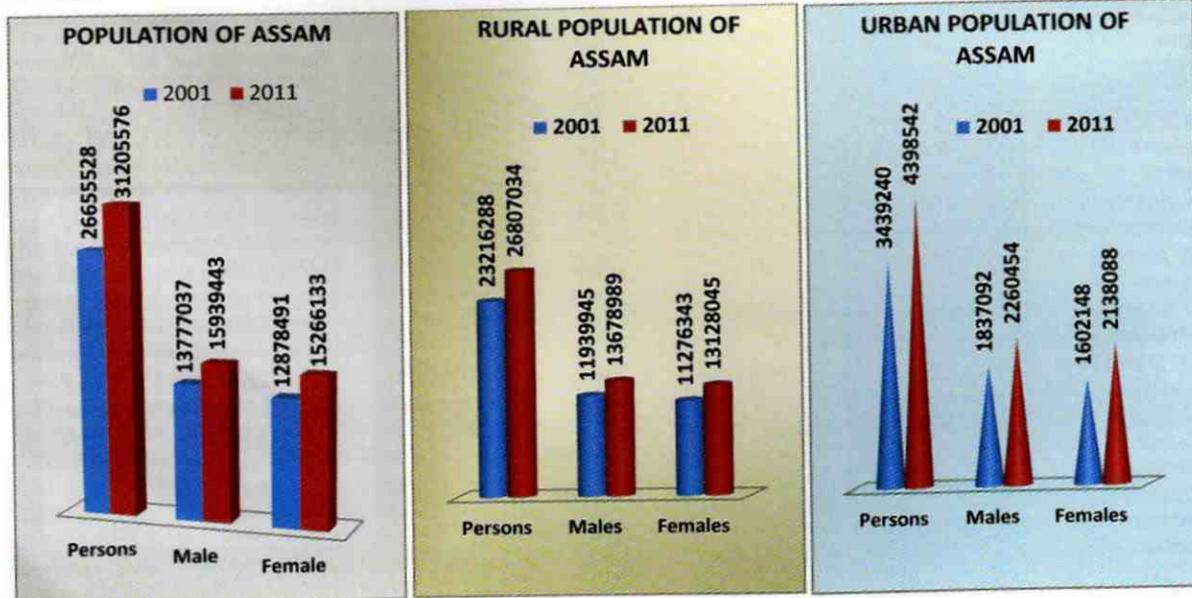
Some important features of population of Assam as per Census 2001 and 2011 are shown in the following Table.

**TABLE - 2.2**  
**POPULATION FEATURES AT A GLANCE OF ASSAM**

Particulars	Unit	2001 Census	2011 Census
Population	Lakh	267	312
Decadal Growth	Percent	18.92	17.1
Change in percentage of decadal growth	Percent	(-) 5.32	(-)1.8
Density	Per Sq. Km.	340	398
Sex-Ratio	Females per 1000 males	935	958
Literacy	Percent	63.25	72.19
(a) Male	Percent	71.28	77.85
(b) Female	Percent	54.61	66.27
Urban Population	Percent	12.90	14.09
(a) Male	Percent	53.41	51.39
(b) Female	Percent	46.58	48.61
Rural Population	Percent	87.10	85.90
(a) Male	Percent	51.43	51.03
(b) Female	Percent	48.57	48.97
S.C. Population	Percent	7.40	7.15
S.T. Population	Percent	12.83	12.45

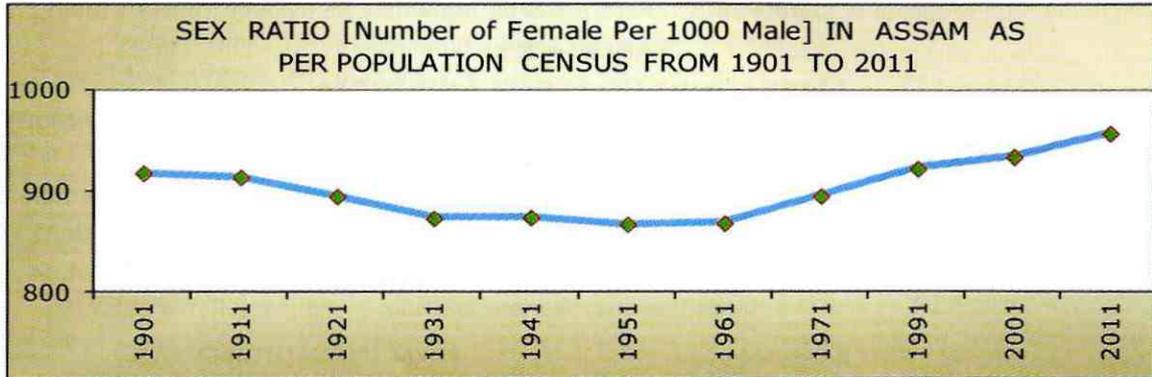
**POPULATION: RURAL AND URBAN**

As per Population Census, 2011, the rural population of the State was 86.0 percent of the total population. This percentage was much higher than that for All-India (69.0 percent). The proportion of rural population in the State decreased from 87 percent in 2001 to 86 percent in 2011. Out of the total rural population 51.03 percent were male and 48.97 were female. As per the Population Census, 2011, around 14 percent of the total population of the State was living in urban areas. The proportion of urban population in the State increased from 12.9 percent in 2001 to 14 percent in 2011.

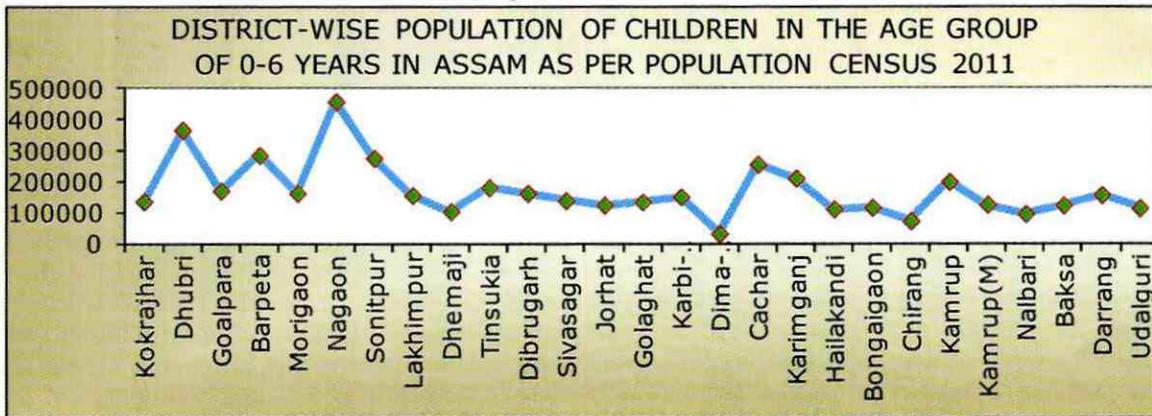


**SEX RATIO**

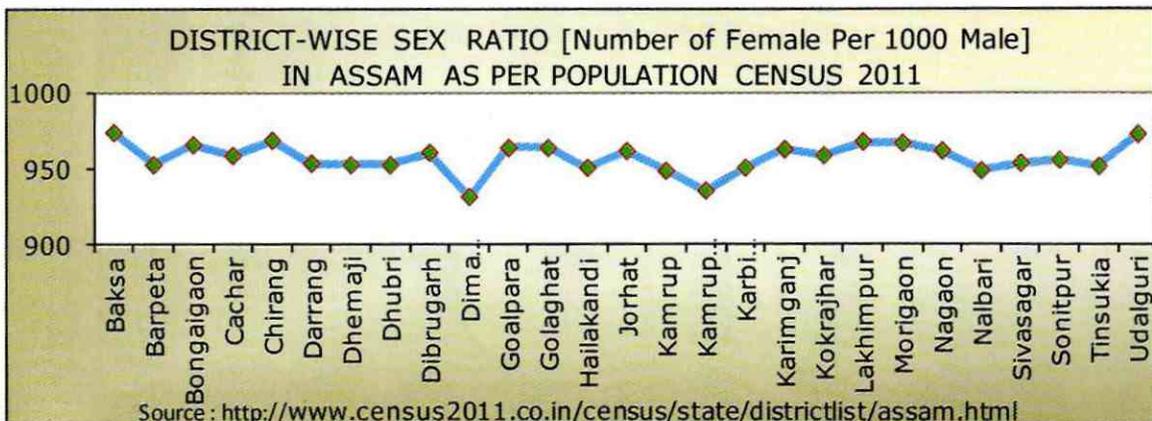
The sex-ratio in the State shows some an improvement from 935 in 2001 to 958 in 2011. The sex ratio for all ages for rural area was calculated at 960 and for urban area were 948. The sex ratio in the age-group 0-6 years is the vital indicator of future sex composition in the population in the State. Child sex ratio in the State was 962 female per 1000 male child as per Census, 2011. The corresponding sex ratio in the State for the age-group 0-6 years was 967 in 2001 and 975 in 1991.



On the other hand, sex ratio at birth (0-1 year) in Assam as per 2011 Census was calculated at 957 female per 1000 male. The sex ratio at birth for rural area was 958 and for Urban were 948. District wise analysis of sex ratio at birth shows that Dima Hasao district recorded highest sex ratio of 985 and the lowest is recorded in Dhemaji District with 922.



The sex ratio of Scheduled Castes and Scheduled Tribes population in Assam were 948 and 985 respectively in 2011. In respect of rural and urban divide, the sex ratio for Scheduled Castes population is 945 and 963 respectively and for Scheduled Tribes population the figures are 984 and 996 respectively.



Source : <http://www.census2011.co.in/census/state/districtlist/assam.html>

**LITERACY RATE**

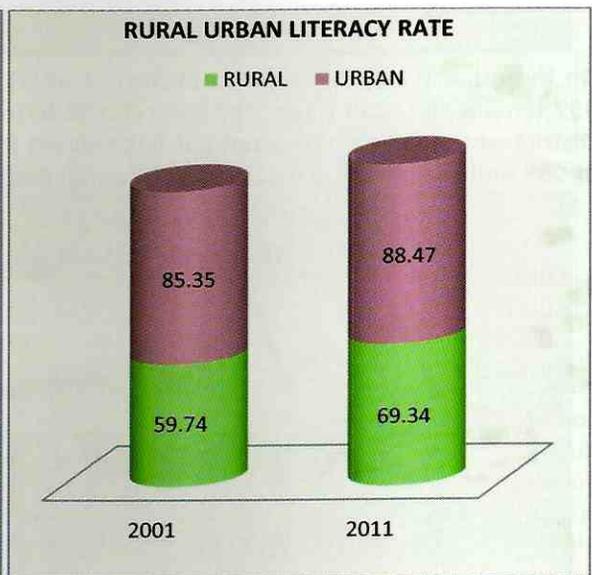
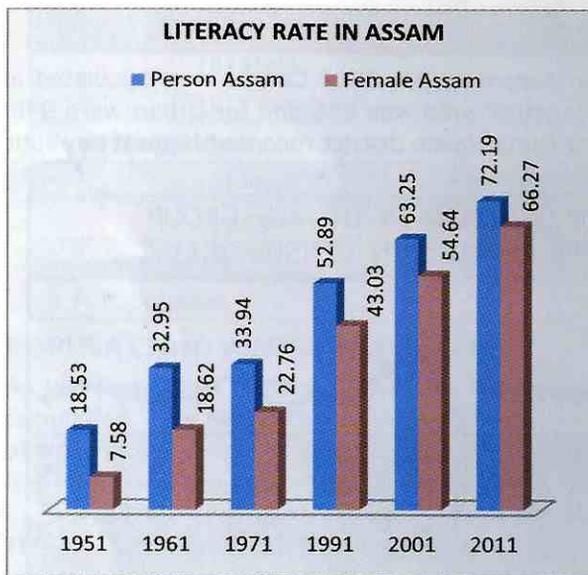
The growth of literacy in Assam has shown an encouraging sign. The literacy rate for Assam as per Census 2011 increased to 72.19 percent with 77.85 percent for males and 66.27 percent for females. The literacy rates for rural and urban areas were calculated at 69.34 percent and 88.47 percent respectively. The literacy rate for country as a whole, on the other hand, increased to 73 percent from 65 percent with male and female differentials of 80.09 percent and 64.64 percent respectively. The progress of literacy rate in Assam and all India may be evident from the table 2.3.

**TABLE – 2.3  
LITERACY RATE: ASSAM AND INDIA**

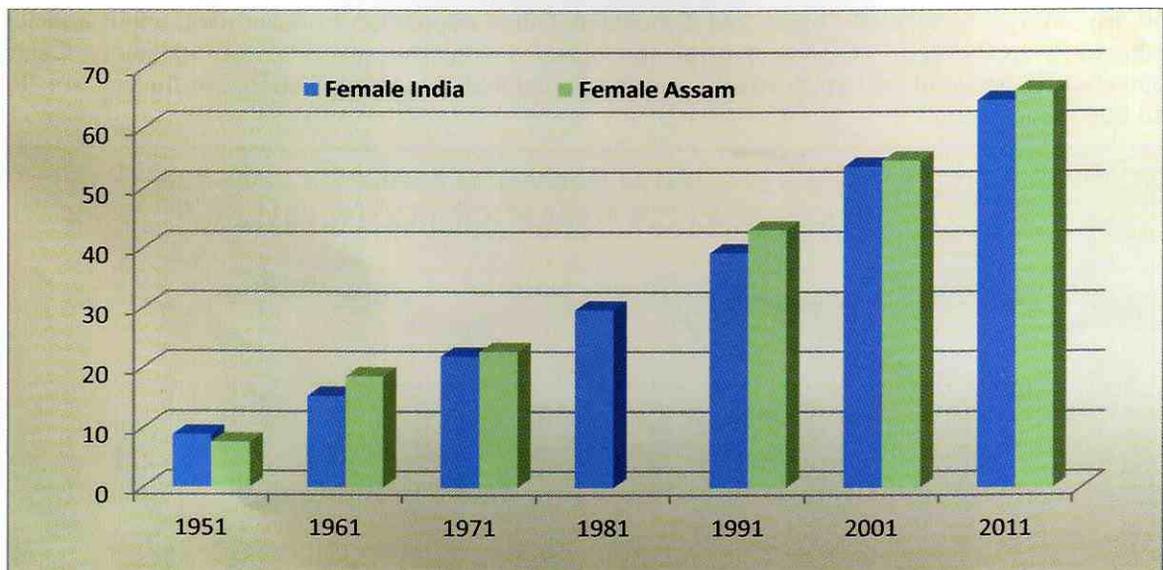
(Figure in percentage)

State	1991			2001			2011		
	Person	Male	Female	Person	Male	Female	Person	Male	Female
Assam	52.89	61.87	43.03	63.25	71.28	54.61	72.19	77.85	66.27
India	52.21	64.13	39.28	64.83	75.26	53.67	72.99	80.89	64.64

Source: Registrar General of India



**FEMALE LITERACY IN ASSAM AND INDIA**



## STATE HIGH LIGHTS – 2011 CENSUS

The Census Directorate of Assam highlighted the following observation after completion of the Population Census, 2011.

- Growth of population in the state during 1971-2011 is 113.12 percent against the national growth rate of 120.77 percent during this period.
- Assam ranks 14<sup>th</sup> in size of population among the states of India.
- Assam ranks 15<sup>th</sup> in density among the states of India.
- Assam ranks 15<sup>th</sup> in sex-ratio among the states of India.
- Assam ranks 26<sup>th</sup> in literacy among the states of India.

Some State highlights in 2011 census, such as highest and lowest population, percentage of growth, literacy rate, sex ratio and density among the districts of Assam may be seen in the following.

Item		Highest	Lowest
Total Population		Nagaon (826,006)	Dima Hasao (213,529)
Total Rural Population		Nagaon (2,457,906)	Dima Hasao (152,302)
Total Urban Population		Kamrup Metro (1,044,832)	Baksa (12,173)
Percentage of Population Growth	Total	Dhubri (24.40)	Kokrajhar (5.19)
	Rural	Dhubri (27.13)	Kamrup Metro (2.93)
	Urban	Nalbari (200.34)	Sonitpur (-2.65)
Literacy Rate	Total	Kamrup Metro (88.66)	Dhubri (59.36)
	Rural	Jorhat (81.36)	Dhubri (56.49)
	Urban	Hailakandi (94.67)	Darrang (66.86)
Sex-ratio	Total	Morigaon (974)	Kamrup Metro (922)
	Rural	Morigaon (975)	Darrang (923)
	Urban	Hailakandi (992)	Dima Hasao (880)
Density		Kamrup Metro (2,010)	Dima Hasao (44)

## POPULATION BY ECONOMIC ACTIVITY

Classification of population by economic activity according to the result of Population Census, 2011 reveal that out of the total population of 31205576 in the State, 11969690 (38 percent) were total workers. Out of the total workers 8687123(72 percent) were main workers and 3282567(27 percent) were marginal workers. Among the total male workers 82 percent were main workers, 18 percent were marginal workers and among females workers 48 percent were main workers and 52 percent were marginal workers. Out of the total 11969690 workers in Assam, 3138554(26 percent) were Cultivators, 903294(8.0 percent) were Agricultural labourers, 242071(2.0 percent) were engaged in Household Industries and 4403204(37.0 percent) were Other Workers.

Among the total marginal workers (3282567), 923073(28.0 percent) were Cultivators, 942052 (29.0 percent) were Agricultural labourers and 249250 (7.6 percent) were Household Industry workers.

TABLE – 2.4

## DISTRIBUTION OF WORKERS AND NON WORKERS IN ASSAM

Workers	Person	Male	Female
Total workers	11969690	8541560	3428130
Main workers	8687123	7034642	1652451
Marginal workers	3282567	1506918	1775649
Cultivators	3138554	2698384	440170
Agricultural labourers	903294	705306	197988
Household Industries workers	242071	146566	95505
Other workers	4403204	3484386	918818
Non workers	19235886	7397883	11838003

Source: State Primary Census Abstract

## BIRTH AND DEATH RATES

The data published in the Sample Registration Bulletins by the Registrar General of India depicts the trend of birth and death rates, natural growth rate and infant mortality rate in the State and it is evident that although there has been a trend of gradual declination, the birth rates, death rates and infant mortality rates in the State were found to be higher than that of the country as a whole. As per available information received from the Registrar General of India, during the year 2012, the birth rates, death rates and infant mortality rates of Assam have been 22.5, 7.9 and 55 per mille as against 21.6, 7.0 and 42 per mille respectively at all-India level. The Table - 2.5 shows the birth, death, natural growth and infant mortality rates of Assam and India from 2001 to 2012.

**TABLE - 2.5**  
**BIRTH RATE, DEATH RATE, NATURAL GROWTH RATE,**  
**INFANT MORTALITY RATE OF ASSAM AND INDIA (PER MILLE)**

YEAR	Birth Rate		Death Rate		Natural Growth Rate		Infant Mortality Rate	
	ASSAM	INDIA	ASSAM	INDIA	ASSAM	INDIA	ASSAM	INDIA
2001	27.0	25.4	9.6	8.4	17.4	17.0	74	66
2002	26.6	25.0	9.2	8.1	17.4	16.9	70	63
2003	26.3	24.8	9.1	8.0	17.2	16.8	67	60
2004	25.1	24.1	8.8	7.5	16.3	16.6	66	58
2005	25.0	23.8	8.7	7.6	16.3	16.3	68	58
2006	24.6	23.5	8.7	7.5	15.9	16.0	67	57
2007	24.3	23.1	8.6	7.4	15.7	15.7	66	55
2008	23.9	22.8	8.6	7.4	15.4	15.4	64	53
2009	23.6	22.5	8.4	7.3	15.2	15.2	61	50
2010	23.2	22.1	8.2	7.2	14.9	14.9	58	47
2011	22.8	22.1	8.0	7.2	14.8	14.7	55	47
2012	22.5	21.6	7.9	7.0	14.6	14.5	55	42

Source: Sample Registration Bulletin, R.G.I., New Delhi.

## SLUM POPULATION

As per Census, 2011, thirty one (31) towns in Assam were reporting slums against 2613 towns reporting slums in India as a whole. According to the Census of India, 2011, the Slum population stands at 197,266 of which 101,424 are males and 95,842 females. The Slum population accounts for 0.63 percent of the total population of the State. The child population (0-6years) in Slum population is 22,229 out of which 11,378 are males and 10,851 are females. The corresponding child population (0-6 years) in all India level is 8,082,743 of which male & females are 4,204,451 and 3,878,292 respectively. The Slum population to the urban population of the State is 4.5 percent. The all India figure for Slum population as per Census, 2011 is 65,494,604 of which 33,968,203 are males and 31,526,401 are females.

## LITERACY RATE OF SLUM POPULATION

The Literacy rate for Slum population is 72 percent with 76 percent for male and 68 percent for female population, according to Census 2011. The corresponding figure for literacy in all India level is 68 percent with 73 percent and 62 percent for male and female literacy respectively.

## APPENDIX – 2.1

## DISTRICTWISE DEMOGRAPHIC PROFILE OF ASSAM, 2011 CENSUS

Sl. No.	District	Area in Sq. Km.	Population	Rural Population	Urban Population	Population Density per Sq. Km.
1	Dhubri	2176	1949258	1745557	203701	896
2	Bongaigaon	1093	738804	628994	109810	676
3	Kokrajhar	3296	887142	832201	54941	269
4	Chirang	1923	482162	446825	35337	251
5	Baksa	2457	950075	937833	12242	387
6	Goalpara	1824	1008183	870121	138062	553
7	Barpeta	2282	1693622	1546269	147353	742
8	Nalbari	1052	771639	688909	82730	733
9	Kamrup (M)	955	1253938	216927	1037011	1313
10	Kamrup (R)	3105	1517542	1375148	142394	489
11	Darrang	1585	928500	873006	55494	586
12	Udalguri	2012	831668	794094	37574	413
13	Sonitpur	5204	1924110	1750265	173845	370
14	Lakhimpur	2277	1042137	950804	91333	458
15	Dhemaji	3237	686133	637848	48285	212
16	Morigaon	1551	957423	884125	73298	617
17	Nagaon	3973	2823768	2454234	369534	711
18	Golaghat	3502	1066888	969152	97736	305
19	Jorhat	2851	1092256	871722	220534	383
20	Sivasagar	2668	1151050	1040954	110096	431
21	Dibrugarh	3381	1326335	1082605	243730	392
22	Tinsukia	3790	1327929	1063186	264743	350
23	Karbi-Anglong	10434	956313	843347	112966	92
24	Dima Hasao	4888	214102	151613	62489	44
25	Karimganj	1809	1228686	1118986	109700	679
26	Hailakandi	1327	659296	611156	48140	497
27	Cachar	3786	1736617	1421153	315464	459
	<b>ASSAM</b>	<b>78438</b>	<b>31205576</b>	<b>26807034</b>	<b>4398542</b>	<b>398</b>

Source : Census of India, 2011.

## APPENDIX – 2.2

## DECADAL PERCENTAGE VARIATION IN POPULATION OF ASSAM

District	1901-1911	1941-1951	1951-1961	1961-1971	1971-1991	1991-2001	2001-2011
Dhubri*	28.73	12.74	43.74	43.26	45.65	22.97	24.44
Bongaigaon*	28.69	12.88	36.27	35.81	38.77	22.09	20.59
Kokrajhar*	28.73	17.11	55.41	54.89	61.96	14.49	5.21
Chirang*	5.02	18.18	40.32	57.37	103.33	(-) 0.08	11.34
Baksa*	18.36	33.68	60.52	66.67	73.65	12.51	10.74
Goalpara	29.97	9.25	37.10	45.88	54.12	23.03	22.64
Barpeta*	18.65	16.62	34.39	33.91	40.97	19.62	21.43
Nalbari*	15.24	35.15	33.56	31.79	75.78	14.21	11.99
Kamrup(M)*	6.59	2.39	13.30	19.99	20.77	45.91	18.34
Kamrup *	10.01	17.01	45.12	44.48	81.53	14.97	15.69
Darrang*	22.72	18.58	40.94	36.05	89.77	22.18	22.19
Udalguri *	45.60	29.13	54.04	37.85	43.03	10.02	9.61
Sonitpur*	23.67	22.02	41.99	33.17	68.08	18.11	15.55
Lakhimpur	26.29	17.94	50.46	43.39	56.29	18.30	17.22
Dhemaji	26.29	17.94	75.21	103.42	107.50	19.45	19.97
Morigaon	15.84	36.63	37.89	37.51	50.90	21.35	23.34
Nagaon	15.84	36.65	35.91	38.99	51.26	22.26	22.00
Golaghat	16.55	19.76	26.04	30.85	58.12	14.27	12.75
Jorhat	16.90	14.87	24.17	17.47	33.10	14.69	9.31
Sivasagar	13.41	15.98	23.36	19.47	38.76	15.83	9.44
Dibrugarh	26.29	17.94	30.64	22.93	37.78	13.68	11.92
Tinsukia	26.29	17.94	35.92	31.02	47.03	19.51	15.47
Karbi Anglong	-	30.96	79.21	68.28	74.72	22.72	17.58
Dima Hasao	(-) 33.12	6.16	36.95	40.00	98.30	24.72	13.84
Karimganj	12.94	29.87	22.96	25.13	42.08	21.87	21.90
Hailakandi	16.09	17.48	27.23	23.61	45.94	20.89	21.45
Cachar	12.33	23.92	22.60	23.96	47.59	18.89	20.19
<b>ASSAM</b>	<b>16.99</b>	<b>19.93</b>	<b>34.98</b>	<b>34.95</b>	<b>53.26</b>	<b>18.92</b>	<b>17.07</b>

\*Due to creation of 4 new Districts the rates for 2001 have been affected in 12 Districts.

**APPENDIX-2.3**  
**DISTRICTWISE POPULATION OF SCHEDULED CASTES**  
**AND SCHEDULED TRIBES IN ASSAM**

Sl. No.	District	Scheduled Castes			Scheduled Tribes		
		Total	Male	Female	Total	Male	Female
1	Kokrajhar	29570	15386	14184	278665	139579	139086
2	Dhubri	70395	36359	34036	6332	3198	3134
3	Goalpara	45094	22999	22095	231570	116013	115557
4	Barpeta	95320	49165	46155	27344	13530	13814
5	Morigaon	117841	60194	57647	136777	68382	68395
6	Nagaon	266350	136473	129877	115153	57759	57394
7	Sonitpur	109130	55817	53313	232207	117685	114522
8	Lakhimpur	81840	41689	40151	249426	126716	122710
9	Dhemaji	4225	23006	21219	325560	165449	160111
10	Tinsukia	37688	19443	18245	82066	41769	40297
11	Dibrugarh	58876	30517	28359	102871	51835	51036
12	Sivasagar	42347	21568	20779	49039	24989	24050
13	Jorhat	88665	45194	43471	139971	70795	69176
14	Golaghat	62298	31807	30491	111765	56420	55345
15	Karbi Anglong	44961	23436	21525	538738	272460	266278
16	Dima-Hasao	4337	2340	1997	151843	76520	75323
17	Cachar	264897	136051	128846	17569	8736	8833
18	Karimganj	157890	81384	76506	1940	994	946
19	Hailakandi	70659	36369	34290	691	354	337
20	Bongaigaon	82784	42513	40271	18835	9377	9458
21	Chirang	35135	18105	17030	178688	89273	89415
22	Kamrup	107827	55237	52590	182038	92094	89944
23	Kamrup(M)	101789	52106	49683	75121	37902	37219
24	Nalbari	60216	30654	29562	23364	11692	11672
25	Baksa	73083	37534	35549	331007	165634	165373
26	Darrang	40260	20566	19694	8419	4300	4119
27	Udalguri	37844	19402	18442	267372	133550	133822
<b>28</b>	<b>ASSAM</b>	<b>2231321</b>	<b>1145314</b>	<b>1086007</b>	<b>3884371</b>	<b>1957005</b>	<b>1927366</b>

**APPENDIX-2.4**  
**POPULATION OF CHILDREN IN THE AGE GROUP OF 0-6 YEARS IN ASSAM**  
**(2011 Census)**

District	Male	Female	Rural	Urban	Total
Kokrajhar	70085	66839	131397	5527	136924
Dhubri	187092	181170	345279	22983	368262
Goalpara	87457	84200	152141	19516	171657
Barpeta	146777	141052	273296	14533	287829
Morigaon	83746	80073	155116	8703	163819
Nagaon	234203	225737	420813	39127	459940
Sonitpur	141353	136509	260964	16898	277862
Lakhimpur	80016	76723	146289	10450	156739
Dhemaji	53457	50790	98352	5895	104247
Tinsukia	92777	89049	155228	26598	181826
Dibrugarh	83168	80042	140283	22927	163210
Sivasagar	71102	68278	128289	11091	139380
Jorhat	63428	61166	103394	21200	124594
Golaghat	68662	66131	125120	9673	134793
Karbi-Anglong	77428	74253	138407	13274	151681
Dima-Hasao	16480	15934	25067	7347	32414
Cachar	131417	125357	222673	34101	256774
Karimganj	107638	104322	200334	11626	211960
Hailakandi	56936	54342	106617	4661	111278
Bongaigaon	59099	57293	105251	11141	116392
Chirang	37201	36014	69176	4039	73215
Kamrup	101716	98345	186844	13217	200061
Kamrup(M)	64444	60942	27333	98053	125386
Nalbari	48458	46875	87759	7574	95333
Baksa	62498	60374	121332	1540	122872
Darrang	79437	76971	150916	5492	156408
Udalguri	57410	55864	109653	3621	113274
<b>Assam</b>	<b>2363485</b>	<b>2274645</b>	<b>4187323</b>	<b>450807</b>	<b>4638130</b>

## APPENDIX-2.5

## COMPARATIVE DISTRIBUTION OF CHILD POPULATION (0-6 YEARS) IN ASSAM

Sl. No.	District	2001	2011	Percentage to total Population		Sex Ratio	
				2001	2011	2001	2011
1	Kokrajhar	151366	136924	17.95	15.43	955	959
2	Dhubri	326754	368262	20.86	18.89	964	953
3	Goalpara	159133	171657	19.36	17.03	974	964
4	Barpeta	265146	287829	19.01	16.99	961	953
5	Morigaon	148758	163819	19.16	17.11	966	967
6	Nagaon	426280	459940	18.42	16.29	975	962
7	Sonitpur	270419	277862	16.24	14.44	974	956
8	Lakhimpur	150312	156739	16.91	15.04	967	968
9	Dhemaji	99545	104247	17.40	15.19	970	953
10	Tinsukia	184845	181826	16.07	13.69	958	952
11	Dibrugarh	172631	163210	14.57	12.31	962	961
12	Sivasagar	149098	139380	14.18	12.11	968	954
13	Jorhat	133888	124594	13.40	11.41	967	962
14	Golaghat	142970	134793	15.11	12.63	963	964
15	Karbi-Anglong	150230	151681	18.47	15.86	974	951
16	Dima-Hasao	30807	32414	16.38	15.14	955	932
17	Cachar	229219	256774	15.86	11.79	961	959
18	Karimganj	177431	211960	17.60	17.25	965	963
19	Hailakandi	100976	111278	18.60	16.88	927	951
20	Bongaigaon	110835	116392	18.09	15.75	972	966
21	Chirang	79037	73215	18.25	15.18	958	969
22	Kamrup	204757	200061	15.61	13.18	963	949
23	Kamrup(M)	125033	125386	11.80	10.00	943	936
24	Nalbari	97847	95333	14.20	12.35	961	949
25	Baksa	138906	122872	16.19	12.93	961	974
26	Darrang	146808	156408	19.32	16.85	977	954
27	Udalguri	125044	113274	16.48	13.62	975	973
<b>28</b>	<b>ASSAM</b>	<b>4498075</b>	<b>4638130</b>	<b>16.87</b>	<b>14.86</b>	<b>965</b>	<b>958</b>

**APPENDIX-2.6**  
**POPULATION OF CHILDREN IN THE AGE GROUP OF 0-6 YEARS IN INDIA**  
**(2011 Census)**

State	Male	Total	Rural	Urban	Total
Jammu & Kashmir	1084355	2018905	1593008	425897	2018905
Himachal Pradesh	407459	777898	712822	65076	777898
Punjab	1665994	3076219	1945502	1130717	3076219
Chandigarh	63536	119434	4270	115164	119434
Uttarakhand	717199	1355814	990776	365038	1355814
Haryana	1843109	3380721	2285112	1095609	3380721
NCT of Delhi	1075440	2012454	56716	1955738	2012454
Rajasthan	5639176	10649504	8414883	2234621	10649504
Uttar Pradesh	16185581	30791331	25040583	5750748	30791331
Bihar	9887239	19133964	17383701	1750263	19133964
Sikkim	32761	64111	49218	14893	64111
Arunachal Pradesh	107624	212188	172289	39899	212188
Nagaland	149785	291071	217482	73589	291071
Manipur	174700	338254	236843	101411	338254
Mizoram	85561	168531	93384	75147	168531
Tripura	234008	458014	365309	92705	458014
Meghalaya	288646	568536	490592	77944	568536
<b>Assam</b>	<b>2363485</b>	<b>4638130</b>	<b>4187323</b>	<b>450807</b>	<b>4638130</b>
West Bengal	5410396	10581466	7820710	2760756	10581466
Jharkhand	2767147	5389495	4367507	1021988	5389495
Orissa	2716497	5273194	4525870	747324	5273194
Chattisgarh	1859935	3661689	2924941	736748	3661689
Madhya Pradesh	5636172	10809395	8325731	2483664	10809395
Gujarat	4115384	7777262	4824903	2952359	7777262
Daman & Diu	14144	26934	7438	19496	26934
Dadra & Nagar Haveli	26431	50895	28504	22391	50895
Maharashtra	7035391	13326517	7688954	5637563	13326517
Andhra Pradesh	4714950	9142802	6152022	2990780	9142802
Karnataka	3675291	7161033	4517645	2643388	7161033
Goa	74460	144611	54014	90597	144611
Lakshwadeep	3797	7255	1815	5440	7255
Kerala	1768244	3472955	1823664	1649291	3472955
Tamil Nadu	3820276	7423832	3911302	3512530	7423832
Puducherry	67527	132858	44514	88344	132858
Andaman & Nicobar Islands	20770	40878	26415	14463	40878
<b>INDIA</b>	<b>85732470</b>	<b>164478150</b>	<b>121285762</b>	<b>43192388</b>	<b>164478150</b>

## APPENDIX – 2.7

STATEWISE POPULATION, SEX RATIO, POPULATION DENSITY,  
LITERACY RATE AND PERCENTAGE DECADAL GROWTH IN INDIA

Sl. No.	India, States, Union Territories	Population 2011	Sex Ratio 2011	Population Density per sq. km. 2011	Literacy rate 2011	Percentage decadal growth	
						1991-2001	2001-2011
	<b>India</b>	<b>1210569573</b>	<b>943</b>	<b>368</b>	<b>72.99</b>	<b>21.54</b>	<b>17.68</b>
1.	Jammu & Kashmir	12541302	889	56	67.16	29.43	23.64
2.	Himachal Pradesh	6864602	972	123	82.80	17.54	12.94
3.	Punjab	27743338	895	551	75.84	20.10	13.89
4.	Chandigarh	1055450	818	9258	86.05	40.28	17.19
5.	Uttarakhand	10086292	963	189	78.82	20.41	18.81
6.	Haryana	25351462	879	573	75.55	28.43	19.90
7.	Delhi	16787941	868	11320	86.21	47.02	21.21
8.	Rajasthan	68548437	928	200	66.11	28.41	21.31
9.	Uttar Pradesh	199812341	912	829	67.68	25.85	20.23
10.	Bihar	104099452	918	1106	61.80	28.62	25.42
11.	Sikkim	610577	890	86	81.42	33.06	12.89
12.	Arunachal Pradesh	1383727	938	17	65.38	27.00	26.03
13.	Nagaland	1978502	931	119	79.55	64.53	-0.58
14.	Manipur	2570390	992	115	79.21	24.86	12.05
15.	Mizoram	1097206	976	52	91.33	28.82	23.48
16.	Tripura	3673917	960	350	87.22	16.03	14.84
17.	Meghalaya	2966889	989	132	74.43	30.65	27.95
<b>18.</b>	<b>Assam</b>	<b>31205576</b>	<b>958</b>	<b>398</b>	<b>72.19</b>	<b>18.92</b>	<b>17.07</b>
19.	West Bengal	91276115	950	1028	76.26	17.77	13.84
20.	Jharkhand	32988134	948	414	66.41	23.36	22.42
21.	Orissa	41974218	979	270	72.87	16.25	14.05
22.	Chhatisgarh	25545198	991	189	70.28	18.27	22.61
23.	Madhya Pradesh	72626809	931	236	69.32	24.26	20.35
24.	Gujarat	60439692	919	308	78.03	22.66	19.28
25.	Daman & Diu	243247	618	2191	87.10	55.73	53.76
26.	Dadra & Nagar Haveli	343709	774	700	76.24	59.22	55.88
27.	Maharashtra	112374333	929	365	82.34	22.73	15.99
28.	Andhra Pradesh	84580777	993	308	67.02	14.59	10.98
29.	Karnataka	61095297	973	319	75.36	17.51	15.60
30.	Goa	1458545	973	394	88.70	15.21	8.23
31.	Lakshadweep	64473	946	2149	91.85	17.30	6.30
32.	Kerala	33406061	1084	860	94.00	9.43	4.91
33.	Tamil Nadu	72147030	996	555	80.09	11.72	15.61
34.	Puducherry	1247953	1037	2547	85.85	20.62	28.08
35.	Andaman & Nicobar Islands	380581	876	46	86.63	26.90	6.86

Source : Census of India, 2011.

## APPENDIX – 2.8

## BIRTH AND DEATH RATES IN ASSAM

YEAR	BIRTH RATE			DEATH RATE		
	Combined	Rural	Urban	Combined	Rural	Urban
1991	30.9	31.7	21.3	11.5	11.8	6.9
1995	29.3	30.2	21.8	9.6	10.0	6.7
1996	27.6	28.9	20.7	9.6	10.2	5.8
1997	28.2	29.0	20.7	9.9	10.3	5.9
1998	27.9	28.7	20.2	10.0	10.5	6.0
1999	27.0	28.0	18.9	9.7	10.1	6.2
2000	26.9	27.9	18.6	9.6	10.0	6.1
2001	26.8	27.8	15.5	9.5	9.8	6.6
2002	26.6	27.5	18.3	9.2	9.6	6.0
2003	26.3	27.2	18.0	9.1	9.5	5.9
2004	25.1	27.0	14.3	8.8	9.3	5.5
2005	25.0	26.6	15.3	8.7	9.2	5.6
2006	24.6	26.1	15.4	8.7	9.2	5.8
2007	24.3	25.7	15.5	8.6	9.1	5.7
2008	23.9	25.3	15.7	8.6	9.0	5.6
2009	23.6	24.9	15.9	8.4	8.8	5.9
2010	23.2	24.4	15.8	8.2	8.6	5.8
2011	22.8	24.0	15.5	8.0	8.4	5.6
2012	22.5	23.7	15.6	7.9	8.3	5.6
2013	22.4	23.5	15.4	7.8	8.2	5.6

Source : Registrar General of India.

**APPENDIX – 2.9**

**INFANT MORTALITY RATE IN ASSAM AND INDIA**

SECTOR	ASSAM/ INDIA	YEARS											
		2001	2002	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Rural	Assam	77	73	69	71	70	68	66	64	60	58	58	56
	India	72	69	64	64	62	61	58	55	51	48	46	44
Urban	Assam	34	38	38	39	42	41	39	37	36	34	33	32
	India	42	40	40	40	39	37	36	34	31	29	28	27
Total	Assam	74	70	66	68	67	66	64	61	58	55	55	54
	India	66	64	58	58	57	55	53	50	47	44	42	40

Source : Registrar General of India.

**APPENDIX – 2.10**

**INFANT MORTALITY RATE BY SEX IN ASSAM AND INDIA**

SECTOR	ASSAM/ INDIA	YEARS											
		2001	2002	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Male	Assam	69	70	76	68	67	64	62	58	56	55	54	53
	India	64	62	58	58	56	55	52	49	46	43	41	39
Female	Assam	80	71	55	69	68	67	65	64	60	56	57	55
	India	68	65	58	61	59	56	55	52	49	46	44	42
Total	Assam	74	70	66	68	67	66	64	61	58	55	55	54
	India	66	63	58	58	57	55	53	50	47	44	42	40

Source : Registrar General of India.

## APPENDIX – 2.11

**DISTRICT-WISE NUMBER OF VILLAGES, GAON PANCHAYAT, COMMUNITY DEVELOPMENT BLOCK, ANCHALIK PANCHAYAT AND ZILA PARISHADS IN ASSAM**

Sl No.	District	Number of Villages (As per 2011 Census)	Number of Gaon Panchayat (as on 2011)	Number of Community Development Block (as on 2011)	Number of Anchalik Panchayat (as on 2011)	Number of Zila Parishad (as on 2011)
1.	Dhubri	1091	168	15	15	1
2.	Kokrajhar	1068	-	4	-	-
3.	Bongaigaon	563	65	5	5	1
4.	Goalpara	829	81	8	8	1
5.	Barpeta	835	129	11	11	1
6.	Nalbari	456	65	7	7	1
7.	Kamrup	1068	146	16	16	1
8.	Darrang	561	76	6	6	1
9.	Sonitpur	1876	158	14	14	1
10.	Lakhimpur	1184	81	9	9	1
11.	Dhemaji	1319	65	5	5	1
12.	Morigaon	632	85	5	7	1
13.	Nagaon	1412	239	18	20	1
14.	Golaghat	1125	102	8	8	1
15.	Jorhat	848	110	8	8	1
16.	Sivasagar	875	118	9	9	1
17.	Dibrugarh	1348	93	7	7	1
18.	Tinsukia	1168	86	7	7	1
19.	Karbi Anglong	2921	-	11	-	-
20.	Dima Hasao	695	-	5	-	-
21.	Karimganj	936	96	7	7	1
22.	Hailakandi	331	62	5	5	1
23.	Cachar	1040	163	15	15	1
24.	Chirang *	508	-	2	-	-
25.	Baksa *	690	-	7	-	-
26.	Kamrup (M)*	216	14	-	-	-
27.	Udalguri *	800	-	5	-	-
	<b>Assam</b>	<b>26395</b>	<b>2202</b>	<b>219</b>	<b>189</b>	<b>20</b>

N. B \* Indicates newly created Districts.

## APPENDIX – 2.12

## COMPARATIVE STATEMENT ON PERCENTAGE OF POPULATION BELOW POVERTY LINE

Sl. No.	State	Using TENDULKAR Methodology (Poverty Headcount Ratio)								
		2004-05			2009-10			2011-12		
		Rural	Urban	Combined	Rural	Urban	Combined	Rural	Urban	Combined
1	Andhra Pradesh	32.30	23.40	29.90	22.8	17.7	21.1	10.96	5.81	9.20
2	Arunachal Pradesh	33.60	23.50	31.10	26.2	24.9	25.9	38.93	20.33	34.67
3	<b>Assam</b>	<b>36.40</b>	<b>21.80</b>	<b>34.40</b>	<b>39.9</b>	<b>26.1</b>	<b>37.9</b>	<b>33.89</b>	<b>20.49</b>	<b>31.98</b>
4	Bihar	55.70	43.70	54.40	55.3	39.4	53.5	34.06	31.23	33.74
5	Chhattisgarh	55.10	28.40	49.40	56.1	23.8	48.7	44.61	24.75	39.93
6	Delhi	15.60	12.90	13.10	7.7	14.4	14.2	12.92	9.84	9.91
7	Goa	28.10	22.20	25.00	11.5	6.9	8.7	6.81	4.09	5.09
8	Gujarat	39.10	20.10	31.80	26.7	17.9	23.0	21.54	10.14	16.63
9	Haryana	24.80	22.40	24.10	18.6	23.0	20.1	11.64	10.28	11.16
10	Himachal Pradesh	25.00	4.60	22.90	9.01	12.6	9.5	8.48	4.33	8.06
11	Jammu & Kashmir	14.10	10.40	13.20	8.1	12.8	9.4	11.54	7.20	10.35
12	Jharkhand	51.60	23.80	45.30	41.6	31.1	39.1	40.84	24.83	36.96
13	Karnataka	37.50	25.90	33.40	26.1	19.6	23.6	24.53	15.25	20.91
14	Kerala	20.70	18.40	19.70	12.0	12.1	12.0	9.14	4.97	7.05
15	Madhya Pradesh	53.60	35.10	48.60	42.0	22.9	36.7	35.74	21.00	31.65
16	Maharashtra	47.90	25.60	38.10	29.5	18.3	24.5	24.22	9.12	17.35
17	Manipur	39.30	34.50	38.00	47.4	46.4	47.1	38.80	32.59	36.89
18	Meghalaya	14.00	24.70	16.10	15.3	24.1	17.1	12.53	9.26	11.87
19	Mizoram	23.00	7.90	15.30	31.1	11.5	21.1	35.43	6.36	20.40
20	Nagaland	10.00	4.30	9.00	19.3	25.0	20.9	19.93	16.48	18.88
21	Odisha	60.80	37.60	57.20	39.2	25.9	37.0	35.69	17.29	32.59
22	Puducherry	22.90	9.90	14.10	0.2	1.6	1.2	17.06	6.30	9.69
23	Punjab	22.10	18.70	20.90	14.6	18.1	15.9	7.66	9.24	8.26
24	Rajasthan	35.80	29.70	34.40	26.4	19.9	24.8	16.05	10.69	14.71
25	Sikkim	31.80	2.90	31.10	15.5	5.0	13.1	9.85	3.66	8.19
26	Tamil Nadu	37.50	19.70	28.90	21.2	12.8	17.1	15.83	6.54	11.28
27	Tripura	44.50	22.50	40.60	19.8	10.0	17.4	16.53	7.42	14.05
28	Uttar Pradesh	42.70	34.10	40.90	39.4	31.7	37.7	30.40	26.06	29.43
29	Uttarakhand	35.10	26.20	32.70	14.9	25.2	18.0	11.62	10.48	11.26
30	West Bengal	38.20	24.40	34.30	28.8	22.0	26.7	22.52	14.66	19.98
31	Andaman & Nicobar							1.57	0.00	1.00
32	Chandigarh							1.64	22.31	21.81
33	Dadra & Nagar Haveli							62.59	15.38	39.31
34	Daman & Diu							0.00	12.62	9.86
35	Lakshadweep							0.00	3.44	2.77
	<b>All India</b>	<b>42</b>	<b>25.5</b>	<b>37.2</b>	<b>33.8</b>	<b>20.9</b>	<b>29.8</b>	<b>25.70</b>	<b>13.70</b>	<b>21.92</b>

Source: Planning Commission, Govt. of India.

## APPENDIX-2.13

## STATE- WISE INFORMATION ON SLUM POPULATION IN INDIA-CENSUS 2011

Sl	Area Name	Towns reporting Slums	Total No. of Households	Slum Population			% of total slum popn. to urban popn.	Slum Population ( 0-6yrs)		
				Persons	Male	Female		Persons	Male	Female
	<b>INDIA</b>	<b>2613</b>	<b>13920191</b>	<b>65494604</b>	<b>33968203</b>	<b>31526401</b>	<b>17.4</b>	<b>8082743</b>	<b>4204451</b>	<b>3878292</b>
1	Andhra Pradesh	125	2431474	10186934	5103377	5083557	36.1	1149779	593145	556634
2	Arunachal Pr.	5	3479	15562	8029	7533	4.9	2226	1102	1124
3	<b>Assam</b>	<b>31</b>	<b>42533</b>	<b>197266</b>	<b>101424</b>	<b>95842</b>	<b>4.5</b>	<b>22229</b>	<b>11378</b>	<b>10851</b>
4	Bihar	88	216496	1237682	649475	588207	10.5	208383	107994	100389
5	Chhattisgarh	94	413831	1898931	966623	932308	32.0	254080	130178	123902
6	Delhi	22	367893	1785390	974329	811061	10.9	229029	119508	109521
7	Goa	3	5497	26247	13826	12421	2.9	3240	1691	1549
8	Gujarat	103	345998	1680095	912571	767524	6.5	240589	126331	114258
9	Haryana	75	332697	1662305	887947	774358	18.8	225889	122124	103765
10	Himachal Pradesh	22	14385	61312	32555	28757	8.9	6509	3493	3016
11	Jammu & Kashmir	40	103633	662062	342422	319640	19.3	94204	50649	43555
12	Jharkhand	31	72544	372999	192908	180091	4.7	53465	27703	25762
13	Karnataka	206	707662	3291434	1650724	1640710	13.9	418295	212928	205367
14	Kerala	19	45417	202048	97429	104619	1.3	20327	10271	10056
15	Madhya Pradesh	303	1117764	5688993	2957524	2731469	28.3	771999	403360	368639
16	Maharashtra	189	2499948	11848423	6328217	5520206	23.3	1428850	743603	685247
17	Meghalaya	6	10518	57418	28737	28681	9.6	8241	4162	4079
18	Mizoram	1	15987	78561	38861	39700	13.7	10430	5292	5138
19	Nagaland	11	17152	82324	42651	39673	14.4	11114	5569	5545
20	Odisha	76	350032	1560303	800963	759340	22.3	188962	97551	91411
21	Punjab	73	293928	1460518	776388	684130	14.0	176257	94781	81476
22	Rajasthan	107	394391	2068000	1078991	989009	12.1	307035	161872	145163
23	Sikkim	7	7203	31378	16216	15162	20.4	3229	1621	1608
24	Tamil Nadu	507	1463689	5798459	2886993	2911466	16.6	614969	314363	300606
25	Tripura	15	34143	139780	70143	69637	14.5	14755	7467	7288
26	Uttar Pradesh	293	1066363	6239965	3298339	2941626	14.0	863392	457036	406356
27	Uttarakhand	31	93911	487741	257624	230117	16.0	66176	35131	31045
28	West Bengal	122	1391756	6418594	3321700	3096894	22.1	656780	337441	319339
29	A. N. Islands	1	3324	14172	7386	6786	9.9	1588	788	800
30	Chandigarh	1	21704	95135	53340	41795	9.3	14720	7697	7023
31	Puducherry	6	34839	144573	70491	74082	17.0	16002	8222	7780

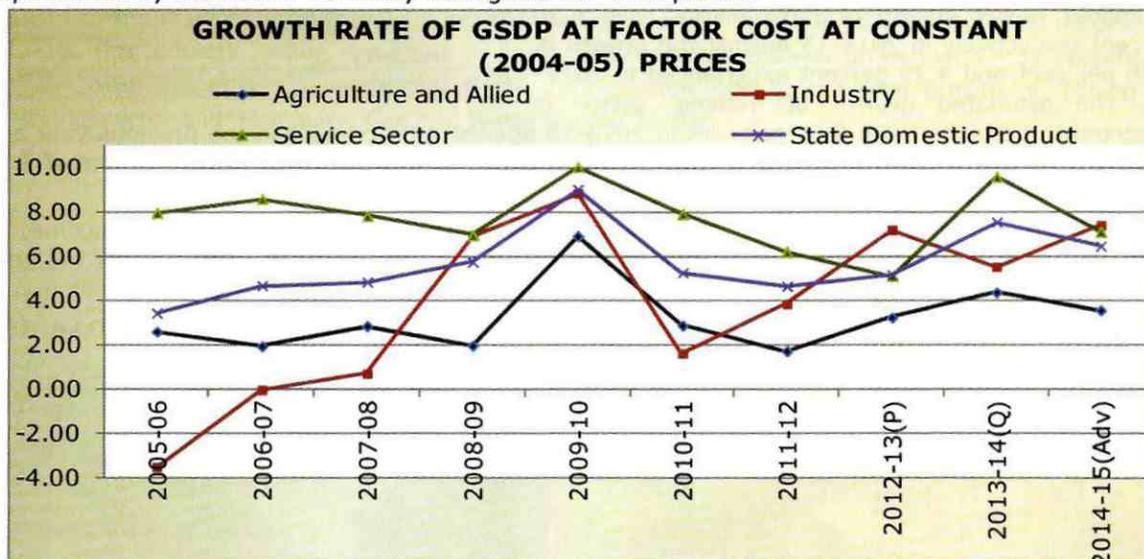
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## CHAPTER – III

## STATE INCOME

The State Domestic Product and its related aggregates are the main components of Planning and Policy making as well as considered as important indicators of development process of the State. The estimates of State Domestic Product reveal the extent and direction of changes in the levels of economic development of the State over a period of time. The fiscal reform measures adopted by the State of Assam started yielding favourable results since 2005-06 and have been recognized to be a key factor for attaining higher economic growth eventually leads to improvement to the well being of people.

The annual average growth rate of Eleventh Five Year Plan Period (2007-12) of the State of Assam is estimated at 5.88 percent which indicates a favourable status of the State Economy when compared with the growth rate of 5.33 percent accredited during Tenth Five Year Plan Period (2002-07). The growth trend of Agriculture and allied sector during 11<sup>th</sup> plan period has been steadily increasing as compared to the 10<sup>th</sup> plan period. The Agriculture and Allied sector of the State has made considerable recovery and achieved average annual growth rate of 3.24 per cent during the 11<sup>th</sup> Plan period as compared to the 10<sup>th</sup> Plan Period due to initiative and prioritize need based intervention of the State Government. However, in the closing year (2011-12) of the Plan period the growth was slow due to crop damaged by flood and unfavourable weather which caused low crop production of some major crops like Autumn Paddy, Winter Paddy, Rape & Mustard, Wheat, Sugarcane and Jute compared to the previous year. The annual average growth rate of Industry sector, on the other hand, shown lower growth rate of 4.36 percent during the 11<sup>th</sup> Plan period compared to 7.90 percent annual average growth achieved during the 10<sup>th</sup> Five Year Plan period. The lower growth of the Industry sector in the State was the result of social disorder in certain part of the State during the period and national economic meltdown which was reflected by declining all India Index of Industrial Production. The growth of Service sector is encouraging with the rapid diversification of communication sector, growing services of Banking & Insurance, steady growth of real estate, ownership dwelling and business services in the State. The annual average growth of Service sector in the 11<sup>th</sup> Plan period was 7.76 percent against 7.20 per cent experienced by the Assam economy during the 10<sup>th</sup> Plan period.



#### ADVANCE ESTIMATES OF GROSS STATE DOMESTIC PRODUCT (GSDP) AND NET STATE DOMESTIC PRODUCT (NSDP) FOR THE YEAR 2014-15

The GSDP at constant(2004-05) prices for the year 2014-15 (Advance Estimates) is estimated at ₹92573.03 crore as against ₹86969.72 crore for 2013-14 (Quick Estimates) reflecting a growth of 6.44 per cent which is lower than the estimated growth of 7.30 per cent in 2013-14(Quick Estimates). The expectation of growth of 6.44 per cent in GSDP of the State for 2014-15 comprises of the estimated growth of 3.53 per cent in Agriculture and Allied sector, 7.37 per cent in Industry sector and 7.08 per cent in Services sector.

The 'Industry' sector comprising of Mining & Quarrying, Manufacturing (Registered and unregistered), Electricity, Gas & Water Supply and Construction sectors is expecting a growth to be achieved at 7.37 per cent in 2014-15 against estimated growth of 5.51 per cent in the previous year (2013-14). Amongst the sub-sectors of Industry sector favourable growth rate is expected in the "Construction" sector and "Unregistered Manufacturing" sector. The growth of "Construction" sector alone is estimated to be achieved at 14.41 percent in 2014-15. On the other hand, the estimated growth of "Unregistered" manufacturing sector is expected to be at 6.08 percent in 2014-15 against estimated growth of 1.29 percent in 2013-14.

**TABLE - 3.1**  
**ADVANCE ESTIMATES OF STATE DOMESTIC PRODUCT FOR ASSAM AND INDIA**  
(₹ in crore)

State	GSDP/GDP		NSDP/NDP		Per Capita NSDP/NNP	
	At Constant (2004-05) Prices	At Current Prices	At Constant (2004-05) Prices	At Current Prices	At Constant (2004-05) Prices	At Current Prices
Assam	92573 (6.44)	183798 (15.26)	77394 (2.46)	159777 (14.45)	23968 (2.46)	49480 (11.8)
India*	5741791 (4.74)	10472807 (11.54)	4988116 (4.04)	9299345 (11.07)	39904 (2.70)	74380 (9.64)

\*All India figure is for 2013-14. Figures in brackets are growth in percentage.

Source: 1. Directorate of Economics and Statistics, Assam.

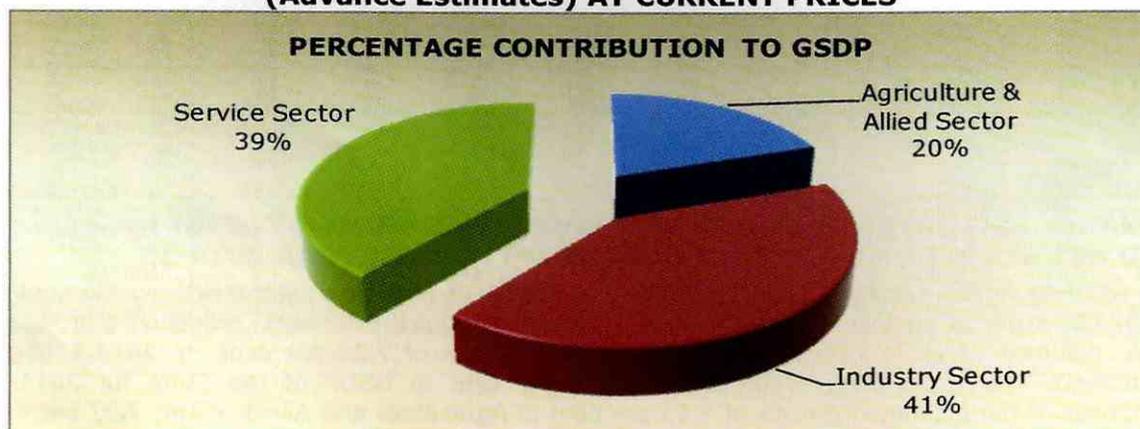
2. Central Statistical Office, Government of India.

The Services sector comprising of Trade, Hotels & Restaurants, Transport by other means & Storage, Real Estate & Business Services and Communications, Banking & Insurance, Social & Personal and Other services is expected to grow by 7.08 per cent during 2014-15 as compared to 9.56 per cent estimated growth in 2013-14 due to comparatively lower performance is likely to be shown by the sub sectors of the services sector 'Public Administration' and 'Other Services'.

In respect of 'Agriculture and Allied' sector the growth of 'Agriculture' and 'Forestry' sector displayed estimated lower growth of 3.16 percent and 4.25 percent respectively in 2014-15 against the growth of 4.36 per cent and 4.39 percent experienced in 2013-14. The estimated growth of 'Fishing' sector is expected to be higher with 6.69 per cent in 2014-15 against 4.08 percent in the previous year and therefore, all together Agriculture and Allied sector is expected to attain a lower growth rate of 3.53 per cent in 2014-15 as compared to the previous year's growth of 4.34 percent.

The estimated growth of Net State Domestic Product (NSDP), also known as State Income, at 2004-05 prices is expected to remain low with 2.46 percent as per Advance Estimates for the year 2014-15 compared to the previous year's [2013-14] estimated growth of 5.02 percent.

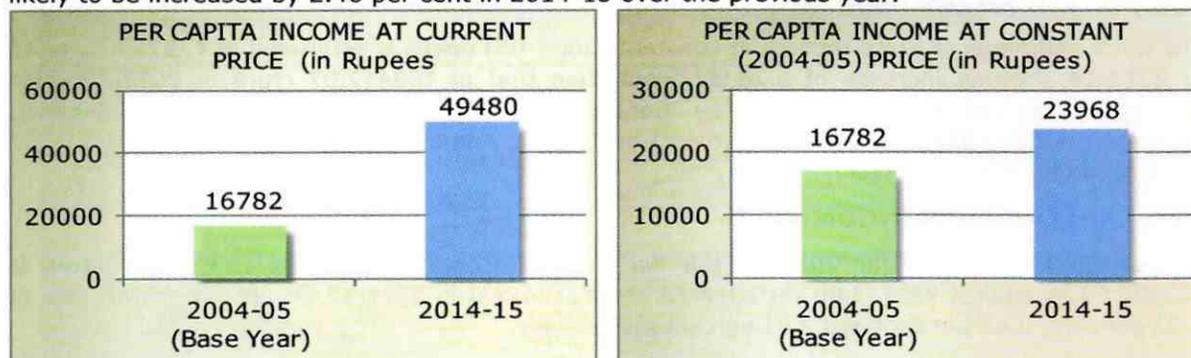
**SECTORAL CONTRIBUTION TO GROSS STATE DOMESTIC PRODUCT IN 2014-15**  
**(Advance Estimates) AT CURRENT PRICES**



Source: Directorate of Economics and Statistics, Assam.

**ADVANCE ESTIMATES OF PER CAPITA INCOME FOR THE YEAR 2014-15**

It is expected that the per capita income of the State will attain the level of ₹23968.00 at constant prices (2004-05) and ₹49480.00 at current prices as per advance estimates for 2014-15 as against ₹23968.00 and ₹44263.00 at constant (2004-05) prices and current prices in the previous year 2013-14 respectively. In terms of growth rate per capita income at constant (2004-05) prices is likely to be increased by 2.46 per cent in 2014-15 over the previous year.

**GROSS STATE DOMESTIC PRODUCT (GSDP) FOR 2013-14 (QUICK ESTIMATES)**

The Gross State Domestic Product (GSDP) of the State of Assam, during 2013-14 (Quick Estimates), at current prices was ₹159460.32 crore which is 15.22 percent higher than that of ₹138400.87 crore in 2012-13 which is navigated by the high growth of 16.14 per cent in Agriculture and allied Sector, 6.49 per cent in Industry Sector and 18.72 per cent in Service Sector.

The Gross State Domestic Product at constant (2004-05) prices during 2013-14 (Quick Estimates) was ₹86861.72 crore against ₹80798.64 crore in 2012-13 showing an increase of 7.50 per cent growth over the previous year. As per Quick Estimates, the Agriculture and Allied Activities showed a marginally higher growth of 4.34 percent compared to the growth of 3.20 per cent in previous year 2012-13. The Service sector also shown considerably high growth from with 9.56 percent during 2013-14 over the previous year 2012-13 [Growth of the Service Sector is estimated at 5.08 percent in 2012-13. The Industry Sector, on the other hand, has experienced lower growth with 5.51 percent in 2013-14 over the previous year's growth of 7.17 percent due to negative growth of 'Mining & Quarrying' sector and 'Electricity, Gas and Water Supply' sector.

**TABLE - 3.3****SECTORAL GROWTH RATES OF GSDP AT CONSTANT (2004-05) PRICES**

Sector	Base Year	Quick Estimates	Growth
	2004-05	2013-14	
Agriculture & Allied Activities	1365566	1800965	31.9
Mining & Quarrying	467925	422401	(-)9.7
Manufacturing	562146	661153	17.6
Construction	342026	803128	134.8
Electricity, Gas & Water Supply	98412	93831	(-) 4.7
<b>Industry</b>	<b>1470509</b>	<b>1980513</b>	<b>34.7</b>
Trade, Hotels & Restaurant, Transport, Storage & Communication	1082681	2013363	86.0
Banking & Insurance Real Estates and Business Services	308480	697268	126.0
Public Administration & Other Services	1112535	2194063	97.2
<b>Services</b>	<b>2503696</b>	<b>4904694</b>	<b>95.9</b>
<b>Gross State Domestic Product (GSDP)</b>	<b>5339771</b>	<b>8686172</b>	<b>62.7</b>
<b>Per capita Net State Domestic Product</b>	<b>16782</b>	<b>23392</b>	<b>39.4</b>

Source: Directorate of Economics & Statistics, Assam.

**NET STATE DOMESTIC PRODUCT 2013-14(QUICK ESTIMATES)**

The State Income i.e, Net State Domestic Product (NSDP) at current prices is estimated at ₹139604.00 crore in 2013-14 (quick estimates) which is higher by 15.01 per cent than that of ₹121379.73 crore in 2012-13. At current prices 'Agriculture & Allied activities' registered an increase of 16.10 per cent while 'Industry' and 'Service' sector registered a growth of 3.97 per cent and 15.01 per cent respectively.

The quick estimates of State Income at constant (2004-05) prices is estimated at ₹73779.23 crore in 2013-14 showing increase of 6.28 per cent than that of ₹69417.07 crore in 2012-13. This increase is the net effect generated by 'Construction' under Industry sector (13.5 per cent), 'Transport & Communication' (11.05 per cent) and 'Public Administration & Other Services' (15.67 per cent) under Service Sector.

**PER CAPITA STATE INCOME**

As per Quick Estimates for 2013-14 the Per Capita Income at constant (2004-05) prices is ₹23392.00 as against ₹22273.00 in 2012-13 and ₹21741.00 in 2011-12 showing a growth rate of 5.02 per cent, 2.45 per cent and 2.81 per cent respectively.

At current prices Per Capita State Income is worked out at ₹44263.00 during 2013-14 as against ₹38945.00 in 2012-13 and ₹36320.00 in 2011-12 registering a growth of 13.66 per cent, 7.23 and 9.77 per cent respectively.

A comparative table in respect of Per capita Income of the State and the country is given at Table-3.4.

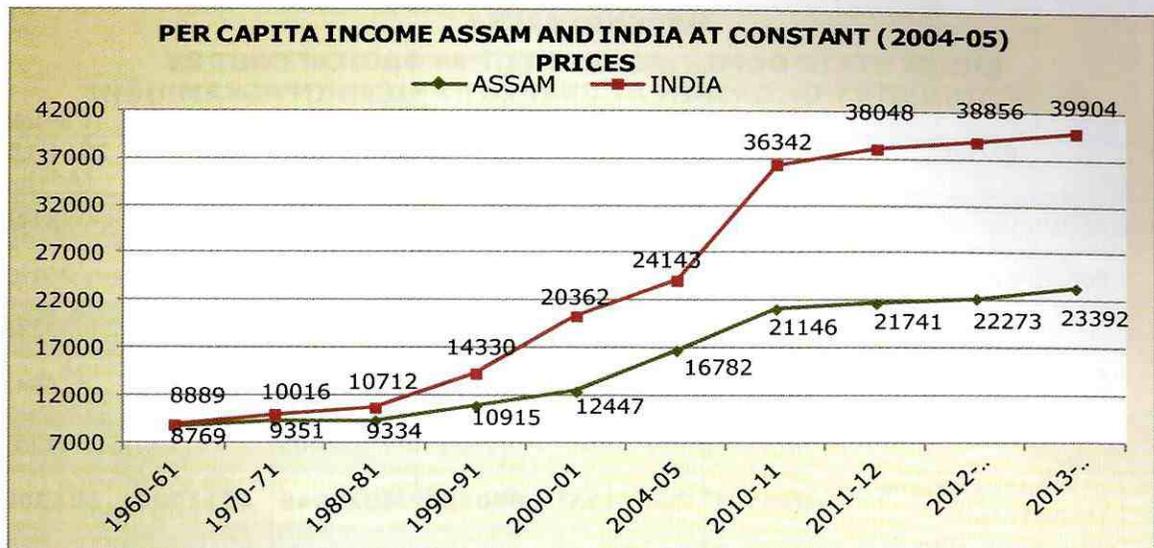
**TABLE – 3.4**  
**PER CAPITA INCOME OF ASSAM AND INDIA**

(in Rupees)

Year	Per Capita Income			
	Assam		India	
	At Current Prices	*At Constant (2004-05) Prices	At Current Prices	At Constant (2004-05) Prices
1960-61	433	8769	373	8889
1970-71	743	9351	763	10016
1980-81	1673	9334	1852	10712
1990-91	5315	10915	5621	14330
2000-01	12803	12447	17295	20362
2004-05	16782	16782	24143	24143
2008-09	24099	18922	40775	31754
2009-10	28383	20406	46249	33901
2010-11	33087	21146	54021	36342
2011-12	36320	21741	61855	38048
2012-13	38945(P)	22273(P)	67839(P)	38856(P)
2013-14	44263(Q)	23392(Q)	74380(Q)	39904(Q)
2014-15	49480(A)	23968(A)	NA	NA

\*For 1960-61 to 2000-01 the base is 1999-2000.

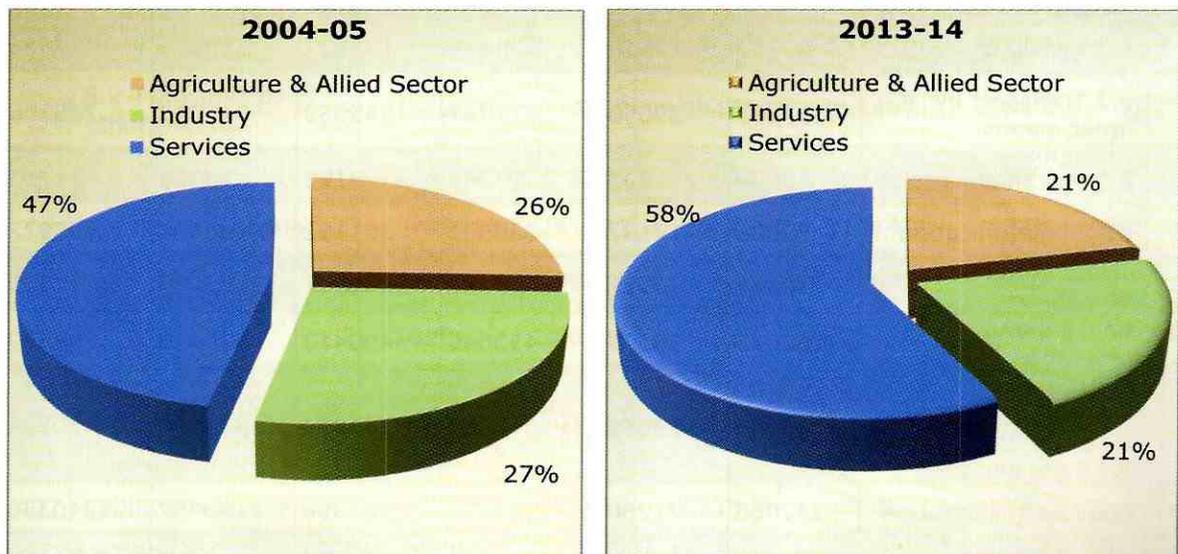
Source :Directorate of Economics & Statistics, Assam and Central Statistical Office (MOSPI), Govt. of India.



**SECTORAL COMPOSITION OF GROSS STATE DOMESTIC PRODUCT (GSDP)**

The sectoral composition of SDP gives comparable position of different sectors in the economy over a period of time which not only indicates the real structural changes taking place in the economy but also facilitates formulation of plans & various programmes for overall economic development of the State. It reveals from the above table that the share of 'Agriculture and Allied' sector in the GSDP has declined from 26 percent in 2004-05 (Base Year Estimates) to 20 percent in 2014-15 (Advance Estimates). Similar trend has been noticed in case of the share of Industry sector also since it has come down from 28 percent in 2004-05 to 23 percent in 2014-15 (A.E) depicting a gloomy industrial scenario in the State. Another important aspect has been noticed that individual contribution of Agriculture sector to GSDP has come down from 22 percent in 2004-05 to 17.0 percent in 2014-15 (A. E.).

**SECTORAL CONTRIBUTION TO GROSS STATE DOMESTIC PRODUCT (GSDP) AT CONSTANT (2004-05) PRICES**



On the other hand, the Services Sector has shown an encouraging growth trend of contribution to the State economy and has increased from 47 per cent in 2004-05 to 57 percent in 2014-15. Moreover, it has also been reveals that the share contribution of Agriculture & Allied sector and Industry sector to GSDP has been remained more or less at the same level since last few years. The State Economy however experienced a picturesque change over the periods as the primary sector witnessed a shift to service sector and the service sector has flourished very rapidly in the State's economy.

**APPENDIX – 3.1**  
**GROSS STATE DOMESTIC PRODUCT AT FACTOR COST BY**  
**INDUSTRY OF ORIGIN AT CURRENT PRICES IN ASSAM**

(₹ in lakh)

Sl. No	Sector	2004-05	2010-11	2011-12	2012-13 (P)	2013-14 (Q)	2014-15 (Adv)
1.	Agriculture	1158871	2455091	2536624	2670510	3148299	3531406
2.	Forestry and logging	127332	179330	225201	221367	241823	261839
3	Fishing	79363	238814	262754	311579	330473	372185
	<b>Agriculture and Allied</b>	<b>1365566</b>	<b>2873235</b>	<b>3024579</b>	<b>3203456</b>	<b>3720595</b>	<b>4165430</b>
4	Mining and Quarrying	467925	711900	816017	826489	791185	847575
	<b>a) Primary Sector (Sub-Total)</b>	<b>1833491</b>	<b>3585135</b>	<b>3840596</b>	<b>4029945</b>	<b>4511780</b>	<b>5013005</b>
5.	<b>Manufacturing (Total)</b>	<b>562146</b>	<b>1021453</b>	<b>1061466</b>	<b>1062523</b>	<b>1131625</b>	<b>1248806</b>
	5.1 Registered	434687	771439	779351	757324	800825	883471
	5.2 Unregistered	127459	250014	282115	305199	330800	365335
6.	Construction	342026	980372	1207478	1234060	1406698	1719382
7.	Electricity, Gas and Water supply	98412	133359	130958	169940	177298	189001
	<b>b) Secondary Sector (Sub-Total)</b>	<b>1002584</b>	<b>2135184</b>	<b>2399902</b>	<b>2466523</b>	<b>2715621</b>	<b>3157189</b>
	<b>c) Industry [4+(b)]</b>	<b>1470509</b>	<b>2847084</b>	<b>3215919</b>	<b>3293012</b>	<b>3506806</b>	<b>4004764</b>
8.	Transport, Storage and Communication (Total)	329700	751081	883145	1108921	1351610	1700786
	8.1 Railways	89783	175189	164655	193927	210375	227826
	8.2 Transport by other means	157887	398500	472727	545659	645730	765306
	8.3 Storage	2509	6014	7232	8173	10029	11732
	8.4 Communication	79521	171378	238531	361162	485476	695922
9.	Trade, Hotel and Restaurant	752981	1491371	1756799	1992811	2182985	2411535
10.	Banking and Insurance	162017	383776	453645	490413	520973	598879
11.	Real Estate, Ownership of Dwelling and Business services	146463	276627	313587	341654	374698	420524
12.	Public administration	342066	712501	785974	902356	1153957	1240356
13.	Other services	770469	1933121	2156659	2507464	3134408	3837485
	<b>d) Tertiary Sector (Sub -Total)</b>	<b>2503696</b>	<b>5548477</b>	<b>6349809</b>	<b>7343619</b>	<b>8718631</b>	<b>10209565</b>
<b>14.</b>	<b>State Domestic Product</b>	<b>5339771</b>	<b>11268796</b>	<b>12590307</b>	<b>13840087</b>	<b>15946032</b>	<b>18379759</b>
<b>15.</b>	<b>State Per Capita Income (in Rupees)</b>	<b>18993</b>	<b>37053</b>	<b>40890</b>	<b>44406</b>	<b>50558</b>	<b>56919</b>

Source: Directorate of Economics and Statistics.

## APPENDIX – 3.2

GROSS STATE DOMESTIC PRODUCT AT FACTOR COST BY  
INDUSTRY OF ORIGIN AT CONSTANT (2004-05) PRICES IN ASSAM

(₹ in lakh)

Sl. No	Sector	2004-05	2010-11	2011-12	2012-13 (P)	2013-14 (Q)	2014-15 (Adv)
1.	Agriculture	1158871	1378848	1393846	1418045	1479852	1526568
2.	Forestry and logging	127332	168421	174605	183497	191550	199692
3	Fishing	79363	97471	104077	124486	129563	138237
	<b>Agriculture and Allied</b>	<b>1365566</b>	<b>1644740</b>	<b>1672528</b>	<b>1726028</b>	<b>1800965</b>	<b>1864497</b>
4	Mining and Quarrying	467925	424639	436172	434273	422401	423243
	<b>a) Primary Sector (Sub-Total)</b>	<b>1833491</b>	<b>2069379</b>	<b>2108700</b>	<b>2160301</b>	<b>2223366</b>	<b>2287740</b>
5.	<b>Manufacturing (Total)</b>	562146	593301	617650	638696	661153	690500
	5.1 Registered	434687	395937	408484	417328	436921	452634
	5.2 Unregistered	127459	197364	209166	221368	224232	237866
6.	Construction	342026	581817	609235	706959	803128	918855
7.	Electricity, Gas and Water supply	98412	87512	88443	97178	93831	93963
	<b>b) Secondary Sector (Sub-Total)</b>	<b>1002584</b>	<b>1262630</b>	<b>1315328</b>	<b>1442833</b>	<b>1558112</b>	<b>1703318</b>
	<b>c) Industry [4+(b)]</b>	1470509	1687269	1751500	1877106	1980513	2126561
8.	Transport, Storage and Communication (Total)	329700	644749	710805	767651	858073	963163
	8.1 Railways	89783	146012	150263	157316	169226	180021
	8.2 Transport by other means	157887	234302	274802	294497	316453	343574
	8.3 Storage	2509	3354	3501	4695	5308	5833
	8.4 Communication	79521	261081	282239	311143	367086	433735
9.	Trade, Hotel and Restaurant	752981	1030917	1063391	1139563	1155290	1198913
10.	Banking and Insurance	162017	380224	432583	438438	444326	491901
11.	Real Estate, Ownership of Dwelling and Business services	146463	203124	215779	232681	252942	273496
12.	Public administration	342066	521863	521698	526464	629408	638998
13.	Other services	770469	1231556	1316084	1371933	1564655	1685634
	<b>d) Tertiary Sector (Sub -Total)</b>	2503696	4012433	4260340	4476730	4904694	5252105
<b>14.</b>	<b>State Domestic Product</b>	<b>5339771</b>	<b>7344442</b>	<b>7684368</b>	<b>8079864</b>	<b>8686172</b>	<b>9257303</b>
<b>15.</b>	<b>State Per Capita Income (in Rupees)</b>	<b>18993</b>	<b>24149</b>	<b>24957</b>	<b>25924</b>	<b>27540</b>	<b>28625</b>

Source: Directorate of Economics and Statistics.

**APPENDIX – 3.3**  
**NET STATE DOMESTIC PRODUCT AT FACTOR COST BY**  
**INDUSTRY OF ORIGIN AT CURRENT PRICES IN ASSAM**

(₹ in lakh)

Sl. No	Sector	2004-05	2010-11	2011-12	2012-13 (P)	2013-14 (Q)	2014-15 (Adv)
1.	Agriculture	1068008	2302085	2372301	2475821	2921181	3256656
2.	Forestry and logging	125651	177123	222537	218850	238887	258287
3	Fishing	69139	202084	222245	265472	276686	307118
	<b>Agriculture and Allied</b>	<b>1262798</b>	<b>2681292</b>	<b>2817083</b>	<b>2960143</b>	<b>3436754</b>	<b>3822061</b>
4	Mining and Quarrying	390230	571395	654969	638855	572297	582781
	<b>a) Primary Sector (Sub-Total)</b>	<b>1653028</b>	<b>3252687</b>	<b>3472052</b>	<b>3598998</b>	<b>4009051</b>	<b>4404842</b>
5.	<b>Manufacturing (Total)</b>	432430	837014	819676	736294	751056	788422
	5.1 Registered	321900	619851	573827	469138	464636	476775
	5.2 Unregistered	110530	217163	245849	267156	286420	311647
6.	Construction	328743	929293	1152227	1165303	1326488	1622350
7.	Electricity, Gas and Water supply	44408	76545	65083	97894	93251	87327
	<b>b) Secondary Sector (Sub-Total)</b>	<b>805581</b>	<b>1842852</b>	<b>2036986</b>	<b>1999491</b>	<b>2170795</b>	<b>2498099</b>
	<b>c) Industry [4+(b)]</b>	1195811	2414247	2691955	2638346	2743092	3080880
8.	Transport, Storage and Communication (Total)	264518	599236	710929	907939	1117152	1417156
	8.1 Railways	54980	106501	102721	124981	129945	130528
	8.2 Transport by other means	140400	352576	414285	476466	565012	667659
	8.3 Storage	2371	5423	6506	7289	8998	10485
	8.4 Communication	66767	134736	187417	299203	413197	608484
9.	Trade, Hotel and Restaurant	730861	1424305	1668702	1883703	2055703	2257559
10.	Banking and Insurance	158850	378227	447477	483711	513155	589421
11.	Real Estate, Ownership of Dwelling and Business services	103593	164083	186966	195055	203680	213639
12.	Public administration	275000	601974	660630	746031	971593	1019746
13.	Other services	726643	1799307	1999540	2323045	2919271	3577228
	<b>d) Tertiary Sector (Sub -Total)</b>	<b>2259465</b>	<b>4967132</b>	<b>5674244</b>	<b>6539484</b>	<b>7780554</b>	<b>9074749</b>
<b>14.</b>	<b>State Domestic Product</b>	<b>4718074</b>	<b>10062671</b>	<b>11183282</b>	<b>12137973</b>	<b>13960400</b>	<b>15977690</b>
<b>15.</b>	<b>State Per Capita Income (in Rupees)</b>	<b>16782</b>	<b>33087</b>	<b>36320</b>	<b>38945</b>	<b>44263</b>	<b>49480</b>

Source: Directorate of Economics and Statistics.

## APPENDIX – 3.4

NET STATE DOMESTIC PRODUCT AT FACTOR COST BY  
INDUSTRY OF ORIGIN AT CONSTANT (2004-05) PRICES IN ASSAM

(₹ in lakh)

Sl. No	Sector	2004-05	2010-11	2011-12	2012-13 (P)	2013-14 (Q)	2014-15 (Adv)
1.	Agriculture	1068008	1283447	1293594	1308269	1353671	1381530
2.	Forestry and logging	125651	166803	173050	182154	190006	197917
3	Fishing	69139	73644	75509	93880	94383	97800
	<b>Agriculture and Allied</b>	<b>1262798</b>	<b>1522622</b>	<b>1542153</b>	<b>1584303</b>	<b>1638060</b>	<b>1677247</b>
4	Mining and Quarrying	390230	290506	322936	309232	278673	258036
	<b>a) Primary Sector (Sub-Total)</b>	<b>1653028</b>	<b>1814400</b>	<b>1865089</b>	<b>1893535</b>	<b>1916733</b>	<b>1935283</b>
5.	<b>Manufacturing (Total)</b>	432430	441218	430495	395285	381365	368899
	5.1 Registered	321900	270471	248582	201552	188898	167545
	5.2 Unregistered	110530	170747	181913	193733	192467	201354
6.	Construction	328743	546714	566873	656321	744922	851950
7.	Electricity, Gas and Water supply	44408	38633	41670	48329	37682	29423
	<b>b) Secondary Sector (Sub-Total)</b>	<b>805581</b>	<b>1026565</b>	<b>1039038</b>	<b>1099935</b>	<b>1163969</b>	<b>1250272</b>
	<b>c) Industry [4+(b)]</b>	1195811	1317071	1361974	1409167	1442642	1508308
8.	Transport, Storage and Communication (Total)	264518	528118	582329	623649	692551	772905
	8.1 Railways	54980	94482	105455	109586	114363	116959
	8.2 Transport by other means	140400	198435	228815	242183	256321	274456
	8.3 Storage	2371	3007	3038	4165	4699	5133
	8.4 Communication	66767	232194	245021	267715	317168	376357
9.	Trade, Hotel and Restaurant	730861	983041	1002930	1069191	1074401	1105936
10.	Banking and Insurance	158850	376078	427875	433512	438664	485393
11.	Real Estate, Ownership of Dwelling and Business services	103593	128960	135917	146435	153807	159546
12.	Public administration	275000	434772	438929	430808	519457	512615
13.	Other services	726643	1139064	1202081	1244642	1418341	1517454
	<b>d) Tertiary Sector (Sub -Total)</b>	<b>2259465</b>	<b>3590033</b>	<b>3790061</b>	<b>3948237</b>	<b>4297221</b>	<b>4553849</b>
<b>14.</b>	<b>State Domestic Product</b>	<b>4718074</b>	<b>6430998</b>	<b>6694188</b>	<b>6941707</b>	<b>7377923</b>	<b>7739404</b>
<b>15.</b>	<b>State Per Capita Income (in Rupees)</b>	<b>16782</b>	<b>21146</b>	<b>21741</b>	<b>22273</b>	<b>23392</b>	<b>23968</b>

Source: Directorate of Economics and Statistics.

## APPENDIX – 3.5

MOVEMENT OF GROSS STATE DOMESTIC PRODUCT (GSDP)  
OF ASSAM AT CURRENT AND CONSTANT (2004-2005) PRICES

YEAR	Gross State Domestic Product (Rupees in Lakh)		Per capita Gross State Domestic Product ( in Rupees)	
	At current Prices	At constant (2004-05) Prices	At current Prices	At constant (2004-05) Prices
2004-05	5339771	5339771	18993	18993
2010-11	11268796	7344442	37053	24149
2011-12	12590307	7684368	40890	24957
2012-13 (P)	13840087	8079864	44406	25924
2013-14 (Q)	15946032	8686172	50558	27540
2014-15 (Adv)	18379759	9243163	56919	28625

Source: Directorate of Economics and Statistics.

## APPENDIX – 3.6

MOVEMENT OF NET STATE DOMESTIC PRODUCT (NSDP) OF  
ASSAM AT CURRENT AND CONSTANT (2004-2005) PRICES

YEAR	Net State Domestic Product (Rupees in Lakh)		Per capita Net State Domestic Product ( in Rupees)	
	At current Prices	At constant (2004-05) Prices	At current Prices	At constant (2004-05) Prices
2004-05	4718074	4718074	16782	16782
2010-11	10062671	6430998	33087	21146
2011-12	11183282	6694188	36320	21741
2012-13 (P)	12137973	6941707	38945	22273
2013-14 (Q)	13960400	7377923	44263	23392
2014-15 (Adv)	15977690	7739404	49480	23968

(P) Provisional : (Q) Quick Estimate : (Adv) Advance Estimate.

Source: Directorate of Economics and Statistics.

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## CHAPTER – IV

### STATE FINANCE

The fiscal reform measures adopted by the State started yielding favourable results since 2005-06. During the year 2013-14 the State had a revenue surplus of ₹222.91 crore and a fiscal deficit of ₹3782.30 crore. The fiscal deficit was 2.37 percent of GSDP well below the 3 percent limit recommended by the Thirteenth Finance Commission. The debt-GSDP ratio during 2013-14 in the State was 17.22 percent well below the fiscal target of 28.4 percent prescribed by the Thirteenth Finance Commission. For the year 2014-15, it is expected to have a revenue surplus of ₹4065.51 crore and a fiscal deficit of ₹3981.71 crore. The total own tax revenues of the State during 2013-14 have shown a growth of 9.01 percent over the previous year. The gross VAT collection increased by 11 percent in 2013-14 over the previous year and contributing about 70 percent to the total own tax revenue during the year.

#### BUDGET 2014-15

The analysis of the Assam Government Budget 2014-15 reveals that the receipt under the consolidated fund of the State is expected to be ₹57311.40 crore comprising of ₹52696.81 crore on Revenue Account and ₹4614.59 crore under Capital Account. After taking into account the estimated receipt of ₹329365.94 crore under Public Accounts and ₹50.00 crore under Contingency Fund, the aggregate receipts amount is expected to be ₹386727.34 crore. The total expenditure from the consolidated fund of the State in 2014-15 is estimated at ₹58104.55 crore, of which ₹48631.31 crore is on Revenue Account and ₹9473.24 crore is on Capital Account. Out of the total estimated expenditure of ₹388113.11 crore for the year 2014-15, ₹329958.56 crore will be spent from Public Account and ₹50.00 crore under Contingency Fund. Thus, during the year 2014-15, it is expected to have a deficit of ₹1385.77 crore which together with the opening deficit of ₹972.14 crore for the year 2014-15 will lead to an estimated closing deficit of ₹2357.91 crore.

**TABLE – 4.1**  
**BUDGET AT A GLANCE**

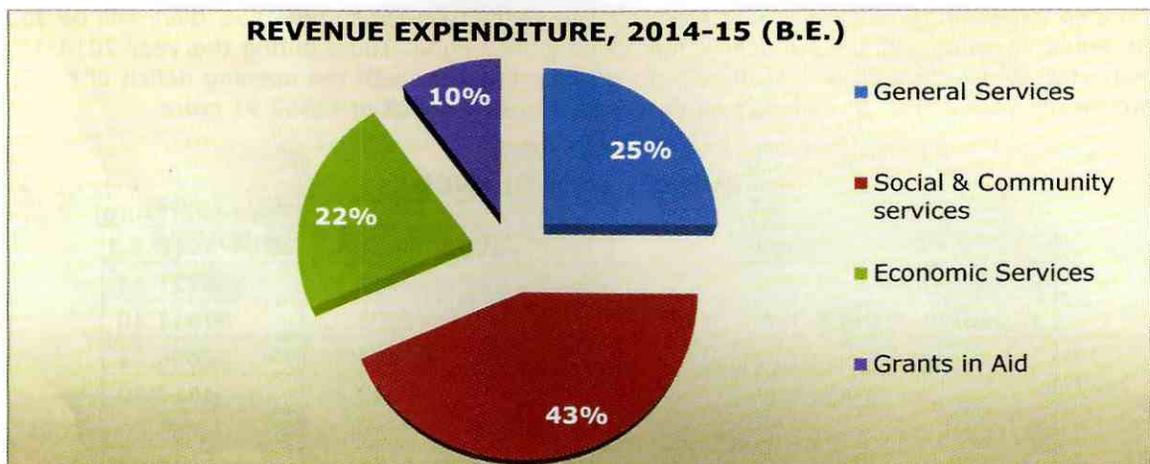
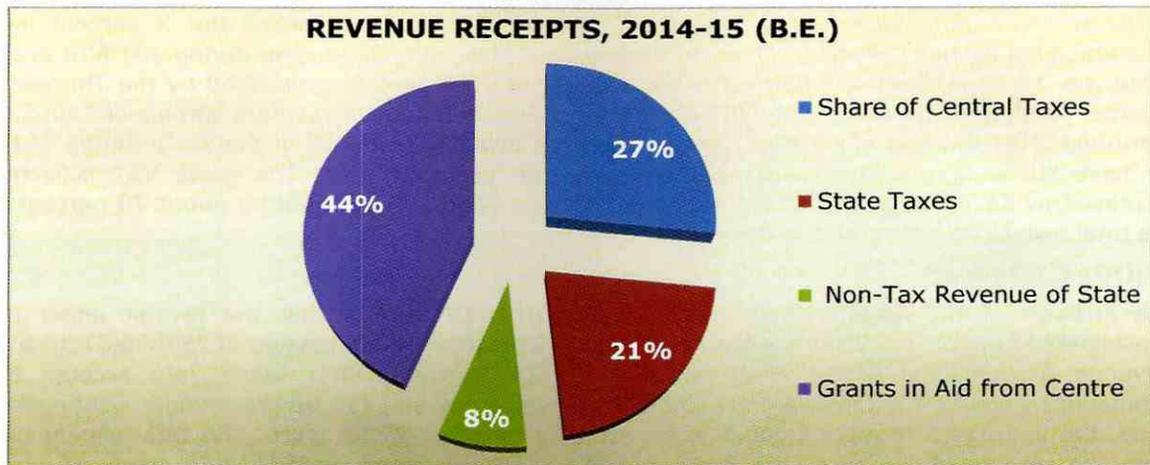
Item	2013-14(R.E.)	2014-15(B.E.)
(Rupees in crore)		
<b>A. Receipts</b>	343302.17	386727.34
<b>I. Consolidated Fund</b>	42602.72	57311.40
Revenue Account	41453.34	52696.81
Capital Account	1149.38	4614.59
II. Contingency Fund Accounts	50.00	50.00
III. Public Accounts	300649.45	329365.94
<b>B. Expenditure</b>	342700.04	388113.11
<b>I. Consolidated Fund</b>	52890.83	58104.55
Revenue Account	41227.90	48631.31
Capital Account	11662.93	9473.24
II. Contingency Fund Accounts	50.00	50.00
III. Public Accounts	289759.21	329958.56
<b>C. Transactions during the year (A-B)</b>		
Surplus (+)	602.13	
Deficit (-)		(-) 1385.77
<b>D. Opening balance</b>		
Surplus (+)		
Deficit (-)	(-)1574.26	(-)972.14
<b>E. Closing balance (C+D)</b>		
Surplus (+)		
Deficit (-)	(-)972.13	(-)2357.91

R.E. = Revised Estimate, B.E. = Budget Estimate.

Source: Assam Budget in Brief, 2014-15, Assam.

### THE REVENUE BUDGET 2014-15

During the financial year 2014-15, the Government of Assam expects to receive ₹52696.81 crore under Revenue account against the total outlay amounting to ₹48631.31 crore. The percentage share of major components of the Revenue account and Revenue expenditure in the Budget 2014-15 may be evident from the figures given below.



During the fiscal year, 2014-15 the State expects to receive ₹11345.42 crore as Tax Revenues and ₹4298.25 crore as Non-Tax revenue amounting to ₹15643.67 crore under State's Own Resources. The expected transfer from the Centre is ₹37053.14 crore which include ₹14105.08 crore as Share in Central Taxes and ₹22948.05 crore as Grants from the Centre. The Revenue Expenditure is segregated into plan and non-plan expenditure. The expected Plan expenditure in the Budget 2014-15 is ₹17585.41 crore and the estimated Non-Plan expenditure is ₹31045.89 crore of which expected interest payment component is ₹2405.26 crore and under Pension the expenditure is expected to be ₹3509.10 crore. Budget estimate of 2014-15 shows revenue surplus of ₹4065.51 crore and fiscal deficit is pegged at 2.17 percent of GSDP.

### THE CAPITAL BUDGET 2014-15

The Budget estimates anticipate receipt of ₹4609.10 crore from Public Debt and ₹54.90 crore from recovery of loans and Advances by the State Government. As regards to the allocation of funds under the three important components of Capital expenditure, the Budget 2014-15 provides ₹7459.16 crore for Capital Outlay, ₹1420.54 crore for Repayment of Public Debt and ₹593.54 crore for Loans and Advances. The expected deficit in Capital budget is estimated at ₹4858.65 crore for 2014-15.

### SHARE OF PLAN EXPENDITURE IN THE BUDGET 2014-15

The table 4.2 shows the relative share of the Plan Schemes under different heads in the budget provision for 2014-15.

**TABLE-4.2**  
**SHARE OF PLAN EXPENDITURE UNDER DIFFERENT HEADS**

(Rs. in crore)

Heads	Total Budget Provision			Budget for Plan Schemes			Plan expenditure to total budget provision(%)
	Revenue	Capital	Total	Revenue	Capital	Total	
General Service	12249.17	581.89	12831.06	643.34	142.48	785.82	1.4
Social & community service	20932.88	1441.57	22374.45	8917.58	231.15	9148.73	15.7
Economic	10668.74	5435.70	16104.44	6371.40	3193.63	9565.03	16.5
A) Grants-in-Aid & Contribution (State)	1821.20	-	1821.20	-	-	-	-
B) Autonomous Councils	2959.32	-	2959.32	826.35	589.13	1415.48	2.4
Loans and Advances	-	593.54	593.54	-	239.44	239.44	0.4
Public Debt including Inter State Settlement & Appropriation to Contingency Fund	-	1420.54	1420.54	-	-	-	-
<b>Total</b>	<b>48631.31</b>	<b>9473.24</b>	<b>58104.55</b>	<b>16758.67</b>	<b>4395.83</b>	<b>21154.50</b>	<b>36.4</b>

Source: Assam Budget in Brief, 2014-15, Assam.

It reveals from the table that out of the total budget provision for the year 2014-15, the share of total plan expenditure is 36.4 percent of which share of Economic Services is the highest with 16.5 percent followed by Social and Community Services (15.7%), Autonomous Councils (2.4%) and General Services (1.4%).

#### FISCAL SCENARIO OF THE STATE

The fiscal scenario in the State took a positive turn in 2005-06 due to the fiscal reform measures adopted by the State in 2004-05 and continued up to 2008-09. In 2009-10, revenue deficit increased to ₹1347.71 crore and Non-plan revenue deficit and fiscal deficit escalated to ₹2457.05 crore and ₹4043.42 crore respectively. This heavy downslide is largely accountable to the revision of pay and pension as per revision of Assam Pay Rules, 2010 as per recommendations of the 6<sup>th</sup> Assam Pay Commission. Thereafter the revenue deficit turned into surplus with ₹53.12 crore in 2010-11 and ₹926.85 crore, ₹1554.06 crore and ₹222.91 crore in 2011-12, 2012-13 and 2013-14 respectively. The Budget estimate of 2014-15 shows revenue surplus of ₹4065.51 crore.

During 2010-11, Non-plan revenue deficit came down to ₹755.87 crore in 2010-11 from ₹2447.75 crore in 2009-10. The Non-Plan revenue deficit ended with surplus of ₹538.06 crore in 2011-12 and ₹31.28 crore in 2012-13. It again turned to deficit with ₹1039.63 crore in 2013-14 and is expected to end favourably with a surplus of ₹679.17 crore in 2014-15.

During the period 2010-11 to 2013-14, fiscal deficit declined over the fiscal deficit of ₹4043.42 crore in 2009-10 which stood at a 4.37 percent of GSDP crossing the 3.5 percent of GSDP limit of State's FRBM Act and also 4 percent of GSDP limit raised by Government of India for 2009-10 as a part of stimulus packages to facilitate more borrowings for increasing capital expenditure for recovery from economic recession. The fiscal deficit came down to ₹1516.49 crore being 1.10 percent of GSDP in 2012-13 but increased to ₹3782.30 crore with 2.37 percent of GSDP in 2013-14.

Budget estimate of 2014-15 shows fiscal deficit of ₹3981.71 crore and is pegged at 2.17 percent of GSDP.

**TABLE – 4.3**  
**FISCAL PARAMETERS**

(Rs. in crore)

Year	Overall Revenue Deficit	Fiscal Deficit	Primary Deficit	Non-Plan Deficit	Fiscal Deficit as percentage of GDP	GSDP at Current prices
2005-06	(-)1509.08	(-)355.71	(-)1865.83	(-)281.17	(-)0.60	59385
2006-07	(-)2210.42	(-)711.39	(-)2227.06	(-)156.25	(-)1.10	64692
2007-08	(-)2580.76	(-)790.39	(-)2302.33	(-)613.18	(-)1.11	71076
2008-09	(-)3833.71	(-)1406.79	(-)3000.12	(-)1492.26	(-)1.73	81074
2009-10	(+)1347.71	(+)4043.42	(+)2210.84	(+)2447.75	(+)4.37	95975
2010-11	(-)53.12	(+)1990.57	(+)78.44	(+)755.87	(+)1.91	112688
2011-12	(-)926.85	(+)1646.05	(-)428.44	(-)538.06	(+)1.31	125903
2012-13	(-)1554.07	(+)1516.49	(-)598.42	(-)31.28	(+)1.10	138401
2013-14	(-)222.91	(+)3782.30	(+)1583.85	(+)1039.63	(+)2.37	159460
2014-15(BE)	(-)4065.51	(+)3981.71	(+)1576.45	(-)679.17	(+)2.17	183798

N.B. (-)ve sign indicates surplus.

Source: Department of Finance (Economic Affairs), Government of Assam.

### REVENUE RECEIPTS

Revenue Receipts comprises of two major components – State's Own Resources and Transfer from the Centre. The trend of actual Revenue receipts for the last eight years from 2006-07 to 2013-14 and the Budget Estimate for 2014-15 is indicated in the table-4.4 below.

**TABLE – 4.4**  
**TOTAL REVENUE RECEIPTS**

(Rs. in crore)

Year	State's Own Resources			Transfer from the Centre				Total Revenue Receipts (4+8)
	Tax Revenues	Non-Tax Revenues	Total (2+3)	Share in Central Taxes	Plan Grants	Non Plan Grants	Total (5+6+7)	
2006-07	3483.32	1859.27	5342.59	3898.99	3716.67	708.70	8324.36	13666.95
2007-08	3359.50	2134.59	5494.09	4918.21	4093.65	818.98	9830.84	15324.93
2008-09	4150.21	2271.90	6422.11	5189.90	5444.10	1020.93	11654.93	18077.04
2009-10	4986.71	2752.94	7739.65	5339.53	5285.94	1519.37	12144.84	19884.49
2010-11	5929.84	2373.32	8303.16	7968.61	5864.94	868.22	14701.77	23004.93
2011-12	7638.24	2866.76	10505.00	9283.53	6876.55	790.32	16950.40	27455.40
2012-13	8250.21	2473.59	10723.80	10601.26	8017.88	1348.04	19967.18	30690.98
2013-14	8993.93	2705.03	11698.96	11575.51	8290.19	648.13	20513.83	32212.79
2014-15(BE)	11345.43	4298.25	15643.68	14105.08	20971.75	1976.30	37053.13	52696.81

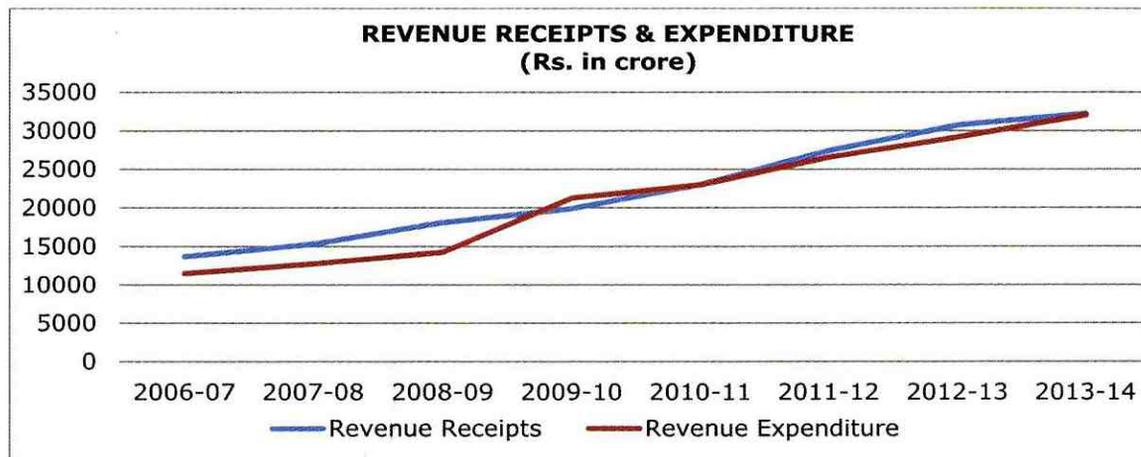
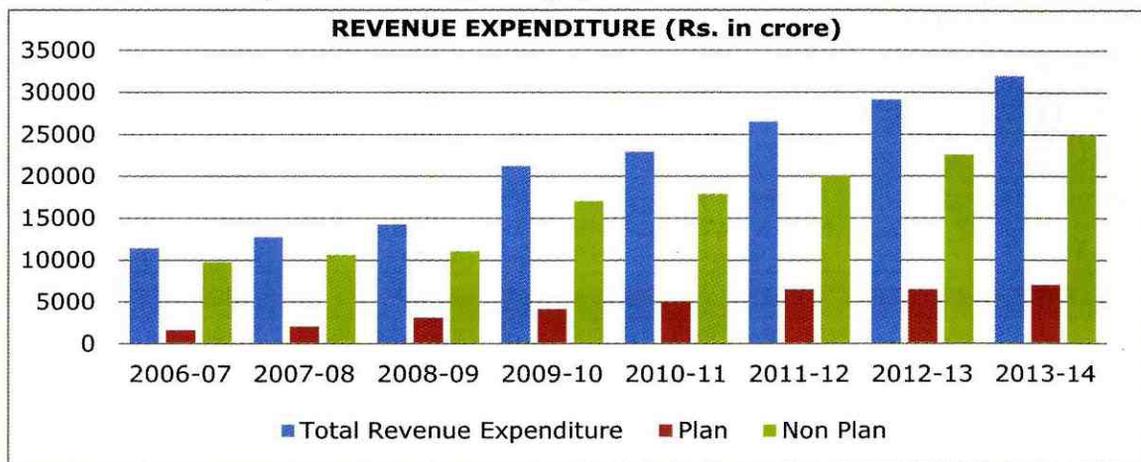
Source: Department of Finance (Economic Affairs), Government of Assam.

The above table depicts an increasing trend of total revenue receipts during the last eight years (2006-2014). The percentage increase of State taxes in 2013-14 over 2012-13 was 9 percent against 8 percent increase in 2012-13 over the previous year. The State taxes increased by 29 percent in 2011-12 over the previous year. The increase of share in Central taxes in 2013-14 was 9 percent than that of 14 percent increase in 2012-13 over the previous year. During 2013-14, the total Revenue receipts was ₹32212.79 crore of which the share of State Taxes was 28 percent, non-tax revenue was 8 percent, the share of Central Taxes was 36 percent and Plan Grants from the Centre was 26 percent and Non-Plan Grants from the Centre was 2 percent.

The Budget estimates for the year 2014-15 shows that the State's Own Resources is expected to increase by 34 percent of which, State Own Tax Revenues is expected to increase by 26 percent and Non-Tax Revenues by 59 percent. During the budget year, transfer from the Centre is expected to increase by 80 percent of which share in Central Taxes is expected to increase by 22 percent, Plan grants by 153 percent and Non-Plan Grants by 205 percent.

**REVENUE EXPENDITURE**

Revenue expenditure is segregated into plan and non-plan expenditure. The volume of total Revenue Receipts, total Revenue Expenditure, Plan Expenditure and Non-plan Expenditure from 2006-07 to 2013-14 is presented through the graphs given below.



The steady increase in Plan expenditure shows inclination of the Government to stimulate developmental activities. The volume of Plan expenditure to total expenditure was 15 percent during 2006-07 and 16 percent in 2007-08. The percentage share of plan expenditure to total expenditure remained above 20 percent during the next six years (2008-2014) with maximum of 24 percent in 2011-12. It is expected to spend around 36 percent of the total expenditure during 2014-15 on the Plan head.

Out of the total Revenue Expenditure amounting to ₹11456.53 crore during 2006-07, the proportion of expenditure on salary and wages was as high as 51 percent and remained more or less same up to 2008-09. It declined to 46 percent during 2009-10 and again soared to 56 percent during 2010-11 due to implementation of the Sixth Pay Commission and the arrear thereon payable since October 2008 and remained more or less at the same level during 2011-12. During 2012-13 and 2013-14 expenditure on Salary and Wages increased to 58 percent and 62 percent of the total Revenue Expenditure respectively.

Another component of revenue expenditure is interest payment. The trend since 2006-07 shows that the proportion of expenditure on interest payment to the total expenditure is decreasing. The table below shows the trend of actual expenditure of Government of Assam from 2006-07 to 2013-14 and the Budget Estimate for 2014-15.

**TABLE – 4.5**  
**REVENUE EXPENDITURE**

(Rs. in crore)

Year	Plan Expenditure		Non-Plan Expenditure				Total Revenue Expenditure
	Total	Salary	Total	Interest Payment	Salary	Pension	
2006-07	1662.50	200.21	9794.03	1515.67	4484.19	1177.86	11456.53
2007-08	2067.38	172.62	10676.78	1512.24	5068.58	1340.68	12744.16
2008-09	3110.65	256.68	11132.68	1593.33	5583.70	1437.37	14243.33
2009-10	4168.91	297.59	17063.29	1832.58	7804.80	1769.28	21232.20
2010-11	5055.96	413.18	17895.86	1912.12	10030.59	2384.53	22951.82
2011-12	6487.76	668.89	20040.79	2074.40	10978.54	3136.07	26528.55
2012-13	6495.09	818.12	22641.83	2114.91	12452.21	3778.87	29136.92
2013-14	7027.65	773.01	24962.23	2198.45	14841.44	4264.13	31989.88
2014-15(B.E.)	17585.41		31045.89	2405.26		3509.10	48631.30

Source: Department of Finance (Economic Affairs), Government of Assam.

**NON-DEBT CAPITAL EXPENDITURE**

Non-debt capital Expenditure consists of capital outlay and lending. This excludes loan repayment. The trend of actual capital expenditure during the period from 2006-07 to 2013-14 is indicated in the table given below.

**TABLE – 4.6**  
**NON-DEBT CAPITAL EXPENDITURE**

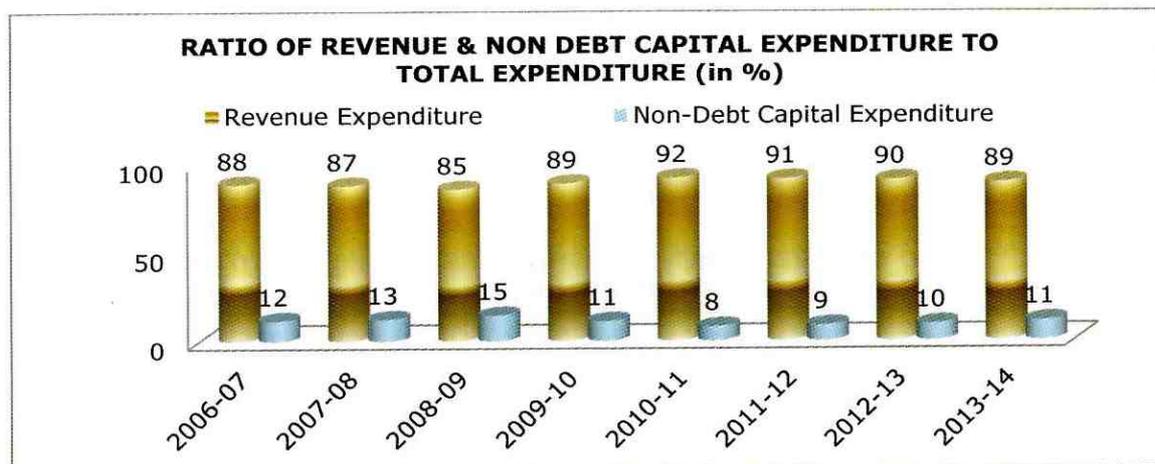
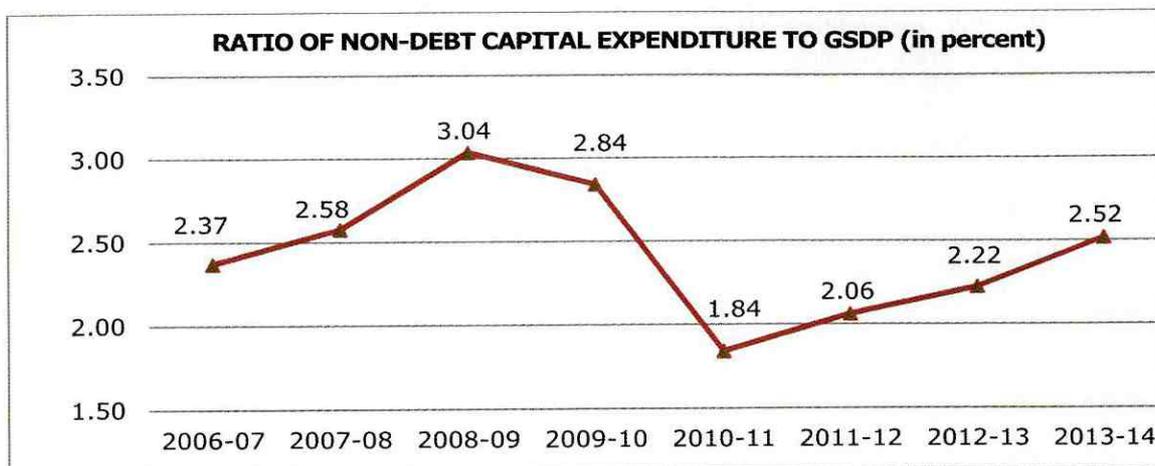
(Rs. in crore)

Year	Capital Outlay			Lending			Total Non-Debt Capital Expenditure	Total Revenue Expenditure	Total Expenditure (Col 8+ Col 9)
	Plan	Non-Plan	Total	Plan	Non-Plan	Total			
1	2	3	4	5	6	7	8(Col.4+ Col.7)	9	10
2006-07	1403.11	49.86	1452.97	76.85	3.78	80.63	1533.60	11456.53	12990.13
2007-08	1470.83	217.28	1688.11	139.80	3.09	142.89	1831.00	12744.16	14575.16
2008-09	2286.15	86.86	2373.01	75.09	13.65	88.74	2461.75	14243.33	16705.08
2009-10	2548.98	80.37	2629.35	96.99	2.24	99.23	2728.58	21232.20	23960.78
2010-11	1929.97	70.92	2000.89	70.78	0.10	70.88	2071.77	22951.82	25023.59
2011-12	2431.34	74.67	2506.01	81.81	6.47	88.28	2594.29	26528.55	29122.84
2012-13	2544.96	72.32	2617.28	71.34	389.31	460.65	3077.93	29136.92	32214.85
2013-14	3088.59	100.65	3189.24	317.83	504.20	822.03	4011.27	31989.89	36001.16

Source: Department of Finance (Economic Affairs), Government of Assam.

**SHARE OF CAPITAL EXPENDITURE TO TOTAL EXPENDITURE**

Size of capital expenditure actually determines the level of investment made for development purposes, which acts as a catalyst for accelerating the economic development. Zero revenue deficit or revenue surpluses help the State for full utilisation of borrowed funds for generating capital assets for revenue earnings. Thus, contracting revenue expenditure to an extent possible helps to generate funds for capital investment. The graph below shows the trend of share in revenue and Non-Debt capital expenditure to total expenditure and capital expenditure as percentage of GSDP since 2006-07.



The break-up of total expenditure excluding Public Debt into Plan expenditure, General services, Social services and Economic services along with Development expenditure (Social services and Economic services) is given in the table-4.7 below.

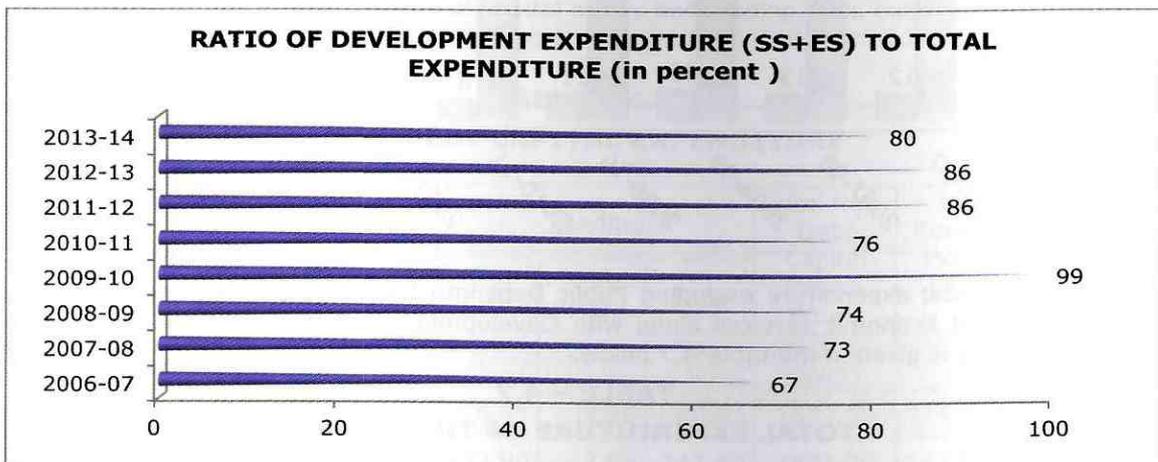
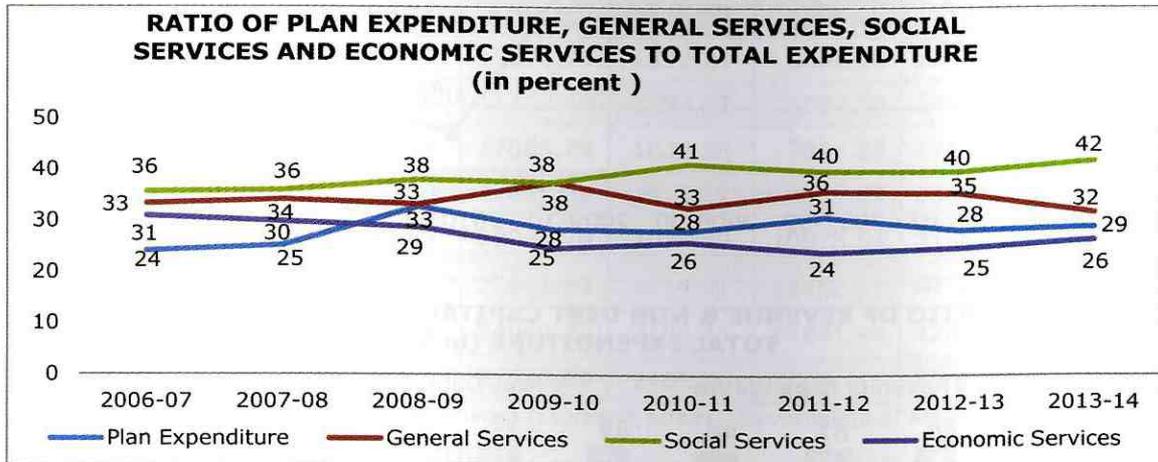
**TABLE - 4.7**  
**TOTAL EXPENDITURE OF THE STATE**

(Rs. in crore)

Year	Plan Expenditure	General Services (GS)	Social Services (SS)	Economic Services (ES)	Total Development (SS+ES)	Total Expenditure (Col.3+4+5)
2006-07	3142.46	4333.32	4634.36	4022.45	8656.81	12990.13
2007-08	3678.01	4976.64	5247.81	4350.71	9598.52	14575.16
2008-09	5471.89	5549.80	6350.80	4804.48	11155.28	16705.08
2009-10	6814.88	9004.29	9018.40	5938.09	14956.49	23960.78
2010-11	7056.71	8177.57	10337.26	6508.76	16846.02	25023.59
2011-12	9000.91	10468.00	11639.15	7015.69	18654.84	29122.84
2012-13	9111.39	11411.93	12797.97	8004.94	20802.91	32214.85
2013-14	10434.07	11430.00	15051.05	9520.11	24571.16	36001.16

Source: Department of Finance (Economic Affairs), Government of Assam.

The trend of public expenditure shown in above Table 4.6 and 4.7 it is evident that capital expenditure of the State Government, which was 12 percent of total expenditure in 2006-07 rose to 15 percent in 2008-09 and slide down to 11 percent in 2009-10. This sliding trend of capital expenditure during 2009-10 to 2011-12 may be attributable to abrupt rise of salary and pension expenditure on the revenue account owing to implementation of revised pay scale and pension of the employees of the State Government. During 2012-13 and 2013-14, capital expenditure increased by almost 10 percent and 11 percent of the total expenditure respectively.



The above figure shows that out of the two constituents of development expenditure, expenditure on social services shows a slight increasing trend while expenditure on economic services is on a decreasing trend since 2006-07 though remained high during 2012-13 and 2013-14 with 25 and 26 percent respectively from 24 percent in 2011-12. Plan expenditure as a percentage of total expenditure has increased from 24 percent in 2006-07 to 28 percent in 2012-13 and to 29 percent during 2013-14. However, revenue expenditure still continues to remain above 80 percent of total expenditure during the period from 2006-07 to 2013-14 and capital expenditure is less than 3 percent of GSDP. Capital expenditure, which was 2.37 percent of GSDP in 2006-07 increased to 3.04 percent in 2008-09 and again went on a decreasing trend to reach 1.84 percent in 2010-11. During the last three years the non-debt capital expenditure is on an increasing trend reaching 2.52 percent of GSDP in 2013-14. In order to accelerate economic growth there is need to substantial increase of capital expenditure.

**BORROWINGS AND REPAYMENT**

Sources of borrowings of the State Government are loans from the market, loans from financial institutions/banks, NSSF loans, loans from the Centre against EAPs and State Provident Fund & GIS. State Government usually resorts to borrowings to meet the fiscal deficit. The prudent level of borrowings is the 3 percent fiscal deficit of GSDP. The Table below shows the position of actual borrowings and repayment of loans for the last eight years from 2006-07 to 2013-14 and Budget Estimate for 2014-15.

**TABLE – 4.8**  
**BORROWINGS AND REPAYMENT**

(Rs. in crore)

Year	Borrowings	Repayment of loans	Net borrowings	Net Borrowing Ceiling fixed by Govt. of India
2006-07	1681.70	711.33	970.37	2180.00
2007-08	1852.00	970.89	881.11	2223.31
2008-09	3505.40	1018.46	2486.94	2540.00
2009-10	2945.08	1272.82	1672.26	3223.00
2010-11	2998.50	1336.15	1662.35	2951.00
2011-12	2114.47	1673.26	441.21	3447.00
2012-13	2757.75	2094.62	663.13	3115.00
2013-14	2650.77	1794.77	856.00	4304.00
2014-15(B.E.)	6105.92	1964.51	4141.41	5355.00

Source: Department of Finance (Economic Affairs), Government of Assam.

The above table shows that year-wise State's net borrowings are far below the ceiling fixed by the Government of India (GOI) and this gradual decline is on account of revenue surpluses.

#### DEBT POSITION

The standard criteria for determining the debt sustainability of the States has been to arrive at the acceptable level of the debt-GSDP ratio and the ratio of interest payment to total revenue receipts. The outstanding debt position of the State has come down within the limit of 28 percent of GSDP recommended by the Twelfth Finance Commission. Moreover, in 2013-14 the debt stock of Govt. of Assam has declined to 16.88 percent of GSDP as against the limit of 28.4 percent of GSDP prescribed in the ASFRBM (Amendment) Act 2011 as stipulated by the Thirteenth Finance Commission. The Table below summarizes the debt position of the State from 2006-07 to 2013-14.

**TABLE – 4.9**  
**DEBT POSITION OF ASSAM**

(Rs. in crore)

Year	Market Loan	Institutional Loan	NSSF Loan	Central Loan	State Provident Fund	Year end total outstanding debt	Debt-GSDP Ratio (%)
2006-07	7296.53	417.74	4688.26	2775.31	3614.78	18792.62	29.05
2007-08	7841.09	511.80	4679.66	2708.44	3932.74	19673.73	27.68
2008-09	9855.85	645.26	4697.03	2639.56	4322.97	22160.67	27.33
2009-10	11261.30	690.92	4721.82	2346.38	4812.52	23832.94	24.83
2010-11	11561.34	760.05	5582.28	2238.69	5352.93	25495.28	22.62
2011-12	10906.58	841.39	6057.14	2143.48	5987.91	25936.50	20.60
2012-13	10210.18	836.78	6700.39	2056.86	6795.43	26599.64	19.22
2013-14	9624.52	886.02	7368.95	1943.54	7632.60	27455.63	17.22

Source: Department of Finance (Economic Affairs), Government of Assam.

It appears from the above table that outstanding debt position of the State has started improving since 2006-07. The debt-GSDP ratio has gradually come down from 29.05 percent in 2006-07 to 17.22 percent in 2013-14.

The reduction of debt stock has been possible by the State because of the adoption of the Government of India's debt swap policy in 2002-03 and relentless effort to bring down the revenue and fiscal deficits, as envisaged in the Fiscal Reform Facility of 11<sup>th</sup> Finance Commission and FRBM Act, 2005 of 12<sup>th</sup> and 13<sup>th</sup> Finance Commissions.

**INTEREST PAYMENT TO REVENUE RECEIPTS**

The position of interest payment to total revenue receipts in terms of percentage is indicated below:

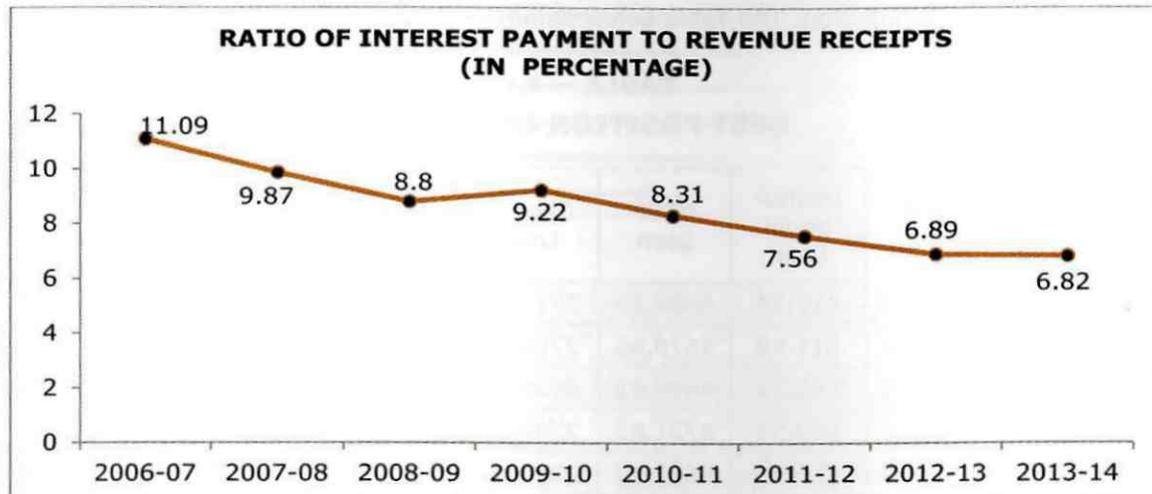
**TABLE - 4.10**  
**INTEREST PAYMENT TO REVENUE RECEIPTS**

(Rs. in crore)

Year	Total Revenue Receipts	Interest Payment	Ratio of Interest Payment to Revenue Receipts (in percent)
2006-07	13666.95	1515.67	11.09
2007-08	15324.93	1512.24	9.87
2008-09	18077.04	1593.33	8.80
2009-10	19884.49	1832.58	9.22
2010-11	23004.94	1912.12	8.31
2011-12	27455.40	2074.40	7.56
2012-13	30690.98	2114.91	6.89
2013-14	32212.79	2198.45	6.82

Source: Department of Finance (Economic Affairs), Government of Assam.

It revealed from the above Table that the ratio of interest payment to revenue receipts has been falling persistently and has come down to 6.82 percent in 2013-14 from 11.09 percent in 2006-07. The ratio of interest payment to revenue receipts remains well below the benchmark of 15 percent prescribed by the Twelfth Finance Commission.

**GOVERNMENT GUARANTEES**

State Government has long since been providing Government guarantees to various State PSUs and Cooperative Institutions for investment in different sectors of the economy against loans given by Banks and Financial Institutions. Since most of the borrowing PSUs failed to discharge guarantee liabilities in time due to their weak financial conditions and became defaulters, Banks and Financial Institutions started invoking the Government guarantees. To honour the Government guarantees invoked by the Banks and Financial Institutions, State Government had initiated a process of 'one time settlement' with the Banks and the Financial Institutions and liquidated major amount of Government guaranteed debt on behalf of the defaulted PSUs and misguided youths. In this way, State Government was able to reduce the outstanding contingent liability arising out of Government guarantees.

**TABLE - 4.11**  
**OUTSTANDING GOVERNMENT GUARANTEES AS ON 31<sup>ST</sup> MARCH**

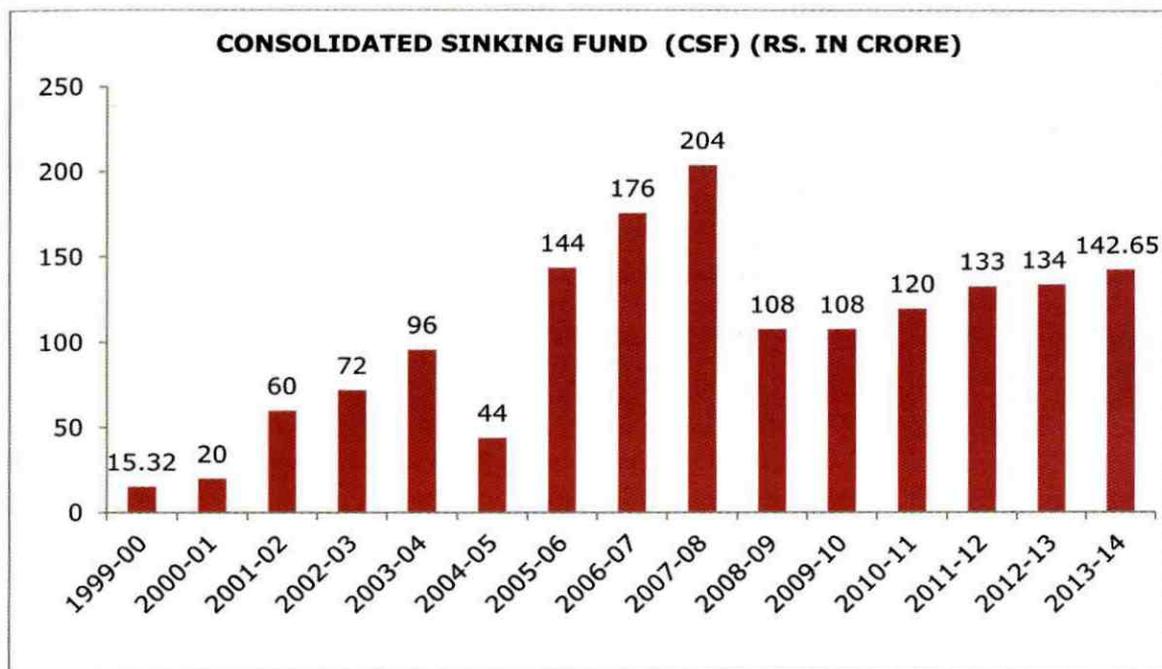
(Rs. in crore)

Year->	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
Principal	863.49	897.63	735.42	246.53	186.26	161.50	71.83	68.81
Interest	40.92	53.68	60.45	61.22	60.79	97.53	42.35	20.05

Source: Department of Finance (Economic Affairs), Government of Assam.

### CONSOLIDATED SINKING FUND AND GUARANTEE REDEMPTION FUND

Government of Assam constituted a Consolidated Sinking Fund (CSF) in 1999-2000 and revised the scheme for redemption of all outstanding loans of the State Government since 2007-08. Moreover, in order to liquidate future contingent liabilities arising out of Govt. Guarantees to various PSUs and Cooperative Institutions against loans given by Banks and Financial Institutions etc., Govt. of Assam has constituted a Guarantee Redemption Fund from 2012-13. At present the total fund under GRF is ₹29.74 crore of which contribution to the fund in the year 2012-13 was ₹19.74 and ₹10.00 crore in the year 2013-14.



Source: Department of Finance (Economic Affairs), Government of Assam.

The total contribution of the Government towards CSF as on 31<sup>st</sup> March 2014 is ₹1576.97 crore. State Government has not yet utilized the interest amount of CSF towards redemption of loans of the State Government.

### ACHIEVEMENT OF TAXATION DEPARTMENT DURING 2013-14

The Finance (Taxation) Department is responsible for collection of major share of tax revenue of the State. It contributes more than 80 percent of the State's Own Tax Revenue. During the year 2013-14, the Department collected ₹7719.62 crore as against ₹7050.56 crore in 2012-13 thereby achieving a growth of 9.5 percent during 2013-14. The State Government has fixed a target of ₹8900.00 crore for the year 2014-15. The provisional revenue collection of the Department up to September 2014 is ₹3889.41 crore showing a growth of 13 percent as against ₹3452.96 crore during the corresponding period of 2013-14. The Department administered nine different Taxation acts during 2013-14 and collection under different Taxation Acts during the years from 2006-07 to 2013-14 is presented in Table-4.12.

**TABLE – 4.12**  
**COLLECTION OF TAXES UNDER DIFFERENT TAXATION ACTS IN ASSAM**

(Rs. in crore)

TAXATION ACT	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
The Assam Value Added Tax, 2003	2015.36	2238.56	2694.77	3229.44	3952.20	5181.44	5689.88	6288.54
The Central Sales Tax Act, 1956	550.49	443.15	415.81	305.82	366.41	512.51	533.25	559.47
The Assam Entry Tax Act, 2008	216.43	9.13	268.84	526.64	461.67	518.75	364.14	404.69
The Assam Professions, Trades Calling & Employment Tax Act, 1947	108.80	124.54	137.61	150.06	160.58	164.27	168.31	186.36
The Assam Electricity Duty Act, 1964	15.89	4.62	22.36	27.07	41.58	36.67	41.82	40.54
The Assam Amusement and Betting Tax Act, 1939	2.70	2.93	2.41	3.50	4.51	5.87	63.07	38.93
The Assam Taxation on Luxuries (Hotels & Lodging Houses) Act, 1989	2.70	3.11	5.75	5.17	5.42	5.89	8.04	8.67
The Assam Taxation (on Specified Land) Act, 1990	63.92	68.55	80.00	78.87	92.02	95.64	99.72	102.43
The Assam Agricultural Income Tax Act, 1939	2.52	3.14	18.18	78.34	101.20	83.27	82.33	89.99
<b>Total</b>	<b>2978.84</b>	<b>2897.73</b>	<b>3645.73</b>	<b>4404.91</b>	<b>5185.59</b>	<b>6604.31</b>	<b>7050.56</b>	<b>7719.62</b>
<b>Growth Rate (in percent)</b>	<b>8.14</b>	<b>(-)2.72</b>	<b>25.81</b>	<b>21.00</b>	<b>17.7</b>	<b>27.4</b>	<b>6.76</b>	<b>9.5</b>

N.B.: Total of 2005-06 & 2006-07 includes arrear collection under the Assam Taxation (on Luxuries) act, 1997.

Source: Commissionerate of Taxes, Assam.

Collection under the Assam Electricity Duty Act during 2012-13 and 2013-14 includes Grants in Aid of ₹30.98 crore and ₹30.67 crore by the Govt. to ASEB. The actual electricity duty collected during 2012-13 and 2013-14 is ₹10.84 crore and ₹9.87 crore respectively recording a fall of 8.9 percent which is mainly due to exemption of electricity duty in respect of generator sets with capacity up to 25 KVA.

Collection of revenue under the Assam Amusement and Betting Tax has shown a negative growth of 38 percent during 2013-14 over 2012-13. This high amount of collection during 2012-13 is mainly due to realization of an arrear amount of ₹27.31 crore from the DTH operators as per the Honourable Gauhati High Court order.

During 2013-14, the Department under the Assam Value added Tax, collected ₹6288.54 crore as against ₹5689.88 crore in 2012-13 registering a growth of 11 percent. The collection up to September 2014 during the current financial year (2014-15) is ₹3280.39 crore with a growth of 11 percent over the corresponding period of the previous year.

## CHAPTER - V

## AGRICULTURE

The economy of Assam is largely rural and agrarian. Agriculture is still the principal occupation of majority of the rural population in the state in terms of employment and livelihood. About 98.4 percent of total land mass [Census, 2011] of the State is rural. The net cultivated area of the State is 28.11 lakh hectares (2011-12) which is about 87.38 percent of the total land available for agricultural cultivation in the State. The average operational holding is 1.10 hectare only and more than 85 percent of the farmer family is small and marginal farmers [Agricultural Census, Assam, 2010-11] with average land holding of only 0.63 hectare but in a scattered manner. The contribution of Agriculture Sector towards State economy registered gradual fall [GSDP at constant (2004-05) prices] during the period 2005-06 to 2012-13 (Provisional Estimate). The trend of growth of Agriculture Sector, on the other hand, was erratic [GSDP (at constant 2004-05 prices)] during the same period. The

**TABLE- 5.1**  
**TREND OF GROWTH OF AGRICULTURAL SECTOR**  
**[GSDP at Constant (2004-05) Prices]**  
(Figure in percentage)

Year	Contribution to GSDP	Annual Growth over the previous year
2005-06	21.4	1.9
2006-07	20.8	1.7
2007-08	20.4	3.0
2008-09	19.6	1.2
2009-10	19.1	6.5
2010-11	18.8	3.4
2011-12	18.2	1.1
2012-13 (P)	17.5	1.8
2013-14(Q)	17.9	4.3

Source: Directorate of Economics and Statistics, Assam.

growth rate is expected to show some remarkable recovery in 2013-14 as per Quick estimate. However, Agriculture sector continues to support more than 75 percent population of the State directly or indirectly providing employment to about 50 percent of the total workforce.

Despite endowed with diverse soil and climatic condition Assam vagaries of nature especially unseasonal floods and dry spells, wreaking havoc on crop land. In addition insufficient irrigation support, occurrence of chronic flood and river bank erosion affected large portion of Brahmaputra Valley impacted upon loss of agricultural land and further to crop loss and hampers crop production in the State.

However, the State Agriculture Department has given more thrust to increase production of food grains by implementing double cropping schemes to provide food security and nutrition to the growing population and prioritized exploitation of available and untapped resources to enhance the production, productivity of the crops including the horticultural crops and income of the farming community by harnessing the best technologies. The Department has formulated State as well as District specific plans depending on Agro-Climatic condition, growth potential and

**TABLE- 5.2**  
**TREND OF PRODUCTION OF FOODGRAINS IN ASSAM**  
(Figure in '000 tonnes)

Year	Total Rice	Wheat	Total Pulses	Total Food grains	Total oilseeds [excl. Coconut]
2001-02	3854	85	66	4023	156
2002-03	3738	78	60	3894	149
2003-04	3880	73	63	4034	157
2004-05	3470	68	61	3617	146
2005-06	3552	54	56	3680	114
2006-07	2916	67	59	3060	134
2007-08	3319	71	61	3468	139
2008-09	4009	55	62	4142	141
2009-10	4409	65	66	4557	147
2010-11	5033	56	72	5178	159
2011-12	4716	49	73	4857	156
2012-13	5128	44	84	5279	187
2013-14	5193	40	88	5402	186

Source: Directorate of Economics and Statistics, Assam.

specific requirement of Districts and giving thrust on multi cropping, improved farm mechanization & assured irrigation, using quality of certified HYV/Hybrid seeds, popularizing integrated Nutrient and Pest Management Schemes with the special use of bio-fertilizer and bio-pesticides and organic farming, development of Marketing infrastructure etc with available State Govt.'s own resources and the resources supplemented by many centrally sponsored and central sector schemes with a view to encourage the farming community and to create maximum potential for income and employment generation.

On the other hand, the agriculture sector in the hill districts of the State viz. Karbi Anglong and Dima Hasao is suffering from various weaknesses like low infrastructural facilities, low productivity due to extensive jhum cultivation, non-availability of market etc. The pattern of cultivation, agricultural infrastructure development and access to markets in these two hilly terrains are special areas of concern and great challenge before the State Government. Emphasis has been given by the State Agriculture Department for introduction of new schemes for production of cash crops, exploitation of horticultural potentialities through introduction of suitable citrus fruits production, production of spices and settled agriculture in terrace lands etc., in these two hilly districts to enhance agricultural productions as well as to substantially enhance contribution towards the economy of these two districts.

#### REQUIREMENT OF FOOD GRAINS DURING THE TWELFTH FIVE YEAR PLAN PERIOD

The food grain requirement during the Twelfth Five Year plan period in the State has been estimated on the basis of growth of population (projected) of 2001 Census and presented in the Table below. To fulfil the needs of food requirement, the State Agriculture Department has given thrust in the areas like making available of quality seeds and inputs to farmers, enhance areas under assured irrigation, enhance farm power, emphasis on SRL, increase coverage of areas under HYV/Hybrid paddy, increase areas under Pulses and Oilseeds, provide institutional support of credit and crop insurance to farmers, bring marketing reforms by establishing markets on PPP mode, Procurement of paddy at GP level etc.

TABLE- 5.3

#### FOOD REQUIREMENT DURING THE TWELFTH FIVE YEAR PLAN PERIOD IN ASSAM

Year	Projected Population (in lakh)	Adult Population (in lakh)	Food requirement(in lakh MT)				Total Food grains (in lakh MT)
			Rice	Wheat	Pulses	Oilseeds	
2012-13	316.97	253.58	41.65	5.55	2.78	3.70	50.91
2013-14	322.34	257.87	42.35	5.65	2.82	3.76	51.77
2014-15	327.79	262.23	43.07	5.74	2.87	3.83	52.64
2015-16	333.34	266.67	43.80	5.84	2.92	3.89	53.53
2016-17	338.40	270.72	44.46	5.92	2.96	3.95	54.35

# Figure rounded off to nearest Zero.

Source: Draft Annual Plan 2014-15, Planning and Development Department, Assam.

#### AGRICULTURE SCENARIO – 2013-14 WEATHER AND RAINFALL

The climate of Assam is of humid sub-tropical nature with warm humid summer and cool dry winter. Due to unique geographical location coupled with varied physiography, the State has array of climatic conditions. Assam is situated in the high rainfall zone with annual average rainfall of 2297.4 mm. The State normally receives 2 percent rainfall in Winter Season (January – February), 25 percent in Summer Season (March – May), 65 percent in Monsoon Season (June – September) and 7 percent in Post-monsoon Season (October – December). Moreover, Assam is prone to flood and occasional drought like situation. Having enough natural potentialities for growing food grains, the State has lost the opportunity to contribute its share to the national granary due to erratic and unpredictable weather condition experienced during the last few years. It is observed that impact of climate change has effected to erratic rainfall and unpredictable monsoon behaviour in the State which further badly affected the agricultural production. The experience of crop season wise pattern of average rainfall may be evident from the Table 5.4.

**TABLE- 5.4**  
**CROP SEASON WISE AVERAGE RAINFALL IN ASSAM**

(Figure in mm)

Year	Kharif season				Rabi season				All Season			
	Actual	Normal	Deviation from normal (%)	Pattern	Actual	Normal	Deviation from normal (%)	Pattern	Actual	Normal	Deviation from normal (%)	Pattern
2007	1816.6	2118.2	(-)14.2	Normal	259.7	313.6	(-)1.7	Normal	2076.3	2431.9	(-)14.6	Normal
2008	1773.0	2038.1	(-)13.0	Normal	275.1	314.8	(-)12.6	Normal	2048.1	2352.9	(-)13.5	Normal
2009	1512.4	1953.6	(-)22.6	Deficient	187.8	302.2	(-)37.9	Deficient	1700.2	2255.8	(-)25.0	Deficient
2010	2066.3	1976.0	(+)4.6	Normal	189.0	306.2	(-)38.3	Deficient	2255.3	2282.2	(-)1.2	Normal
2011	1411.1	2001.0	(-)29.5	Deficient	155.5	295.3	(-)47.3	Deficient	1566.6	2296.3	(-)29.5	Deficient
2012	1953.2	2001.0	(-)2.0	Normal	198.6	294.8	(-)32.6	Deficient	2151.8	2295.8	(-)6.3	Normal
2013	1529.5	2016.3	(-)24.0	Deficient	177.3	294.8	(-)40.0	Deficient	1706.8	2311.1	(-)26.1	Deficient

Source: Directorate of Agriculture, Assam

**RAINFALL DURING 2013-14**

It is evident from the Table 5.4 that the State had experienced 1706.8 mm rainfall during 2013-14 against normal rainfall of 2311.1 mm. During the kharif crop season only 1529.5 mm [against the normal rainfall of 2016.3 mm] was occurred in the State. Thus, according to the State Agriculture Department, the pattern of overall rainfall in the State was deficient during the kharif season both in terms of total rainfall [(-) 24.0 percent below normal] and it's spread. However, the State has experienced "Normal" rainfall in the months of May, July and August, 2013. During the Rabi season overall rainfall in the State was "Deficient" with deviation of (-) 40.0 percent from normal.

**TABLE- 5.5**  
**MONTHWISE RAINFALL IN ASSAM DURING KHARIF AND RABI SEASON, 2013-14**

Months	Actual (mm)	Normal (mm)	Departure from normal (%)	Pattern
Kharif Season				
April, 2013	103.7	172.9	-40.0	Deficient
May, 2013	298.2	304.2	-2.0	Normal
June, 2013	238.1	444.1	-46.0	Deficient
July, 2013	368.3	454.2	-19.0	Normal
August, 2013	297.2	355.2	-16.0	Normal
September, 2013	224.0	285.7	-22.0	Deficient
<b>Total (Kharif, 2013)</b>	<b>1529.5</b>	<b>2016.3</b>	<b>-24.0</b>	<b>Deficient</b>
Rabi Season				
October, 2013	115.8	131.8	-12.0	Normal
November, 2013	0.8	24.9	-97.0	Scanty
December, 2013	2.3	11.8	-80.0	Scanty
January, 2014	1.9	16.2	-88.0	Scanty
February, 2014	29.1	32.0	-9.0	Normal
March, 2014	27.5	78.1	-65.0	Scanty
<b>Total (Rabi, 2013-14)</b>	<b>177.4</b>	<b>294.8</b>	<b>-40.0</b>	<b>Deficient</b>

Source: Directorate of Agriculture, Assam.

Although the occurrence of overall rainfall throughout the State was 'deficient' during the year 2013-14, according to the State Agriculture Department, the spread and pattern of rainfall varies from district to district during the period. The pattern of rainfall experienced by the districts in Assam during the year 2013-14 may be evident from the Table-5.6:

**TABLE: 5.6**  
**PATTERN OF RAINFALL EXPERIENCED BY THE**  
**DISTRICTS IN ASSAM DURING 2013-14**

Month/ Year	Pattern of Rainfall					Month/ Year	Pattern of Rainfall				
	Normal	Deficient	Scanty	Excessive	No Rain		Normal	Deficient	Scanty	Excessive	No Rain
<b>Kharif Season</b>						<b>Rabi Season</b>					
April, 2013	4	18	5	-	-	October, 2013	10	11	-	6	-
May, 2013	9	9	1	8	-	November, 2013	-	-	8	-	19
June, 2013	4	18	5	-	-	December, 2013	-	4	16	7	-
July, 2013	10	12	2	3	-	January, 2014	-	-	15	-	12
August, 2013	13	10	2	2	-	February, 2013	4	8	2	13	-
September, 2013	8	15	1	3	-	March, 2014	1	7	19	-	-

Note: Figure refers to number of districts.

Source: Directorate of Agriculture, Assam.

#### AREA UNDER CROPS

Production of all agricultural crops including food grains is directly related to area coverage. In Assam, the soil, topography, rainfall and climate in general are conducive for an agricultural activity mainly for paddy cultivation and therefore concentration is high on paddy production both for farmers and the Agriculture Department. As per final estimates, the total area under paddy cultivation during the year 2013-14 was 25.13 lakh hectare or 92.2 percent of the total area under food grains in the State. The area covered under paddy cultivation was 0.15 lakh hectare more during the year 2013-14 over 2012-13. The Paddy cultivation, during the year 2013-14 occupies 89.0 percent of the net cropped area and 60.0 percent of the gross cropped area in the State.

Total area under paddy although increased in the State, there has been a gradual decline in respect of area covered under Autumn Rice. This is due to choice of farmers to switch over to the Summer Rice for its higher productivity and hazard risk. The Final forecast estimates show (Table-5.7) that the area under Autumn Rice has declined from 4.36 lakh hectares in 2004-05 to 2.23 lakh hectares in 2013-14. The area under Autumn Rice recorded 48.9 percent decline over the period of ten years i.e., from 2004-05 to 2013-14.

The area under Winter Rice, the principal Kharif Crop of the State, has increased to 18.81 lakh hectares during 2013-14 from 18.57 lakh hectares in 2012-13 due to more or less normal seasonal rainfall experienced in the State although its distribution was uneven. The area under the crop recorded 25.6 percent increase during the period of eight years i.e., from 2006-07 to 2013-14.

According to the final estimates, the area covered for cultivation of Summer Rice during 2013-14 was 3.99 lakh hectares which was 0.06 lakh hectares or 1.53 percent more than that of 2012-13 [the area under summer rice cultivation in the State was 3.93 lakh hectares during 2012-13]. Compared to the area covered during 2006-07 [3.12 lakh hectares], the area under Summer Rice during 2013-14 was about 28.0 percent more.

The area coverage under Pulses and Oilseeds in 2013-14 as per final estimates has been expected to increase to the level of 1.50 lakh and 3.25 lakh hectares respectively compared to 1.42 lakh hectares and 3.05 lakh hectares respectively in 2012-13. It is evident from the **Table 5.7** that the area under Pulses and oilseeds has been gradually increasing. In respect of pulses, the area under cultivation has increased from 1.00 lakh hectares in 2005-06 to 1.50 lakh hectares in 2013-14 and the area under Oilseeds recorded increase from 2.53 lakh hectares in 2008-09 to 3.25 lakh hectares in 2013-14.

The trend of crop-wise land utilization in Assam during the last ten years may be evident from the Table 5.7.

**TABLE- 5.7**  
**AREA UNDER CROPS IN ASSAM DURING THE PERIOD 2004-05 to 2013-14**  
(In lakh hectares)

Year	Autumn Rice	Winter Rice	Summer Rice	Total Rice*	Wheat	Total Pulses	Total Food grains	Total Oilseeds (excl. Coconut)
2004-05	4.36	16.36	3.11	23.83	0.64	1.08	25.82	2.77
2005-06	3.98	17.07	3.15	24.20	0.50	1.00	25.97	2.42
2006-07	3.79	14.98	3.12	21.89	0.60	1.07	23.82	2.70
2007-08	3.54	16.47	3.23	23.24	0.56	1.13	25.18	2.66
2008-09	3.51	17.73	3.60	24.84	0.50	1.14	26.70	2.53
2009-10	3.46	17.89	3.94	25.29	0.60	1.19	27.33	2.77
2010-11	3.13	18.59	3.99	25.71	0.45	1.26	27.67	2.72
2011-12	2.76	18.76	3.94	25.46	0.40	1.32	27.43	2.76
2012-13	2.38	18.57	3.93	24.88	0.34	1.42	26.92	3.05
2013-14	2.23	18.81	3.99	25.03	0.31	1.50	27.14	3.25

\*Total may not be equal due to rounding off.

Source: Directorate of Economics and Statistics, Assam.

## PRODUCTION

As per final estimates, [reference Table-5.2] total food grains production in the State was 54.02 lakh MT compared to 52.79 lakh MT in 2012-13. Total food production in the State was 2.33 percent more during the year 2013-14 compared to the previous year's production. During the year 2011-12, total production of food grains in the State was 48.57 lakh MT. The Table 5.2 also reveal that compared to last twelve years the total foodgrains production in the State was the highest in 2013-14.

**".....the Ministry of Agriculture, Government of India has categorised Assam among the 'Highest Ranked States' for production of foodgrains. Hon'ble Union Finance Minister in his budget speech has acknowledged Assam's contribution to increased rice production of the country. He has assured his support to the Eastern Indian States with ₹1000 crore allocation in their endeavour to take forward the green revolution in Eastern India farther. In recognition of commendable production of pulses, the State has received the 'Krishi Karman' Award from the Hon'ble President of India."**[Source: Budget Speech of Finance Minister, Assam 2013-14].

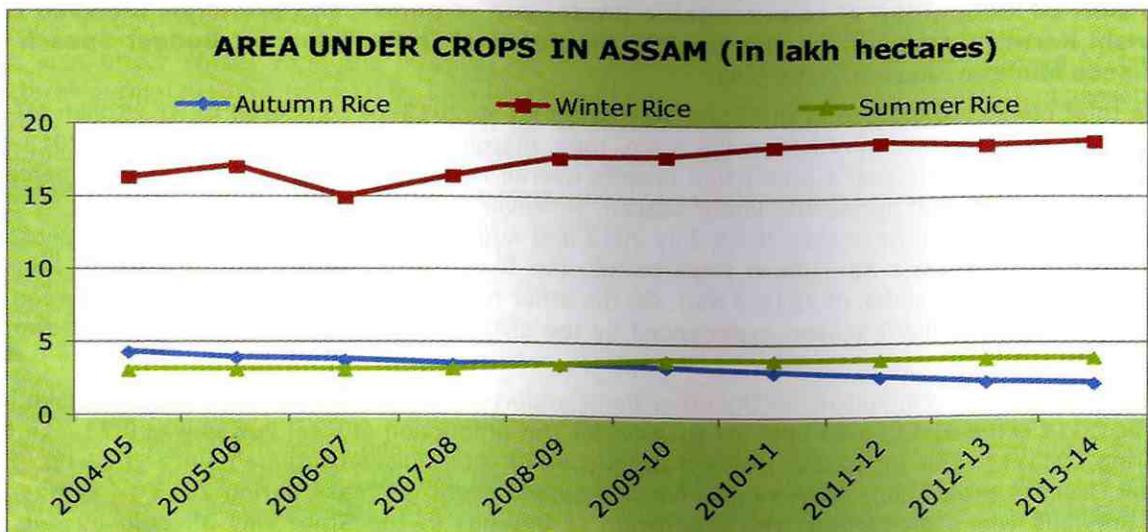
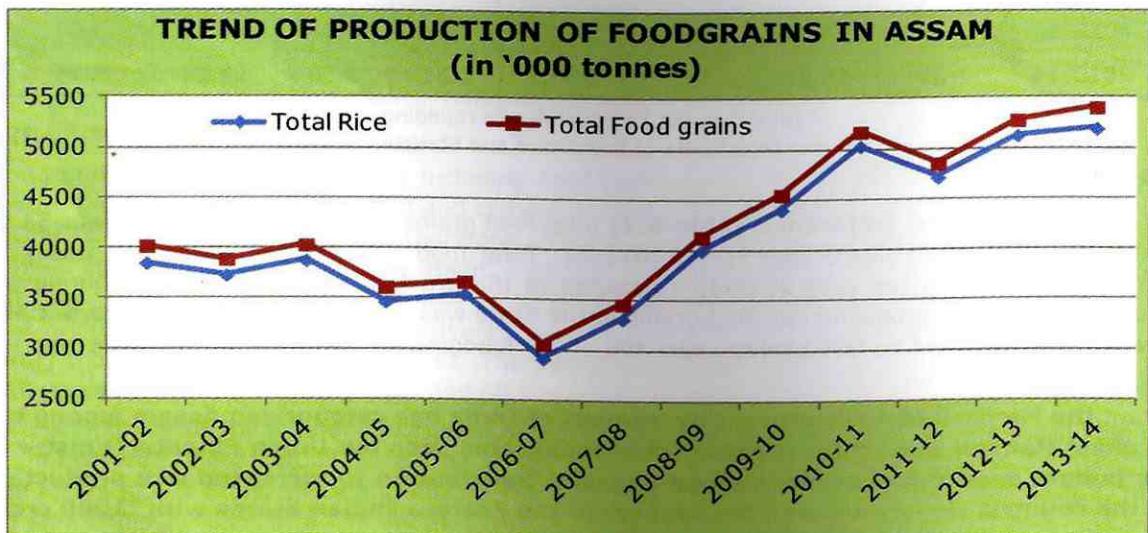
The total production of Rice in the State was 51.93 MT in 2013-14 compared to 51.28 lakh MT in 2012-13. Total production of rice in the State, thus, marginally 1.27 percent more during 2013-14 compared to previous year's production despite overall rainfall in the State was (-) 24.0 percent deviated from normal during the kharif season. However, normal rainfall was experienced by the State during the months of May 2013, July 2013 and August 2013. During the kharif crop season, according to the State Agriculture Department, the State had experienced 1529.5 mm rainfall against the normal rainfall of 1616.3 mm. On the other hand, analysis of the pattern and spread of rainfall during the kharif season experienced by the districts draws an erratic picture as shown in Table-5.6.

The production of total Pulses, on the other hand, reported 5.1 percent increase with 0.88 lakh MT in 2013-14 compared to 0.84 lakh MT in 2012-13. The production of total Pulses was 0.73 lakh MT during 2011-12. This increasing trend of production of total Pulses continued since 2005-06. The total Oilseeds production, on the other hand, recorded slight decrease during 2013-14 compared to previous year's production. The production of oilseeds in the State was affected by due to overall "deficient" rainfall experienced by the State during the Rabi season.

Due to the success in the agriculture sector, the Agriculture Department has been able to secure three National Awards. Assam is now surplus in rice production. This has been possible due to utilisation of modern technology, improved practices and hybrid seeds. This year, Agriculture and Horticulture Department in convergence with Irrigation Department, Soil Conservation Department and Rural Development Department propose to introduce a new scheme, namely, Chief Ministers' Rural Economy Development Scheme. Sixty percent of the works will be taken under MGNREGA for creation of productive assets under Agriculture sector. About one lakh water harvesting structures, 25000 vermi-compost units, 27,000 dairy related structure, 5000 nurseries and a large number of schemes for micro and minor irrigation, fishery, plantation etc., are proposed to be taken in current year. In the field of Farm Mechanisation, providing Tractors and Power tillers at subsidised rates will remain a core theme for this department. It is proposed to issue up to 2 lakh Soil Health Cards to farmers this year.

The Union Government has laid great stress on organic cultivation in the North East Region. In Assam, under the Chief Ministers' Organic Farming Scheme; 4500 hectares of land have already been brought under organic cultivation. This year, it is proposed to double the area under organic farming. Horticulture Department will impart training to 15000 unemployed youths and provide them Green House and such other facilities to make them self-employed.

Source: Budget Speech of Finance Minister, 2014-15 by Chief Minister, Assam, Dated 11<sup>th</sup> August, 2014



## YIELD RATE

It is evident from the Table 5.8 that the trend of yield rate of autumn rice was erratic during the period 2004-05 to 2012-13. Since 2009-10, however, maintains a continuous increasing trend and in 2013-14 it reached the level of 1340 kg/ hect. The yield rate of Autumn rice has increased by 1.75 percent during the year 2013-14 compared to the previous year.

The productivity of winter rice, on the other hand, maintains its increasing trend since 2008-09 to 2013-14. The productivity of winter rice has increased by about 22.0 percent more during the period 2008-09 to 2013-14. The productivity of winter rice was low during the year 2011-12 over the previous year due to "deficient rainfall" experienced by the State during the kharif season. The yield rate of winter rice was low during the years 2006-07 and 2007-08 also compared to 2004-05 and 2005-06

mainly due to drought like situation and severe floods that the State had experienced during the peak Sali Paddy season of the aforesaid years respectively.

The productivity of Summer Rice also continued to maintain its increasing trend during the period 2004-05 to 2013-14 except in the year 2005-06. The yield rate of summer paddy although remained marginally low during 2009-10 [3.8 percent] compared to the yield rate of 2007-08, it recorded 8.1 percent more in 2012-13 compared to 2011-12. The yield rate of summer paddy recorded very nominal increase in 2013-14(0.54 percent) compared to the previous year.

The trend of productivity of Total Pulses and Total Oil Seeds was erratic during the period 2004-05 to 2009-10. However, productivity of Total Pulses is expected to decrease by 1.34 percent and the productivity of Total oilseeds is expected to be increased by 0.16 percent during 2013-14 over 2012-13.

Year	Autumn Rice	Winter Rice	Summer Rice	Total Pulses	Total Oilseeds (excl. Coconut)
2004-05	667	1598	1959	569	529
2005-06	1016	1543	1780	550	465
2006-07	899	1321	2017	547	491
2007-08	999	1380	2267	596	525
2008-09	1084	1641	2133	545	549
2009-10	982	1894	2180	558	529
2010-11	1155	1993	2577	572	580
2011-12	1242	1785	2744	560	563
2012-13	1317	1998	2965	597	610
2013-14	1340	2002	2981	589	611

Source: Directorate of Economics and Statistics, Assam.

### Distinctive features of Assam agriculture

- Assam has become rice surplus state since 2010-11.
- Productivity of fruits, spices and vegetables in the State is higher than that of national level.
- Marketable surplus in 2013-14: Rice (6 lakh MT), Fruits (4.70 lakh MT), Spices (0.75 lakh MT and vegetables (8.60 lakh MT).
- Hybrid rice cultivation has been taken up since 2009-10. During 2013-14, 2.03 lakh Ha(8 percent of total rice area) was covered under hybrid rice apart from 15.90 lakh Ha(69 percent of total rice area) under HYV rice.
- In the financial year 2013-14, the State produced 1.04 lakh MT of lentil, which was highest in the country.

## AREA UNDER HIGH YIELDING VARIETY (HYV)

Total area under HYV of Autumn Rice, Winter Rice and Summer Rice was 15.89 lakh hectares during the year 2013-14 compared to 16.91 lakh hectares during 2012-13 [Table 5.9]. The area coverage under HYV Rice was 68.0 percent of the total area under rice during the said year. It is evident that area under HYV Rice coverage remained 60 percent or more during the period 2006-07 to 2012-13. However, the area coverage under HYV Rice was 6.3 percent less during 2013-14 over the previous year. According to the Agriculture Department, increasing concentration of area under HYV Rice assisted to bumper production of rice in the State vis-à-vis put additional impetus for enhancing productivity and farm income. Moreover, the productivity of HYV summer Rice is more than winter rice and autumn rice due to of package of practices during summer season as free from any risk. Considering the productivity, cultivators preferred the seed of HYV rice viz., Mala, IR-36., Lachit, Masuri, Joya, Ranjit, Ratna, China Boro, Biplov, Bahadur, Kaveri, Krishna etc.

## HYBRID RICE

The State Agriculture Department has put special efforts in cultivation of hybrid variety of rice on experiment basis in the State since 2009-10 considering the productivity of hybrid rice is more than double compared to HYV rice as well as to enhance farm income [Table 5.10]. The area coverage under hybrid rice has been increased to 234.0 thousand hectares or 9.1 percent of the total area under rice in the State during the year 2013-14 compared to the area coverage of 97.2 thousand hectares or 3.9 percent of the total area under rice in the State during the year 2012-13. The area under hybrid rice was only 24.2 thousand hectares or 1.0 percent of the total area under rice during the year 2011-12.

## INDEX OF AGRICULTURAL PRODUCTION

The Index of Agricultural Production for all crops (Base triennium ending 2007-08=100) for the State stands at 141.56 in 2013-14 compared to 135.70 in 2012-13. In 2011-12 the index of Agriculture Production was 126.44. In respect of food crops, the Index of Agricultural Production for the State was 155.81 in 2013-14 compared to 152.29 in 2012-13. The All India Agricultural Production Index for all major crops, on the other hand, stands at 128.9 (Base Triennium ending 2007-08=100) in 2013-14 compared to 124.2 in 2012-13. In respect of food crops, the Index of Agricultural Production for India as a whole was 122.9 in 2013-14. The table 5.11 shows the trend of Index of Agricultural Production in the State as well as in the country as a whole for the last five years.

**TABLE- 5.9**  
**AREA UNDER HIGH YIELDING VARIETY RICE**  
(Area in lakh hectares)

Year	Autumn Rice	Winter Rice	Summer Rice	Total HYV Rice area
2005-06	2.35	9.50	2.65	14.5(59.9)
2006-07	2.15	8.63	2.67	13.45(61.4)
2007-08	2.23	8.94	2.78	13.95(60.0)
2008-09	2.24	9.75	3.14	15.13(60.9)
2009-10	2.29	10.2	3.41	15.9(62.8)
2010-11	2.13	11.34	3.54	17.01(66.2)
2011-12	2.19	12.8	4.02	19.01(74.6)
2012-13	1.60	11.70	3.61	16.91(68.0)
2013-14	1.43	12.22	2.24	15.89(63.5)

Total figure may not be equal due to rounding off to nearest zero; Figure in bracket shows the percentage to Total Rice Area.

Source: Directorate of Agriculture. Assam.

**TABLE- 5.10**  
**AREA UNDER HYBRID RICE IN ASSAM**  
(Area in '000 hectare)

Year	Kharif Rice (Autumn + Winter)	Rabi Rice (Summer Rice)	Total
2009-10	32.9	14.1	47.0 (1.9)
2010-11	37.7	25.0	62.7 (2.4)
2011-12	2.5	21.7	24.2 (1.0)
2012-13	12.4	84.8	97.2 (3.9)
2013-14 (P)	28.0	206.0	234.0(9.1)

P: Provisional

\*Total figure may not be equal due to rounding off to nearest zero.

Figure in bracket shows the percentage to Total Rice Area.

Source: Directorate of Agriculture. Assam.

TABLE- 5.11

## INDEX OF AGRICULTURAL PRODUCTION IN ASSAM AND INDIA

(Base : Triennium ending 2007-08=100)

Year	Assam			India		
	Food	Non-Food	All Commodities	Food	Non-Food	All Commodities
2009-10	131.43	107.00	120.57	100.6	105.0	102.8
2010-11	149.34	106.43	130.25	114.3	128.1	121.1
2011-12	140.08	109.42	126.44	119.5	131.3	125.3
2012-13	152.29	115.11	135.70	119.4	129.1	124.2
2013-14	155.81	123.81	141.56	122.9	135.0	128.9

- N. B.: 1. The Agricultural indices for Assam are constructed only on the basis of crops covered by the Crop Forecast.  
2. Figure rounded to nearest zero.  
3. Data for 2013-14 for India are based on Advance Estimates.

Source: (1) Directorate of Economics and Statistics, Assam.

(2) Department of Agriculture and Cooperation, Govt. of India/Reserve Bank of India.

### LAND UTILIZATION STATISTICS

As per the Land Utilization Statistics for the year 2011-12(Provisional), the total reporting area (Village paper) of the State was 78.50 lakh hectares. Out of the total reporting area, net sown area constitutes 28.11 lakh hectares or 35.80 percent, 18.53 lakh hectares or 23.61 percent was under forest, 26.20 lakh hectares or 33.38 percent was 'land not available for cultivation' and 4.34 lakh hectares or 5.5 percent was other uncultivable area. While Fallow land constitutes 1.68 percent of the total reporting area with around 1.32 lakh hectares, land under still water and water logged area jointly constitutes 1.78 lakh hectares or 2.27 percent. The area under Social forestry was only 0.16 lakh hectare or 0.16 percent of the total reporting area.

The Gross Cropped Area in the State increased to 41.74 lakh hectares in 2011-12 from 41.60 lakh hectares in 2010-11. In 2008-09, the gross cropped area was 39.99 lakh hectares. The Gross Cropped Area in the State, thus, increased by 4.38 percent during the year 2011-12 over 2008-09.

The area sown more than once while recorded 1.04 percent increase with 13.63 lakh hectares in 2011-12 over 2010-11[13.49 lakh hectare], the net cropped area remained at the same level with 28.11 lakh hectares during 2011-12 as it was in 2010-11. Thus, it reveals from the above that the ratio of area sown more than once to the net area sown was 48.5 percent during the year 2011-12 compared to 48.0 percent during the year 2010-11. The ratio of area sown more than once to the net sown area in the State was to 46 percent in 2009-10. The ratio of net sown area to gross cropped area, on the other hand, was calculated at 67.34 percent during the year 2011-12 compared to 67.57 percent during the year 2010-11. During the year 2009-10, the ratio of net sown area to gross cropped area was 68.48 percent.

### AGRICULTURAL HOLDING

It reveals from the Agricultural Census, 2010-11 that there were 27.2 lakh operational holdings in Assam covering an operated area of 29.99 lakh hectares as against 27.5 lakh operational holdings covering an operated area of 30.49 lakh hectares in 2005-06 and 27.1 lakh operational holdings covering an operated area of 31.1 lakh hectares in 2000-01. Thus, the agricultural operated area shows decreasing in the State by 3.69 percent in 2010-11 over 2000-01 which largely affected by soil erosion of ever widening Brahmaputra River, increasing urbanization, industrialization, expansion of roadways and other infrastructural development activities, conversion of agricultural land for setting up of industries as well to homestead land to accommodate ever increasing population etc. The Table 5.12 depicts the trend of number of holding and area between the Agricultural censuses, 2000-01, 2005-06 and 2010-11.

**TABLE- 5.12**  
**AGRICULTURAL CENSUSES 2000-01, 2005-06 AND 2010-11**

Size class (In hectare)	Number of holding			Area operated (in hectare)		
	2000-01	2005-06	2010-11	2000-01	2005-06	2010-11
Marginal (Below 1.0)	1699107	1752989	1831115	662780	760145	774796
Small (1.0-2.0)	561039	591431	496574	730513	718383	687156
Semi-medium (2.0-4.0)	351521	317859	303528	957959	846006	817982
Medium (4.0-10.0)	95500	82933	84869	498797	425403	437372
Large (10.0 & above)	4970	4902	4137	263529	298606	271763
Total	2712137	2750114	2720223	3113578	3048543	2999070

Total figure may not be equal due to rounding off to nearest zero

Source: Directorate of Economics and Statistics, Assam.

The disaggregated data also shows that the marginal holdings with less than one hectare of land accounted for 67.3 percent of the total holdings and 25.8 percent of the total operated area of the State in 2010-11 compared to 63.7 percent of the total holdings and 24.9 percent of the total operated area of the State in 2005-06. It also reveals from the Table 5.13 that the small holding with size class between 1-2 hectares, shared 18.25 percent of the total holdings and 22.91 percent of the total operational area and the large holdings (10 hectares and above) constituted only 0.15 percent of the total number of holdings and 9.1 percent of the total operated area in the State in 2010-11.

The Table 5.13 shows the trend of agricultural holdings and operated area in the State from 1970-71 to 2010-11.

**TABLE- 5.13**  
**AGRICULTURAL HOLDINGS AND OPERATED AREA IN ASSAM**  
(AS PER AGRICULTURAL CENSUSES)

Agricultural Census Year	Number of Holdings(in'000)	Total operated area (in thousand hect.)	Average size of Holdings (in hect.)
1970-71	1964	2882	1.47
1976-77	2254	3079	1.37
1980-81	2298	3121	1.36
1985-86	2419	3161	1.31
1990-91	2523	3205	1.27
1995-96	2683	3138	1.17
2000-01	2712	3114	1.15
2005-06	2750	3049	1.11
2010-11	2720	2999	1.10

Total may not be equal due to rounding off to nearest zero.

Source: Directorate of Economics and Statistics, Assam.

## HORTICULTURE

Assam is traditionally rich in horticultural production due to its diverse and unique agro-climatic condition which is conducive for growing wide range of horticultural crops like various fruits, vegetables, flowers, spices, nuts, tuber crops, medicinal and aromatic plants. Assam being encompassed under one of the 14 global bio-diversity hotspots, the State has enough options for farming as well as investment in horticulture sector. This sector, moreover, opens enough opportunity for employment generation of unemployed youths. After 2001-02, Assam is making inroads towards commercialization of horticulture sector for sustainable economic development of rural farming community. To make the horticulture sector more viable and sustainable, due emphasis have been given in raising productivity of various commercially potential crops through use of better technology, management and planting materials is being given. Similarly due importance has also been given on various aspects of facility like pre-harvest treatment, proper harvest, setting up of collection centers with grading facilities and transport facilities, Marketing and processing etc.

Horticultural crops occupy about 15 percent of the gross cultivated area of Assam and annually produce more than 67 lakh MT of various horticultural produces besides nut crops, flowers and medicinal & aromatic plants thus contributing significantly towards food and nutritional security of the State. Statistically, according to the Directorate of Horticulture and Food Processing, Assam, the growth of area, production and productivity of horticulture crop have been assessed at 50.32 percent, 91.0 percent and 20.31 percent respectively. Positive efforts of the Horticulture Directorate towards self employment under horticulture sector helping about 15000 rural women to engage themselves by establishing 156 mini fruit processing units during the Eleventh Five Year Plan period. Of let, the efforts of the Directorate of Horticulture and FP helping the horticulture sector of the State limping towards commercialization.

Details of area, production and productivity of horticulture crop in Assam may be evident from the table below.

**TABLE- 5.14**  
**AREA, PRODUCTION & PRODUCTIVITY OF HORTICULTURAL CROPS**

Year	Fruits			Spices			Vegetables		
	Area (lakh hect.)	Pro-Duction (lakh MT)	Producti- vity (Kg./ hectare)	Area (lakh hect.)	Pro-Duction (lakh MT)	Producti- vity (Kg./ hectare)	Area (lakh hect.)	Pro-Duction (lakh MT)	Producti- vity (Kg./ hectare)
2005-06	1.13	13.52	12005	0.86	2.12	2475	2.32	18.18	16485
2006-07	1.14	13.72	12139	0.86	2.14	2476	2.36	38.87	16469
2007-08	1.16	14.08	14142	0.88	2.18	2478	2.38	39.18	16462
2008-09	1.34	16.61	12425	0.93	2.80	3023	2.46	44.20	17923
2009-10	1.27	15.65	12370	0.94	2.35	2505	2.51	42.55	16952
2010-11	1.37	16.56	12485	1.01	2.30	2277	2.57	44.33	17231
2011-12	1.38	17.75	12885	1.04	2.56	2464	3.66	52.51	24325
2012-13	1.51	20.74	13760	1.10	3.28	2970	3.86	60.34	27536
2013-14	1.42	20.25	14219	1.04	2.67	2578	3.65	53.30	24797

Total may not be equal due to rounding off to nearest zero.

Source: Directorate of Agriculture, Assam and Directorate of Horticulture & FP, Assam.

## INTEGRATED NUTRIENT MANAGEMENT (INM)

### FERTILIZER AND MANURE

Fertilizer is an important input, which plays a dominant role in augmenting the productivity of crops. Therefore thrust has been given on "Integrated Nutrient Management" (INM) to make a major breakthrough in this direction with the following objectives:

- i) Less dependence on inputs from outside source and encourage farmers to utilize on farm resources.
- ii) Economize the production cost by using optimum dose of fertilizer.

The trend in use of bio-fertilizer, compost and green manures and organic farming have been increasing gradually as the application of chemical fertilizer is posing a major threat in depletion soil nutrients.

Much stress has been given by the State Government on timely availability of fertilizers at the door step of farmers during peak period of cultivation. AAIDC, NAFED, GPSS, and organization like IFFCO, BVFCL, Green Chemicals Ltd, Teesta Agro Industries Ltd. have been playing a pivotal role in distribution of fertilizer through their respective branches located at various corners of the State. At present, there are 416 whole sale point and 6855 fertilizer sale point in Assam.

### CONSUMPTION OF FERTILISER

To augment the productivity of crops thrust has been given to increase the consumption of chemical fertilizers under the banner of "Integrated Nutrient Management" as consumption in the state in terms of nutrient (NPK) per hectare is much lower than the National average. The consumption of fertilizer in the State is low because of low consumption during kharif season as the farmers are reluctant to invest on fertilizer due to fear of loss for heavy rainfall and flood. On the other hand, consumption of fertilizers during summer and rabi season is low due to non-availability or occurrence of frequent crisis. According to the State Agriculture Department consumption of fertiliser in the State was 65.64 kg per hectare during the year 2013-14 compared to 74.58 kg per hectare during the year 2011-12. The detail of consumption of fertilizers in Assam is presented in the Table 5.15.

**TABLE- 5.15**  
**CONSUMPTION OF (CHEMICAL) FERTILISERS**

(Fig in '000 MT)

Fertilizer	Year							
	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
Nitrogen	102.6	109.0	114.0	135.6	129.3	155.0	135.3	151.3
Phosphorus	51.1	57.7	52.5	56.1	47.2	60.0	36.0	41.7
Potash	50.0	57.6	59.1	71.9	71.4	75.0	44.8	80.1
Total	203.7	224.3	225.7	263.6	248.0	290.0	216.1	273.0
Consumption (kg/Ha)	52.3	56.2	57.8	63.2	67.1	74.6	58.5	65.4

Total may not be equal due to rounding off to nearest zero.

Source: Draft Annual Plan 2014-15, Planning and Development Department.

## SOIL HEALTH MANAGEMENT

The State Agriculture Department has taken up due initiative to preserve depletion of soil nutrient and Sustain Crop Production System. Bio-fertilizer has given tremendous result in crop production, increase in productivity and maintenance of soil health by narrowing the gap between nutrient

removals and supply along with additional/ application of Micronutrient, lime, green manuring and vermi compost including FYM. Of late, the trend in use of Bio-fertilizer has increased significantly due to its motivation through extension machinery and initiation of demonstration programmes by the State Agriculture Department. Special thrust has been given in use of Bio-fertilizer by initiating Programme 'Input support to the

agriculturist having KCC' under State Priority Scheme which has been implemented from 2006-07 with an aim to attract the farming communities to go for credit support in cultivating crops.

In addition, there are 11(eleven) State owned Soil Testing Laboratories functioning in the State of which 7 are Static and 4 are Mobile. One Soil Testing Laboratory is also functioning under Private Sector. All these Soil Testing Laboratories have total annual analyzing capacity of 90000 soil samples.

**TABLE- 5.16**  
**CONSUMPTION OF BIO-FERTILISER**

ITEM	YEAR					
	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
Bio-Fertilizer (MT)	178	227	175	350	365	380
Micronutrient (MT)	441	101	142	500	548	697
Lime(Lakh MT)	2.1	0.3	1.4	0.05	0.2	0.3
Organic Manure (including FYM) (Lakh MT)	81.24	81.92	82.67	85.00	88.00	97.00

Source: Directorate of Agriculture, Assam.

**TABLE- 5.17**  
**SOIL SAMPLE ANALYSED AND SOIL HEALTH CARD ISSUED (NOS)**

Soil Testing Labs	2009-10	2010-11	2011-12	2012-13
State Owned	59124	59296	60147	61608
Private	728	776	400	321
Total	59852	60072	60547	61929

Source: Draft Annual Plan, 2014-15, Planning and Development Department.

## INTEGRATED PEST MANAGEMENT (IPM)

Integrated Pest Management (IPM) is the key component of sustainable agricultural production. Assam having a diverse eco-system with sub-tropical climate, the crop production is associated with loss of biotic stress problem which share 20-30 percent of the yield loss. Excessive and injudicious use of chemical pesticides in the field as well as horticultural crops result into development of pest resistance, pest resurgence, pest replacement and pesticides residue problem.

Intensification of agriculture with the introduction of HYV, Hybrid, STW, Mechanization and other advance inputs also enhance the pest population dynamics and pest status.

In order to facilitate the availability of the Bio-Control Agent (BCA) in the biological pest management intensive IPM (BIPM), the thrust has been given to increase production of the already established BCA and the newly introduced BCA in the State Bio-Control Laboratory (SBCL).

The State Agriculture Department is trying to popularize the use of bio-pesticides and other methods of IPM by organizing training demonstrations. As a result the consumption of bio-pesticide is increasing in the State.

The trend of consumption of both chemical and bio-pesticides during the last eight years consumption may be evident in the Table 5.18 below.

**TABLE- 5.18**  
**CONSUMPTION OF PESTICIDES**

(Figure in MT)

Pesticide Consumption	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14(T)
Chemical Pesticide	165.0	158.0	150.0	143.0	150.0	160.0	183.0	205.0
Bio-pesticide	-	6.7	18.0	19.0	24.0	87.0	143.0	180.0

T: Target

Source: Directorate of Agriculture, Assam.

### SEED: DEVELOPMENT OF SEED SECTOR

Seed is the most vital component for increasing production & productivity of crops. Quality seed is the primary input for crop production. Certified Seed production is a process through which seeds are produced in conformity with the standard variety, characters by taking specific measure as required for seed production. In Assam, production of certified seed has been taken up in the Field Trial Stations (FTSs), in some of the State Govt. Seed Farms and Assam Seed Corporation's seed farms. But there is dearth of quality seeds in the State and so the Seed Replacement Rate (SRR) in the State stands at a very low level. Moreover, the State has to depend on outside sources for quality seeds of some crops every year to meet the demand immediately after every unwarranted natural calamity. To meet the growing demand and increase quality seed production, the Agricultural Department has taken the following steps:

- Expansion of Seed Village Programme;
- Production of certified seeds of Paddy, Pulse & Oilseeds in Seed Village in large scale;
- To focus on capacity building of Registered Seed Growers;
- Strengthen Seed Farms to facilitate production, processing & storage of seeds.

### SEED REPLACEMENT RATE (SRR)

Seed is the basic key input for crop productivity without which the impact of overall other inputs applied in crop production cannot be expected. Due to continuous effort of the State agriculture Department through popularisation of HYV, SRR of paddy has been increasing to a great extent. Achievements of SRR of some of the important crop is placed at Table-5.19

**TABLE- 5.19**  
**SEED REPLACEMENT RATE (SRR) IN ASSAM**

(Figure in %)

Crop	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
Paddy	17.0	23.0	33.0	50.0	46.8	47.9	31.1
Blackgram	20.5	7.0	64.4	48.0	79.7	25.8	40.5
Greengram	-	6.0	33.0	38.0	100.0	37.5	45.2
Lentil	21.0	7.0	50.6	34.0	26.2	100.0	54.1
Pea	20.2	37.0	88.0	37.0	40.5	59.7	46.7
Rape & Mustard	16.0	24.0	60.0	16.0	26.2	46.8	38.1
Sesamum	-	20.0	30.7	4.0	0.9	0.0	0.0
Jute	57.0	52.0	22.5	42.0	51.1	10.2	19.2

Source: Directorate of Agriculture, Assam

## SEED CERTIFICATION

Assam State Seed Certification Agency (ASSCA) is the Nodal Agency is entrusted for Seeds Certification of Paddy, Mustard and Pulses as per feasibility in the State. The planting crops like Coconuts, Litchi, and Guava etc are under consideration for certification. There are 3 nos. of notified Seed Testing Laboratories under ASSCA located at Guwahati, Jorhat and Silchar. Total annual testing capacity of these three notified laboratories is 20,000 seed samples. Seed testing and certification guidelines are strictly followed for proper quality control and certification.

Table 5.20 below shows the performance of seed certification in Assam.

**TABLE- 5.20**  
**STATUS OF SEED CERTIFICATION**

(Figure in Quintal)

Crop(Seeds)	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14(T)
Paddy	20500	19750	18960	28686	18555	18555
Mustered	8470	3840	3840	7450	9210	11324
Blackgram	Nil	1250	1250	2800	700	1840
Potato	-	-	-	3412	11300	23350

T: Target; Source Draft Annual Plan 2014-15, Planning and Development Department.

## SYSTEM OF RICE INTENSIFICATION (SRI)

Annual growth of production of major crops mainly rice and food grains in the State is significantly increasing because of adoption of SRI system of Rice intensification and use of Hybrid seeds. Compared to normal practices adoption of SRI system enhanced the productivity of Rice as it facilitates use of low volume of seeds, fertilizer, water, low cost of production and further shorten the crop duration and thus open the scope for double cropping.

**TABLE- 5.21**  
**STATUS OF SYSTEM OF RICE INTENSIFICATION**

Year	Area under SRI (in Ha)	Average Yield under Normal Practice (Ton/Ha)	Average Yield under SRI (Ton/Ha)	Percentage of increase over normal practice
2008-09	882.20	2.65	5.08	219
2009-10	43836.00	5.80	5.85	209
2010-11	50438.00	2.65	5.65	217
2011-12	57900.00	2.88	5.70	205
2012-13	65150.00	2.90	6.14	212

Source: Draft Annual Plan-2014-15, Planning and Development Department.

## CROP DEVELOPMENT (MISSION DOUBLE CROPPING)

48 percent or 13.49 lakh hectare of net cropped area is under double/multiple cropping which restricts farm income. To attract farmers towards the practice of double /multiple cropping the State Govt. has taken initiative to drive massive cultivation of Summer Paddy, Rabi Pulses and Oilseeds as per feasibility/potentiality under Mission Double Cropping with additional coverage of 1.00 lakh hectare areas under mono cropping with an allocation of ₹6200.00 lakh. Additional area of 3.0 lakh hectares is proposed to be covered under double cropping to increase cropping intensity up to 160.0 percent.

## FARM MECHANIZATION AND IRRIGATION

Farm mechanization in Assam is slow although it is considered as a critical input for timely agricultural operation. Highly fragmented and small land holding is the major constraint in bringing the entire farming community under high volume of mechanization. Moreover, low Farm Power in the State also hampering in achieving much coveted schemes of double or multiple cropping. However, an effort to boost up farm mechanization is on in a systematic/ schematic manner. The State Agriculture Department has taken initiative to procure Tractors, Power Tillers and other farm equipments under various Externally Aided, Centrally Sponsored and State Plan Schemes for the benefit of farmers mainly for Small and Marginal farmers. According to the State Agriculture Department, the Farm power created in the State till the end of 2012-13 is 1.52 HP per hectare. However, the availability of farm power in the State was only 1.02 HP per hectare till the end of 11<sup>TH</sup> Five Year Plan period compared to 2.05 HP per hectare at national level.

Various farm machineries and equipments procured and distributed by the State agriculture department during the period 2006-07 to 2013-14 may be evident from the Table 5.22.

**TABLE- 5.22**  
**STATUS OF FARM MECHANISATION**

(Figure in Nos.)

Year	Tractor	Power Tiller	Power Pump	Small Implement	Rotovator	Farm power available [HP per hectare]
2006-07	338	2112	3994	958	-	0.54
2007-08	855	4232	9960	850	-	0.60
2008-09	1719	861	18163	1527	158	0.60
2009-10	511	3782	30634	92492	59	0.69
2010-11	962	3136	85506	0	65	0.90
2011-12	824	5138	12852	-	335	1.02
2012-13	588	3339	24337	NA	93	1.52
2013-14	0	73	15000	NA	NA	NA

N.A. =Not Available

Source: Directorate of Agriculture, Assam.

### IRRIGATION

There is considerable potential for agricultural growth in the State by increasing cropping intensity, raising crop yield and diversifying into pulses and oilseeds through irrigation. Considering the uncertainties in the production of Kharif crop due to flood and high rainfall, the State Agriculture Department has given more emphasis on Rabi crops by assigning top priority to develop assured irrigation facilities through installation of Pump Sets (Shallow Tube Well & Low Lift Pump). Irrigation by way of Shallow Tube Well and Low Lift Pumps is considered to be the efficient method of water utilization for crop growth. At present only 30 percent of net cropped area is covered by assured irrigation facility. In order to attain the objective of optimum ground water use and to enhance assured irrigated area to facilitate extensive cultivation of Rabi Crops, the State agriculture Department has given top priority for installation of Pump sets. So far, the Agriculture Department has created potential of 9.77 lakh hectares of which 5.84 lakh hectares is under utilizable/ assured irrigation. During the 11<sup>TH</sup> Five Year Plan period all total 191880 STWs, 50 DTWs, 30142 LLPs and 1673 Sprinkler Irrigation sets were distributed by the State Agriculture Department to farmers. During the year 2012-13 the State Agriculture Department installed 48674 numbers STWs/LLPs to create additional irrigation potential in the State. In 2013-14, the Agriculture Department has installed 30000 numbers STWs in the State.

**TABLE- 5.23**  
**IRRIGATION INFRASTRUCTURE CREATED BY THE**  
**AGRICULTURE DEPARTMENT**

Component of irrigation	No. installed							
	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
Shallow Tube Wells(Nos)	2812	8190	30080	53208	141452	25704	43938	30000
Low Lift Pumps (Nos)	5176	11730	6246	8060	29560	0	4736	0

Source: Directorate of Agriculture, Assam.

To increase the irrigation command of additional assured irrigation area by 2.0 lakh hectare and to regain the loss of area coverage by deplorable condition of STW installed prior to 2000, the scope /popularity towards use of assure irrigation in the field of Agriculture is felt one of the most prime needs of the department. Therefore, the department proposed to install 1.00 lakh STW under RIDF Scheme of NABARD.

## CROP INSURANCE

The state of Assam has been experiencing flood in almost every year and around 4.75 lakh hectare area in the State is chronically flood prone and around 0.94 lakh hectares area is draught prone. Therefore, the crop insurance is an area to help farmers at the time when there is crop loss/ crop damage due to recurring natural calamities, severe pest infestations and diseases in notified crops. The Government of India launched a Crop Insurance programme under the nomenclature "National Agricultural Insurance Scheme" (NAIS). All farmers who avail loans from financial institutions are covered under the scheme and it is optional for non-loanee farmers. 50 percent of the premium amount is contributed as subsidy to small and marginal farmers which will be shared equally by Government of India and State Government. This scheme is expected to be a critical instrument for development in the field of crop production by providing financial support to the farmers in the event of crop failure and help in maintaining flow of agricultural credit. This programme covers 8 (Eight) crops i.e. 3 crops in Kharif and 5 crops in Rabi season.

Kharif Season : Autumn / Ahu Paddy, winter / Sali Paddy and Jute.

Rabi Season : Rape & Mustard, Wheat, Potato, Sugarcane and summer / Boro Paddy.

This scheme, under the **Area Approach**, not only facilitate insurance coverage to each of the notified crop damage within the defined area for widespread calamities but also on an individual basis for localized calamities such as hailstorm, landslide, cyclone and flood .

National Agriculture Insurance Scheme, unfortunately, has not been able to provide desired solution to the risk hedging in the agriculture sector in the State. Lack of awareness, low subsidy premium (10 percent) for small and marginal farmers, delayed claim settlement, slow response of banks in issuance of Kissan Credit Cards etc., affected large number of farmers of the State from getting benefit from the NAIS. Moreover, some important horticulture crops like ginger etc. are not covered under the Scheme.

According to the State Agriculture Department achievements made under the scheme so far since its launching in the year 1999-2000 is as follows –

Farmer family covered	: 4.14 lakh .
Area covered	: 3.15 lakh hectare
Total Sum Insured	: ₹823.67 crore
Claims paid	: ₹14.80 crore
Farmers benefited	: 0.70 lakh

The performance of National Agricultural Insurance Scheme during the period 2006-07 to 2012-13 may be evident from the table below:

**TABLE- 5.24**  
**PERFORMANCE OF NATIONAL AGRICULTURAL INSURANCE SCHEME IN ASSAM**

Season & Year	Area covered (Ha)	Sum Insured (Rs in Crore)	Farmers covered (No.)	Farmers benefited (No.)
Kharif 2006	8304.30	10.84	8800	3882
Rabi 2006-07	4757.90	9.12	5818	491
Kharif 2007	7541.80	11.72	8938	2181
Rabi 2007-08	5854.91	13.60	10780	853
Kharif 2008	7332.90	8.26	7458	198
Rabi 2008-09	5565.22	41.71	28359	3592
Kharif 2009	23616.62	48.02	24619	3727
Rabi 2009-10	19486.44	57.20	27288	7512
Kharif 2010	17277.05	46.26	21433	2598
Rabi 2010-11	10464.97	31.03	14675	533
Kharif 2011	18281.07	62.03	23770	5457
Rabi 2011-12	20317.33	73.91	32547	15405
Kharif 2013	24195.66	89.45	32053	1654
Rabi 2012-13	14011.58	63.92	44558	3308

Source: Directorate of Agriculture, Assam.

**MODIFIED NATIONAL AGRICULTURAL INSURANCE SCHEME (MNAIS):**

- The scheme is being implemented on pilot basis in 50 districts in the country. NAIS is withdrawn from those districts in which MNAIS will be implemented.
- Unit of insurance for major crops is Village / Village Panchayat.
- Scheme is compulsory for loanee farmers & voluntary for non-loanee farmers. Uniform seasonality norms will be applicable for both loanee & non-loanee farmers.
- Sum insured can be opted up to 150% of the value of average yield. Premium subsidy is available up to the value of threshold yield / loan amount only.
- Entire claim will be borne by the implementing agency. The scheme provides account payment up to 25% of likely claim for immediate relief to the farmers.
- Minimum indemnity level will be 70% against 60% in case of NAIS.
- Calculation of threshold yield: Average yield of last 7 years excluding up to 2 years of declared natural calamity.

The scheme is implemented in two districts of Assam viz., Kamrup and Dhubri from Rabi, 2010-11. The summary of progress of implementation of MNAIS in the above mentioned districts presented in the table below:

**TABLE- 5.25**  
**STATUS OF IMPLEMENTATION OF MNAIS (Kamrup & Dhubri district)**

Item	Rabi, 2010-11	Kharif, 2011	Rabi, 2011-12	Kharif, 2012	Rabi, 2012-13	Total
Area covered (hectare)	1564.19	3192.02	2670.87	3375.94	1809.53	12612.55
Sum insured (₹ in crore)	4.98	13.89	8.75	12.58	12.28	52.48
Premium received (₹ in crore)	0.12	0.80	0.32	0.33	0.30	1.87
State Govt. share of premium subsidy (₹ in lakh)	3.94	19.27	6.00	6.27	2.50	37.98
No. of farmers covered	2097	4641	3942	2749	2228	15,657
Farmers benefited	Nil	711	299	126	Not yet settled	1,136

Source: Directorate of Agriculture, Assam.

**PROCUREMENT OF PADDY AS A MEASURE OF PRICE SUPPORT**

Assam has become marginally surplus in Rice production due to remarkable improvement in productivity through better input management practices and adoption of improved technology. But disposal of produce by the farmers at un-remunerative prices discouraged them in adopting improved measures that can result in more yields. Considering the interest of the farmers the State Govt. has engaged Assam State Agricultural Marketing Board (ASAMB) for procurement of paddy at Minimum Support Price apart from procurement to be done by FCI. Total procurement target was fixed at 1.44 lakh MT during the year 2012-13. Due to initiative of the State Govt., the ASAMB procured 7895.0 MT Paddy through 18 nos. procurement centres and 3 nos. extension centres with the involvement of ₹13.923 crore during 2012-13. The FCI also procured 20104.0 MT during the year 2012-13. During the year 2013-14 ASAMB and FCI targeted to procure 40000.0 MT and 50000.0 MT Paddy respectively through 40 nos and 25 nos procurement centres respectively. C.M Assam has also given special emphasis for paddy procurement during the year 2013-14.

To support MSP of Vegetables the State Agriculture Department provided transport subsidy to 980 numbers APMG for carrying vegetables to distant market. During the year 2012-13 the State Agriculture Department provided transport subsidy of ₹149.00 lakh for carrying 4864 MT vegetables to the APMGs. The State Agriculture Department set target to provide transport subsidy for carrying 14000.0 MT during the year 2013-14 for which budget provision of ₹152.00 lakh has been made for the year.

## AGRICULTURE MARKETING AND STORAGE

Marketing of Agriculture produces in the State is a serious problem for the farming community. Lack of organized marketing facility, lack of storage infrastructure near the field, poverty and need of money after harvest for repayment of agricultural debt forced the farmers to dispose off their hard earned produces at the earliest and that too at low prices. However, there is good potential for development of Agricultural Marketing Infrastructure and Storage facilities with Private Sector Participation. Keeping in view of the interest of farmers the State govt. has encouraged procurement of Paddy at Minimum support Price by engaging the Assam State Agriculture Marketing Board in addition to the procurement done by the FCI.

At present, there are 24 Regulated Market Committees, 20 Primary Market Yards, 143 Trader's Shop, 532 Auction Platform/retailers Shed, 806 Rural Primary Markets, 405 Wholesale Markets, One Organic Market, 18 Packaging Room, 42 Drying Platform and 15 Processing units in the State. The Regulated Markets have been covered under AGMARKNET. As regards to cold storage infrastructure in the State, there are 26 numbers of cold storages (Govt. Sector-3, private sector-23) are available in the State at present. In his budget speech for the year 2013-14, Hon'ble Chief Minister, Assam has proposed for setting up of 30 cold storages in different parts of Assam at an estimated cost of ₹150 crore.

To assist the farmers for carrying vegetables to the distant market, the Assam State Agriculture Marketing Board provided transport subsidy to 980 farmers. The State Government proposed to construct three-storied Market at Pamohi (Guwahati), Growers Consumers Market Complex at Ulubari (Guwahati) and establish 11 nos. of Sale Counters for marketing of farm products. For transportation of agricultural produces from field to market as many as 1102 numbers of three/four wheelers are provided during the year 2012-13. During the year 2013-14, the State Agriculture Department has planned to provide 2372 numbers of three/four wheel Auto Vans, 35 numbers of refrigerated vans and develop 15 numbers of Rural Hats to the farmers to facilitate marketing of farm produce. The Department has also taken initiative for establishment of market infrastructure, storage facility and to eradicate the transportation bottlenecks by distributing 224 auto vans, 610 mini trucks and providing transport for carrying the produces from remote areas to different markets. The rural connectivity scheme implemented under PMGSY is a major step towards benefit of farmers to take out their agricultural products to nearest urban markets.

**TABLE-5.26**  
**STORAGE CAPACITY CREATED BY**  
**DIFFERENT ORGANIZATIONS IN THE STATE**

Organisations	No. of Godowns	Storage Capacity (in MT)
FCI	18	206964
Central Warehousing Corporation	6	64200
State Warehousing Corporation	44	248181
ASAMB	58	40110
<b>Total</b>	<b>126</b>	<b>559455</b>

Source: Directorate of Agriculture, Assam

**TABLE- 5.27**  
**MARKET INFRASTRUCTURE DEVELOPED**

Market Infrastructure	Number
Cold Storage	26
Wholesale Market Developed (Out of 405 nos.)	21
Rural Primary Market (Out of 735 nos)	272
Organic Market	1
Sale Counter	11
Seed Storage Godown	18
Drying Platform	33
Three/Four Wheel Auto Van	4687

Source: Draft Annual Plan 2014-15, Planning and Development Department

Some of the major steps taken up to boost up marketing support and for post harvest management:

- Farming community has been mobilized to form 25 numbers of Farmer Producer Organizations (FPO) for securing better produce price;
- Rural farm women have been empowered by training and providing mini processing units of Pulses and oil seeds from which they can earn from their homes;
- Tie up has been made for export of Red Bao Paddy to USA and the process has started in 2012-13 on regular basis;
- Export of Pineapple cubes, orange, ginger, dendrobium orchids to other States and Countries have already been started;
- 0.56 lakh SHGs assisted to take up Agri-Horti activities including post harvest management; etc.

#### **NATIONAL MISSION ON OILSEEDS & OIL PALM**

The State is highly deficient in Oil seed production. To achieve targeted area coverage of 4.65 lakh hectares and 3.44 lakh MT production during 2014-15 to drive the State towards self sufficiency at the end of 12<sup>TH</sup> Five Year Plan an amount of ₹5000.00 lakh has been earmarked for launching Mini-Mission-I-Development of Cultivation of vegetable oilseeds crop, Mini-Mission-II-Development of Cultivation of Oil Palm and Mini-Mission-III-Development of Cultivation of Tree Borne Oil seeds.

#### **ESTABLISHMENT OF MINI OIL MILL WITH PACKAGING UNIT**

For employment generation from value added products of oilseeds and to facilitate the farming community to assure supply of pure cooking oil locally with maximum return from oilseeds cultivation. The State Agriculture Department proposed to establish 800 mini oil mills with packaging unit involving an amount of ₹2000.00 lakh. The Scheme will be envisaged for marketing linkage of oil produced involving ASAMB.

#### **WOMEN WELFARE SCHEME AS A GENDER RESPONSIVE BUDGET**

Rural women are considered as the most productive workforce in all aspects of cultivation/crop production and processing to marketing. Development of farming women has been given special thrust by the State Govt. for which the scheme has been formulated which will cover 500 women. 200 spice and pulses grinding mills, 200 numbers of power weeder and 50 numbers of paddy transplanter will be provided to the women SHGs for their economic upliftment during the year 2014-15 with special reference to Chief Minister's Vision of Women & Children of 2016.

#### **BRING GREEN REVOLUTION TO EASTERN INDIA INCLUDING ASSAM**

Central and State Governments have chalked out a strategy to achieve the planned growth in agriculture sector particularly with a view to achieving self-sufficiency in food production to provide food security. Several interventions with emphasis such as Bringing Green Revolution to Eastern India (**BGREI**), double cropping, supply of improved seeds, fertilizer and technology equipment etc. have been taken. Under this new initiative **BGREI**, the Government of India covers the states namely Assam, Bihar, Chhatisgarh, Jharkhand, Odisha, Eastern U.P. and West Bengal because of having excellent potential for increasing food grain production and productivity but is mired by low credit availability, poor extension facilities and infrastructure bottlenecks etc. To remove these impediments on a priority basis and transform these States into the best performing States steps have been taken by putting better Seed Replacement Ratio, adequate and timely availability of critical inputs, improving infrastructure facilities and other required programmatic interventions including bank credit etc.

In Assam, the scheme was launched in 2010-11 as a sub-scheme of RKVY to overcome the constraints limiting the productivity of rice based cropping system in the state by adopting short term activities related to Transfer of Technology through Rice demonstration in farmers field along with activities pertaining to assets building like creation of irrigation facilities to maximize agricultural production on sustainable basis. The scheme targets the main food grain crop of the State, i.e. Rice.

After 3 years (2010-11 to 2012-13) of implementation of the scheme the productivity and production of Rice has been increased by 21 percent and 19 percent respectively.

For successful implementation of the Scheme, [though the scheme is a sub-scheme of RKVY], separate fund has been provided by the Govt. of India. During the period 2010-11 to 30<sup>th</sup> September, 2013, the State has received an amount of ₹19501.00 lakh from the Govt. of India.

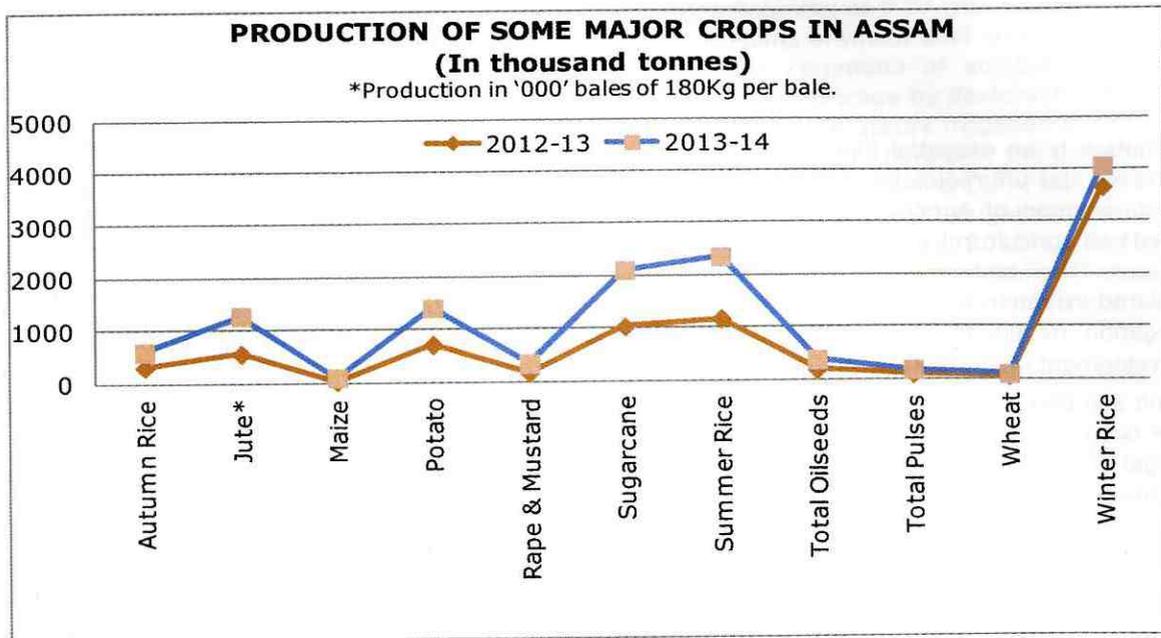
## APPENDIX - 5.1

## INDEX NUMBERS OF AREA, PRODUCTION AND PRODUCTIVITY FOR FOOD AND NON- FOOD CROPS IN ASSAM, 2013-14 (PROVISIONAL)

(Base Triennium ending 2007-08=100)

Sl. No.	Commodities	Area index	Production Index	Productivity Index
1.	Autumn Rice	63.07	84.61	134.16
2.	Winter Rice	114.19	165.68	145.08
3.	Summer Rice	123.61	162.58	131.53
4.	<b>Total Rice</b>	<b>110.91</b>	<b>156.49</b>	<b>141.10</b>
5.	Maize	131.08	578.19	441.12
6.	Wheat	55.81	57.13	102.35
7.	Other Cereals and Millets	78.46	94.77	120.80
8.	<b>Total Cereals</b>	<b>106.69</b>	<b>155.99</b>	<b>146.20</b>
9.	Gram	109.73	151.53	138.10
10.	Tur	104.02	133.38	128.22
11.	Other Rabi Pulses	134.75	145.00	107.61
12.	<b>Total Pulses</b>	<b>132.04</b>	<b>144.30</b>	<b>109.28</b>
13.	<b>Total Food Grains</b>	<b>107.06</b>	<b>155.81</b>	<b>145.53</b>
14.	Linseed	78.43	99.18	126.45
15.	Castor	73.51	87.82	119.46
16.	Sesame	92.19	118.42	128.44
17.	Rape and Mustard	118.90	137.49	115.64
18.	Coconut	107.55	92.90	86.38
19.	Nizer	84.31	101.65	120.58
20.	<b>Total Oilseeds</b>	<b>111.22</b>	<b>112.96</b>	<b>101.56</b>
21.	Jute	116.68	109.20	93.59
22.	Cotton	83.89	84.57	100.81
23.	Mesta	84.60	108.91	128.73
24.	<b>Total Fibres</b>	<b>115.39</b>	<b>109.17</b>	<b>94.61</b>
25.	Plantation Crop (TEA)	100.28	115.09	114.77
26.	Chillies	117.48	162.58	138.39
27.	Turmeric	130.17	182.89	140.50
28.	Arecanut	101.65	157.06	154.51
29.	<b>Total Condiments &amp; Spices</b>	<b>107.04</b>	<b>160.78</b>	<b>150.20</b>
30.	Potato	130.27	134.43	103.20
31.	Banana	115.47	141.36	122.42
32.	<b>Total Fruits and Vegetables</b>	<b>122.30</b>	<b>138.16</b>	<b>112.97</b>
33.	Sugarcane	113.01	109.74	97.11
34.	Tobacco	51.70	51.70	100.00
35.	Total Misc. Crops	112.62	109.37	97.11
36.	<b>Total Non-Food Crops</b>	<b>115.55</b>	<b>123.81</b>	<b>107.15</b>
37.	<b>All Commodities</b>	<b>108.79</b>	<b>141.56</b>	<b>130.13</b>

Source: Directorate of Economics and Statistics, Assam.



**APPENDIX - 5.2**

**AREA, PRODUCTION AND AVERAGE YIELD OF SOME MAJOR CROPS IN ASSAM**

(Area in thousand hectares, Production in thousand tonnes and Average yield in Kg/Hectare)

Sl. No.	Crops	2012-13			2013-14		
		Area	Production	Average Yield	Area	Production	Average Yield
1.	Autumn Rice	238	309	1242	223	294	1340
2.	Winter Rice	1857	3655	1785	1881	3709	2002
3.	Summer Rice	393	1164	2744	399	1190	2981
4.	Total Rice	2488	5128	1876	2503	5193	2101
5.	Wheat	34	44	1209	31	40	1292
6.	Maize	24	21	802	24	77	3199
7.	Total cereals	2550	5195	1855	2564	5314	2090
8.	Total Pulses	142	84	560	150	88	589
9.	Total Foodgrains	2692	5279	1792	2714	5402	2007
10.	Rape & Mustard	279	170	559	279	169	605
11.	Total Oilseeds	326	187	563	325	186	611
12.	Potato	95	709	6978	98	700	7148
13.	Sugarcane	16	1028	37055	29	1075	36969
14.	Jute*	65	558	1669	70	717	1849

\*Production in '000' bales of 180Kg per bale.

Source: Directorate of Economics and statistics, Assam

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## CHAPTER – VI

## IRRIGATION

Irrigation is an essential input of agriculture. Assam agriculture is primarily rain-fed. But, due to adverse and unpredictable weather conditions as well as to pursue double/multiple cropping and modernization of agricultural practices in the State agricultural sector to cope with the growing needs of agricultural production to feed the burgeoning population, irrigation is highly essential in Assam. Over and above, for a sustained development in the agricultural sector, availability of assured irrigation facility is undoubtedly the most important pre-requisite. Thus, the importance of irrigation development bears special significance in the context of efforts towards economic development of the State too.

Land use pattern in Assam indicates that out of the total geographical area of 78.44 lakh hectares, the Gross Cropped Area of Assam is 41.74 lakh hectares [2011-12]. Against this, the ultimate irrigation potential i.e. the ultimate Gross Irrigation Potential (Annually Irrigable Area) has been estimated at about 27 lakh hectares, which constitutes 64.9 per cent of the Gross Cropped Area. It is planned to provide irrigation facilities to 10 lakh hectares of cropped area through Major and Medium Irrigation Projects from surface water sources and the rest 17 lakh hectares through Minor Irrigation Schemes. Again out of that 17 lakh hectares, 7 lakh hectares through Minor Irrigation Schemes from ground water sources and the rest 10 lakh hectares of cropped area from surface water sources.

The development programmes for improvement of irrigation facility in Assam taken up under two broad heads, viz., Minor Irrigation and Major & Medium Irrigation. While the Irrigation Schemes are classified as Major, Medium and Minor, they are categorized as Surface Flow, Surface Lift (for Major / Medium and Minor) and Ground Water Lift (for Minor only). Three Departments, viz. Irrigation, Agriculture and Panchayat and Rural Development are associated with development of irrigation facilities in the State. While the State Irrigation Department, being the **Nodal Department** for development of irrigation in the State, executes and maintains Major, Medium and Minor Irrigation Schemes, the irrigation works of the other two departments are confined to minor irrigation schemes like Shallow Tube Wells, Low Lift Points and Temporary Minor Irrigation Schemes only.

Out of the Gross Cropped Area of 41.74 lakh hectares of the State, the Irrigation Department alone created potential of 8.52 (approx) lakh hectares up to March, 2014 by operating both completed and ongoing irrigation schemes of which 2.63 lakh hectares through both Major and Medium Irrigation Projects and the rest 5.89 lakh hectares through Minor Irrigation Schemes. Out of the 5.89 lakh hectares of created potential under Minor Irrigation Sector, a potential of 4.40 lakh hectares was created through the Govt. Minor Irrigation Schemes executed by the State Irrigation Department and the rest 1.49 lakh hectares through Shallow Tube Wells (STWs) and Low Lift points (LLPs) installed by the Assam State Minor Irrigation Development Corporation (ASMIDC) Limited [Now merged with the State Irrigation Department]. It is pertinent to note that the Irrigation Department could achieve 39.0 percent of the Ultimate Irrigation Potential of the State against the National average of 75.0 percent till the end of March 2014. The position of creation of irrigation potential under different sectors is presented in Table-6.1.

**TABLE – 6.1**  
**IRRIGATION POTENTIAL CREATED (AIA) UPTO 2013-14**

Department/ Agency	Major & Medium Irrigation Sector	Minor Irrigation Sector	Total
Irrigation Department	262613	440153	702766
ASMIDC Ltd (now merged with Irrigation, Deptt.)	NIL	149205	149205
<b>Total</b>	<b>262613</b>	<b>589358</b>	<b>851971</b>

Source: Chief Engineer, Irrigation Department, Assam.

The State Agriculture Department has also created irrigation Potential of 9.77 lakh hectares till the end of 2013-14 through the Shallow Tube wells and Low Lift Points of which 5.84 lakh hectare area under utilisable/assured irrigation. To increase the irrigation command of additional assured irrigation area by 2.0 lakh hectare and to regain the loss of area coverage by deplorable condition of STW installed prior to 2000, the scope /popularity towards use of assure irrigation in the field of Agriculture is felt one of the most prime needs of the department. Therefore, the department proposed to install 1.00 lakh STW under RIDF Scheme of NABARD. During the 11<sup>TH</sup> Five Year Plan period all total 191880 STWs, 50 DTWs, 30142 LLPs and 1673 Sprinkler Irrigation sets were distributed by the State Agriculture Department to farmers. During the year 2012-13 the State Agriculture Department installed 48674 numbers STWs/LLPs to create additional irrigation potential in the State. In 2013-14, the Agriculture Department has installed 30000 numbers STWs in the State.

The achievements made by Agriculture Department in installation of Shallow Tube wells and Low Lift Points to create irrigation facilities to the farmers till 2013-14 may be evident from the table below:

**TABLE- 6.2**  
**IRRIGATION INFRASTRUCTURE CREATED BY THE**  
**AGRICULTURE DEPARTMENT**

(Figure in number)

Component of irrigation	No. installed							
	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
Shallow Tube Wells	2812	8190	30080	53208	141452	25704	43938	30000
Low Lift Pump	5176	11730	6246	8060	29560	0	4736	0

Source: Directorate of Agriculture, Assam.

### CREATION OF IRRIGATED AREA AND UTILISATION OF POTENTIAL

It is worth mentioning that no works of Irrigation Schemes could be successfully completed under normal State Plan due to low allocation of fund during VIII th to IX th Plan period. However since 1996-97 Central Assurances have been obtained under **Accelerated Irrigation Benefit Programme (AIBP)** in respect of Major and Medium Irrigation Sector. Since 2000-01 Central Assurances also provided for Minor Irrigation Sector also. Such assurances were also received from other programmes like **Non Lapsable Central Pool of Resources (NLCPR)**, **Assam Rural Infrastructure for Agricultural Services Programme (ARIASP)** funded by the World Bank and National Bank for Agriculture and Rural Development (NABARD) under RIDF-X and RIDF-XI. With the above sources of funding the position of creation of irrigation potential has been improved in the State to certain extent. The year wise irrigation potential created during the last six years is as follows.

**TABLE - 6.3**  
**IRRIGATION POTENTIAL CREATED THROUGH GOVT. IRRIGATION**  
**SCHEMES BY IRRIGATION DEPARTMENT**

(In hectare)

Year	Major & Medium Irrigation	Minor Irrigation	Total
2007-08	484	14966	15450
2008-09	9425	18375	27800
2009-10	7162	29838	37000
2010-11	4426	16456	20882
2011-12	10678	15029	25707
2012-13	270	9485	9755
2013-14	8000	11713	19713

Source: Chief Engineer, Irrigation Department, Assam.

#### a) Major and Medium Irrigation Sector

At present there are 4(four) AIBP funded ongoing Major/Medium Irrigation Projects (Dhansiri I/P, Champamati I/P, Borolia I/P and Buridehing I/P) and all are in different stages of progress. But due to inadequate plan fund and land acquisition problem one project [Buridehing I/P] is targeted to wind up during 2011-12. The remaining 3(three) Irrigation Projects have been expected to be completed by 2015 with an anticipated expenditure of ₹35695.00 lakh which will create total irrigation potential of 53973 hectares.

Reconstruction of flood damaged Bordikorai Irrigation Project (Major) in Sonitpur District has been taken up for ₹47.22 Crore under One Time ACA to revive lost potential of 34000 hectares. Till March 2013 revival of 30,300 Hectares covering 93 villages (out of the total 130 villages) within its command has been completed.

Under Assam Bikash Yojana, revival/ improvement work of Rupahi Irrigation Project (Medium) was taken up with the estimated amount of ₹2.47 Crore to restore lost potential of 5668 Hectares. The project is in progress.

In addition to the above, modernization of Sukla Irrigation Project (Major) in Baksa District has been completed with NABARD (RIDF-XI) and BTC fund and revived lost potential of 27400 hectares.

The State Irrigation Department has planned to complete all the ongoing projects within the 12th Five Year Plan period. In addition, one Major Irrigation Project viz., Puthimari Irrigation Project at an estimated potential of 12280 hectare and 3 medium Irrigation Projects – Burisuti Medium Irrigation Project, Dikhow Medium Irrigation project and Buroi Medium Irrigation Project having potential of 6500 hectares, 6000 hectares and 5000 hectares respectively have been proposed in the 12<sup>TH</sup> Five Year Plan with estimate costs of ₹1225.09 crore for creating additional potential of 29780 hectares (net Irrigation area).

Besides above, the State Irrigation Department has completed repairing of 3 nos. of 650 HP pump sets and 3300 volts transformer etc for smooth operation of the Kollong and Sonai River Basin (Major) Irrigation Schemes under Integrated Irrigation Scheme.

#### **b) Minor Irrigation Sector**

Under AIBP, total 702 Minor Irrigation Schemes were taken up since 2001-02 with an estimated cost of ₹2507.48 crore to achieve an irrigation potential of 321,138 hectares. Upto March 2013, 426 Minor Irrigation schemes have been completed creating a potential of 1,78,613 hectares including restoration/revival of lost potential.

The works of 6 Minor Irrigation Schemes are in progress under Non Lapsable Central Pool of Resources (NLCPR) funding with an estimated cost of ₹3103.62 Lakh to achieve a potential of 4510 hectares. Out of the total 6 Schemes, 3 Schemes have been completed creating a potential of 2510 hectares.

Two NEC funded Minor Irrigation Schemes have been completed achieving a potential of 370 hectares. Two new Minor irrigation Schemes are taken up to achieve potential of 635 hectares.

All total 33 Minor Irrigation Schemes have been completed with the NABARD assistance (RIDF-X and XI) creating potential of 14179 hectare. Construction of 2 Minor Irrigation Schemes are in progress with NABARD assistance to create a targeted irrigation potential of 570 hectares. In addition, the State Irrigation department achieved sanction of ₹79.82 crore to undertake 104 Minor Irrigation Schemes under NABARD (RIDF -XVIII) assistance which will help to achieve targeted potential of 6,942 hectares.

Under Scheduled Caste Sub-Plan (SCSP), works of 156 Minor Irrigation Schemes are in progress in the State since 2005-06 out of which 64 schemes have been completed creating a potential of 8980 hectares. Remaining 92 Schemes are in various stages of construction.

66(sixty six) Minor Irrigation Schemes were taken up under Tribal Sub-Plan (TSP Schemes since 2005-06 out of which 40 Schemes have been completed creating a potential of 6323 hectares. Execution of remaining 26 Schemes are in progress and are in various stages of construction.

Under the Assam Vikash Yojana renovation/reconstruction of 27 sick Minor Irrigation Schemes are in progress for revival of lost potential of 1780 hectares. Out of the total aforementioned Schemes, 19 Schemes have been completed reviving a lost potential of 1367 hectares.

During the 12<sup>TH</sup> Five year Plan period, the State Irrigation department has targeted to create irrigation potential of 228664 hectares. According to the department, under AIBP there are 319 Minor Irrigation Schemes in different stages of completion. On completion the State could achieve an additional irrigation potential of 148680 hectares. The department has also proposed to take up 779 new Minor Irrigation Schemes to create additional potential of 151878 hectares in different districts subject to their feasibility during the Plan period.

The State Irrigation Department has planned to complete 60 ongoing schemes under AIBP during the year 2013-14 to achieve irrigation potential of 31000 hectares. In addition, the department has proposed to take up 104 new schemes under NABARD Assistance during the said year i.e., 2013-14.

The Department has also undertaken a Pilot Project of Solar Power Driven Deep Tube Well Scheme at Borlah near Hajo of Kamrup District on experimental basis to combat the problem of erratic power supply. Introduction of the system is being proposed for more Schemes being the running cost is less.

### c) Command Area Development and Water Management (CADWM)

The Centrally Sponsored Command area Development Programme was launched in the year 1974-75 for development of adequate delivery system of Irrigation Water upto the farmers' field with an objective to enhance water use efficiency and production and productivity of crops per unit of land and water for improving socio-economic condition of farmers. Accordingly, completion of 60 percent progress of Major/Medium and Minor irrigation Projects /Schemes covering minimum of 1000 hectares are taken into consideration to bring under CADWM programme.

Under the CADWM, 8 (eight) projects have been taken up –Jamuna Irrigation Project, Kaliabor Irrigation Project, Sukla Irrigation Project, Kolong & Sonai River Basin Irrigation Schemes (Integrated Irrigation Scheme), Kaldiya Irrigation Project, Dekadong Irrigation Project, Bordikrai Irrigation Project and Pahumara CAD Project. Out of the eight Projects Jamuna, Kaliabor, Sukla Irrigation Projects were deleted in July 2003 on completion of On Firm Development (OFD) works and the Kolong & Sonai River Basin Integrated Scheme were discontinued as no OFD works was taken up due to non-availability of assured water supply.

During the 11<sup>TH</sup> Five Year Plan period, overall physical achievement was 11090 hectare out of the total target of 35755 hectare against the existing 4(four) ongoing schemes.

During the year 2010-11, Pahumara Command Area Development Programme at Sarupeta has been included with an estimated culturable Command Area of 9259 hectare. In addition, 78.0 percent and 83.5 percent physical achievements have also been achieved for Kaldiya Irrigation Project and Dekadong irrigation Projects respectively during the period.

During the 12<sup>TH</sup> Five Year Plan period (2012-2017), the State Irrigation Department planned to continue and complete the pending works of all the ongoing works to achieve the objective to cover 96557 hectare. Accordingly planned to complete 4 (four) ongoing projects Viz., Kaldiya Irrigation Project, Dekadong Irrigation Project, Pahumara Command Area Development Project and Bordikrai Irrigation Project and initiate works of 8(eight) new projects as under:

- (1) Bhumki Command Area Development Project.
- (2) Moradiya Command Area Development Project.
- (3) CAD to LIS from River Burhi Dihing in Khowang Area.
- (4) Sapkata Command Area Development Project.
- (5) Longa Command Area Development Project.
- (6) Dhansiri Command Area Development Project.
- (7) Champamati Command Area Development Project.
- (8) New Minor Irrigation Scheme (17 nos. of Clust), under Tangla Division Irrigation.

The "State Level Monitoring Committee" approved the first 5(five) new projects of the above and the reports have been submitted to the State Govt. for obtaining approval from the Govt. of India.

### REVIEW OF ANNUAL PLAN: 2012-13 AND 2013-14

During the Annual Plan 2012-13 out of the total physical target of 10349 Hectare, only 160 Hectare area could be achieved and expenditure was ₹80.00 lakh. During the year, Government of India released ₹269.48 lakh as Central assistance to the State Government.

During the Annual Plan 2013-14 out of the total physical target of 7400 Hectare, only 200 Hectare could be achieved till December, 2013. The Irrigation department expected to complete two ongoing projects Dekadong and Kaldiya Scheme.

**TABLE - 6.4**  
**FUND POSITION DURING 11TH**  
**FIVE YEAR PLAN PERIOD**  
(₹ in lakh)

Year	Total	Central Share Released	State Share Released
2007-08	75.00	Nil	75.00
2008-09	894.61	594.61	300.00
2009-10	718.47	Nil	718.47
2010-11	363.98	226.00	137.98
2011-12	292.00	Nil	292.00
<b>Total</b>	<b>2344.06</b>	<b>820.61</b>	<b>1523.45</b>

Source: Chief Engineer, Irrigation Department, Assam.

**TABLE - 6.5**  
**FINANCIAL ACHIEVEMENTS OF SOME OF THE CENTRAL SECTOR**  
**AND CENTRALLY SPONSORED SCHEME**

(₹ in lakh)

Year	Schemes									
	AIBP		AIBP		CADWM		NLCPR		NEC	
	Major/Medium		Minor		Target	Achievement	Target	Achievement	Target	Achievement
	Target	Achievement	Target	Achievement						
2011-12	19503	4950	36046	34379.94	1736	292	625	156.63	610	135.66
2012-13	21313	648.65	36676.10	14575.19	2933	80	800	22.04	500	351.28
2013-14	13353	1140.80	43230	29614.17	2743	722.34	1200	31.79	543.68	140.00

Source: Chief Engineer, Irrigation Department, Assam.

**TABLE - 6.6**  
**PHYSICAL ACHIEVEMENTS OF SOME OF THE CENTRAL SECTOR**  
**AND CENTRALLY SPONSORED SCHEME**

(Area in Hect.)

Year	Schemes									
	AIBP		AIBP		CADWM		NLCPR		NEC	
	Major/Medium		Minor		Target	Achievement	Target	Achievement	Target	Achievement
	Target	Achievement	Target	Achievement						
2011-12	19244	4000	28580	36321	5430	1350	3010	2010	500	0
2012-13	53973	270	58334	35868	2100	360	2500	0	500	0
2013-14	48625	8000	33800	13543	7400	1508	2000	0	635	0

Source: Chief Engineer, Irrigation Department, Assam.

**TABLE - 6.7**  
**FINANCIAL ACHIEVEMENTS OF THE SCHEMES**  
**FUNDED UNDER DIFFERENT SOURCES**

(₹ in lakh)

Year	Scheme											
	NABARD		NABARD		Assam Vikash Yojana		TSP		SCSP		State Plan (ACA)	
	Major/Medium Irrigation		Minor Irrigation		Minor Irrigation		Target	Achievement	Target	Achievement	Target	Achievement
	Target	Achievement	Target	Achievement	Target	Achievement						
2011-12	50.00	50.00	500	65.64	0.00	0.00	450	440.89	1450	1381.23	1667	325.80
2012-13	0.00	0.00	415	274.26	100.00	59.90	735	680.04	2328	1475.73	0.00	0.00
2013-14	0.00	0.00	415	209.84	122.60	120.48	800	799.15	2628	2627.15	1356	718.18

Source: Chief Engineer, Irrigation Department, Assam.

**TABLE - 6.8**  
**PHYSICAL ACHIEVEMENTS OF THE SCHEMES**  
**FUNDED UNDER DIFFERENT SOURCES**

(Area in Hect.)

Year	Scheme									
	NABARD		Assam Vikash Yojana		TSP		SCSP		State Plan (ACA)	
	Minor Irrigation		Minor Irrigation		Target	Achievement	Target	Achievement	Target	Achievement
	Target	Achievement	Target	Achievement						
2011-12	1300	700	497	0	3130	1040	8112	1156	5455	3100
2012-13	570	0	627	110	2100	574	11239	1670	3700	0
2013-14	570	0	497	35	1518	1220	3577	2292	3700	3650

Source: Chief Engineer, Irrigation Department, Assam.

**d) Thirteenth Finance Commission: GRANT-IN-AID**

Under 13<sup>th</sup> Finance Commission's Grant-in-aid, ₹15.00 crore is proposed for repairing of 78 nos. of Deep Tube Well points, 10 nos. of Lift Irrigation Schemes and 5 Nos. of Flow irrigation Schemes in Minor Irrigation Sector to revive lost potential of 3940 Hectares during the financial year 2011-12. Another amount of ₹7.00 crore are proposed for repairing of 3 Nos. Major/Medium Irrigation Projects to make them operational. But the Schemes could not be implemented during the year 2011-12 and therefore the same was revalidated during 2012-13. The total 2553 Hectare irrigation potential revived during 2012-13 under Minor Irrigation Sector (DTW-1959 hectare, LIS-54 hectare and FIS-540 hectare)

In respect of Major/Medium Sector, revival of irrigation potential was 400 hectare.

**e) Utilisation of Irrigation potential**

The crop season wise utilisation of irrigation potential of State Government owned irrigation projects/schemes under Irrigation Department during the last six years may be evident from the table below:

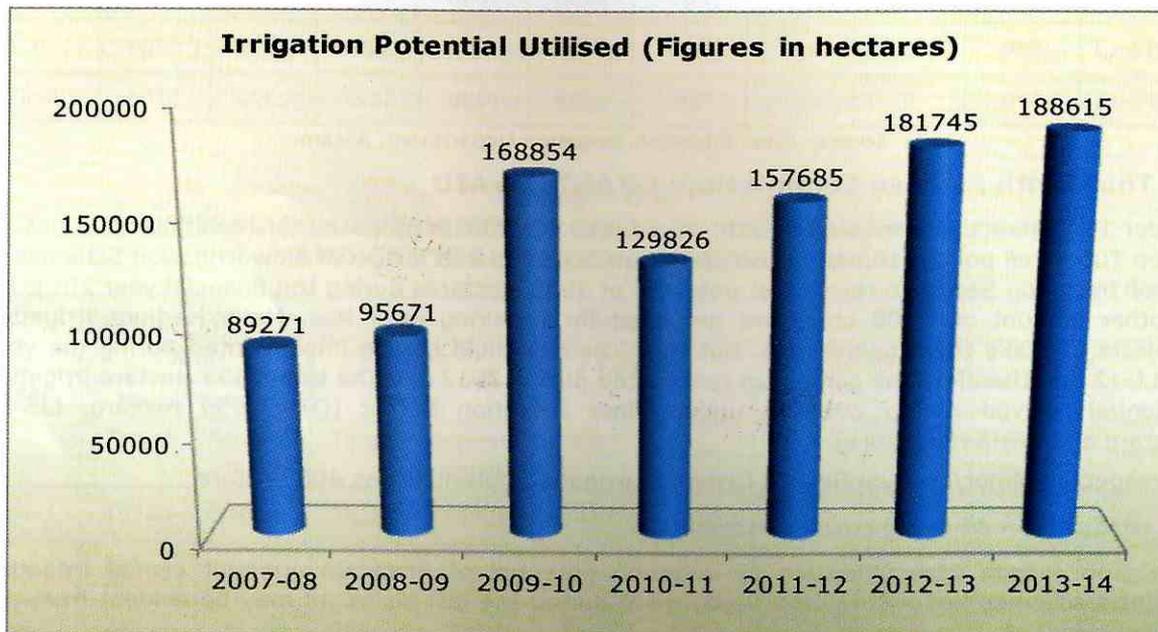
**TABLE - 6.9**  
**CROP SEASON WISE IRRIGATION POTENTIAL UTILISED**

(Figures in hectares)

Year	Crop Season								
	Kharif crops season			Rabi & Pre-Kharif crops season			Total		
	Minor	Major/Medium	Total	Minor	Major/Medium	Total	Minor	Major/Medium	Total
2007-08	41795	32668	74463	10486	4322	14808	52281	36990	89271
2008-09	40775	34902	75677	10923	9071	19994	51698	43973	95671
2009-10	77495	70274	147769	11178	9907	21085	88673	80181	168854
2010-11	63649	44691	108340	15612	5874	15612	79261	50565	129826
2011-12	71650	61028	132678	18360	6647	25007	90010	67675	157685
2012-13	92677	60700	153377	23546	4822	28368	116223	65522	181745
2013-14	99199	60058	159257	25301	4057	29358	124500	64115	188615

Source: Chief Engineer, Irrigation Department, Assam.

It is pertinent to mention that the utilisation of irrigation potential is not upto the expectation and there is a gap between the created irrigation potential and potential actually utilised. The primary reason of less utilisation of irrigation potential is that that the cultivators are reluctant to take advantage of irrigation facilities. However, the identified causes for less utilization of irrigation potential were - general wear and tear of the schemes, damage caused by natural calamities like flood, storm etc., erratic power supply in respect of the electrically operated schemes (Surface Lift schemes and Ground Water Lift schemes), damage of transformer, HT line and mechanical components, change of river course in respect of Surface Flow and Surface Lift Irrigation Schemes, damage of canal System, no demand from cultivators, reluctance of the cultivators to adopt multiple cropping system where assured irrigation is necessary, non-functioning of the schemes due to theft of motors/ pumps and other accessories, realization of Irrigation Service Charges [imposed by the government] from beneficiary cultivators, economically poor cultivators want to get free irrigation from Govt. Schemes.



In order to minimize the gap between irrigation potential created and irrigation potential utilised in the State as well as to encourage utilisation of irrigation facilities created by the state government departments following steps have been taken:

- 1) Emphasis has been given on Participatory Irrigation Management (PIM) where the farmers can take part in the system and process of irrigation as well as its maintenance. Under the PIM system Water Users' Associations (WUA) have been formed within the command area of Govt. Irrigation Schemes.
- 2) Out of State exposure visit in Tamil Nadu, Andhra Pradesh and Jharkhand have been organized for some Irrigation officials, NGOs and WUA farmers.
- 3) District Level Co-ordination Committees have been formed with the officials of Irrigation Department and Agriculture Department to motivate farmers for optimum use of water by motivating the farmers.
- 4) Farmers' Motivation Trainings are conducted in every district to encourage them to go for more and more multiple cropping using assured irrigation provided by Govt. Irrigation Schemes.
- 5) The Assam Irrigation Act, 1983 and The Assam Irrigation Rules, 1997 have been enacted providing safeguard to the Irrigation Schemes and the cultivators as well.
- 6) The Assam Irrigation Water Users' Act, 2012 has been enacted with a view to safeguarding the right of the beneficiary cultivators of the Govt. Irrigation Schemes wherein provision for active participation of the cultivators has been made. Necessary Rules under the Act is also being passed by the Govt.

### f) Creation of Irrigation Potential and its utilization [As per Census of Minor Irrigation Schemes]

The 4<sup>th</sup> Minor Irrigation Census was conducted with reference year 2006-07 under the guidance and supervision of Ministry of Water Resources, Govt. of India. As per 4<sup>th</sup> Census of Minor Irrigation, 2006-07, there were 104312 Ground Water Schemes (Shallow Tube wells and Deep Tube wells) and 6442 Surface Water Schemes (Surface Flow and Surface Lift) creating 306905 hectares and 322856 hectares of irrigation potential respectively in the State under Minor Irrigation Sector. Of the total potential of 629761 hectares (306905 hectares + 322856 hectares) created under Minor Irrigation Sector, a total of 323297 hectares of area was irrigated (utilized) during that particular year 2006-07. Thus, there exists large gap between irrigation potential created and irrigation potential utilized.

The table below shows the category wise number of Minor Irrigation Schemes, creation of irrigation potential and its utilization.

**TABLE – 6.10**  
**IRRIGATION POTENTIAL CREATED AND UTILISED IN ASSAM IN 2006-07**

Category of Schemes	Total no. of Schemes	Schemes in use (No).	Irrigation Potential Created (In hect.)			Irrigation Potential Utilised out of the created potential in use ( in hect)
			In use	Not in use	Total	
Surface Water	104312	5025	207049	115807	322856	137786
Ground Water	6442	91453	244216	62689	306905	185511
<b>Total</b>	<b>110754</b>	<b>96478</b>	<b>451265</b>	<b>178496</b>	<b>629751</b>	<b>323297</b>

Source: Chief Engineer, Irrigation Department, Assam.

### IRRIGATED AREA AS PER AGRICULTURE CENSUS-2010-11

As per Agriculture Census 2010-11, there is about 1.61 lakh hectare net irrigated area (including private sources) in the State of which 0.33 lakh hectare area irrigated from 'canal', 0.048 lakh hectare from 'tanks', 0.02 lakh from 'wells', 0.27 lakh hectare from 'tubewells' and 0.94 lakh hectare receives irrigation from 'other sources'. The table below shows the size class wise area receiving irrigation from different sources in the State.

**TABLE – 6.11**  
**SIZE CLASS AND SOURCE-WISE AREA IRRIGATED IN ASSAM**

Sl. No.	Size Class (in Ha)	Area under Operational Holding	Area Receiving Irrigation from Sources					Net Irrigated Area
			Canal	Tanks	Wells	Tube wells	Other Sources	
1	Below 0.5	385255.42	1526.19	118.44	101.62	3529.43	8669.36	13944.04
2	0.5-1.0	389541.03	3196.83	468.34	84.74	1850.74	6593.15	12193.80
3	1.0-2.0	687156.19	6559.21	698.40	153.37	4339.87	16900.42	28651.27
4	2.0-3.0	480948.66	5841.16	1169.86	213.77	3413.60	11237.00	21875.39
5	3.0-4.0	337033.83	4578.28	879.46	159.52	2728.56	9871.89	18217.71
6	4.0-5.0	214768.17	2484.95	562.97	57.31	2207.41	7263.68	12576.32
7	5.0-7.5	184189.82	2763.62	256.95	48.59	1748.33	6113.66	10931.15
8	7.5-10.0	38414.24	892.87	79.07	0.00	103.15	2361.59	3436.68
9	10.0-20.0	24567.50	988.38	0.00	0.00	152.35	1264.93	2405.66
10	20 & above	257195.09	4268.05	542.82	1016.72	7095.84	24079.25	37002.68
11	All Classes	2999069.95	33098.54	4776.31	1835.64	27169.28	94354.93	161234.70

Source: Report of Agriculture Census, Assam 2010-11.

**AREA IRRIGATED DURING 2012-13**

The table below shows the crop season-wise area irrigated during the year 2012-13 in different districts of Assam from Government source of irrigation:

**TABLE - 6.12**

Name of District	Kharif		Rabi & Pre-Kharif		Total	
	2011-12	2012-13(P)	2011-12	2012-13(P)	2011-12	2012-13(P)
Dhubri	199	44	475	263	674	307
Kokrajhar	13378	6578	175	90	13553	6668
Bongaigaon	48	351	76	216	124	567
Goalpara	1402	2338	734	647	2136	2985
Barpeta	4298	1837	256	174	4554	2011
Nalbari	451	64	100	62	551	126
Kamrup	2702	290	444	589	3146	879
Kamrup Metro	1137	4821	2148	2992	3285	7813
Darrang	4047	4333	800	1340	4847	5673
Sonitpur	11097	9185	24	31	11121	9216
Lakhimpur	426	505	458	415	884	920
Dhemaji	475	415	60	0	535	415
Morigaon	245	225	874	818	1119	1043
Nagaon	20092	29549	4330	4225	24422	33774
Golaghat	224	163	67	0	291	163
Jorhat	55	784	870	394	925	1178
Sivasagar	951	322	29	21	980	343
Dibrugarh	1237	2290	0	120	1237	2410
Tinsukia	743	698	58	17	801	715
Karbi Anglong	15679	32179	3457	5658	19136	37837
Dima Hasao	3819	3875	0	0	3819	3875
Karimganj	50	1305	200	65	250	1370
Hailakandi	1055	925	902	805	1957	1730
Cachar	1130	1130	1961	1766	3019	2896
Chirang	7478	5646	974	1376	8452	7022
Baska	15896	12485	2625	1114	18521	13599
Udalguri	24364	27830	2910	3373	27274	31203
Total	132678	150167	25007	26571	157685	176738

Source: Chief Engineer, Irrigation Department, Assam.

**REALISATION OF IRRIGATION SERVICE CHARGES**

As sufficient fund is required for operation and maintenance of Irrigation Schemes and the fund provided in the State's budget is not adequate, the State Irrigation Department has introduced the system of realisation of service charges from the beneficiary cultivators since 1993. The rates of Irrigation Service Charges have been revised during 2000-01 to cope with the increasing cost of maintenance and in accordance with the Fiscal Reform Measures of the State Government. The current rates of Irrigation Service Charges are shown in Table 6.13.

**TABLE - 6.13**  
**IRRIGATION SERVICE CHARGES**

Crops	Rate/Bigha (₹)	Rate/Hect. (₹)
Kharif	37.50	281.24
Wheat and Other Rabi	75.00	562.50
Early Ahu	100.00	751.00
Ahu	100.00	751.00
Jute	20.00	150.00
Sugarcane	29.60	222.00

Source: Chief Engineer, Irrigation Department, Assam.

The reasons for poor realisation of Irrigation Service Charges from the beneficiary cultivators are -

1. Poor economic condition of the cultivators;
2. General tendency of the beneficiary cultivators to get free water from Govt. Irrigation Schemes;
3. Absence of legal authority of Water Users' Associations empowering them to collect Irrigation Service Charges;
4. Some authorities have not permitted to collect the Irrigation Service Charges.
5. Adverse law and order situation in some areas for certain periods.

However, the Department is making its endeavour to realize the Service Charges from the beneficiary cultivators. A remarkable realisation of Irrigation Service Charges has been made during the year 2011-12 [₹12.06 lakh] as against ₹4.72 lakh during the year 2010-11. The year wise status of Irrigation Charges actually realised from beneficiary cultivators is presented at Table - 6.14.

In order to improve the position of realisation of Irrigation Service Charges the Department has undertaken the following steps-

- a) The Assam Irrigation Act, 1983 as well as the Assam Irrigation Rules, 1997 was enacted;
- b) The Assam Irrigation Water Users' Act, 2004 has been enacted.
- c) District wise Farmers' Motivation Training Programmes are conducted time to time to create awareness about the utility of irrigation for Multiple Cropping with a view to uplift their economic condition of cultivators through scientific agriculture.
- d) 795 Water Users' Associations (WUA) have been constituted in the Command Areas of Irrigation Schemes/Projects.
- e) District wise WUA Farmers' Training was conducted to adopt scientific agriculture in Irrigation Command.
- f) Out-of-State exposure visit in Tamilnadu, Andhra Pradesh and Jharkhand have been organised for officials of Irrigation Department, NGOs and WUA farmers.

**TABLE - 6.14**  
**IRRIGATION CHARGES**  
**REALISED**

(Rupees in Lakh)

Year	Amount realized
2002-03	1.74
2003-04	2.86
2004-05	4.92
2005-06	3.53
2006-07	2.02
2007-08	1.96
2008-09	2.02
2009-10	3.40
2010-11	4.72
2011-12	12.06
2012-13	7.63
2013-14	7.95

Source: Chief Engineer, Irrigation Department, Assam.

## APPENDIX – 6.1

PHYSICAL & FINANCIAL TARGET AND ESTIMATES OF THE SCHEMES PROPOSAL  
PROPOSED TO BE UNDERTAKEN DURING THE YEAR 2014-15

Programme	Physical target (Area in Hectare)	Financial (Rupees in Lakh)	
		Targets	Estimates
<b>A) 4701 CO.Major &amp; Medium</b>			
1) State Plan	Revival of		
i) Jamuna I/P	Lost	30.00	100.00
ii) Intd.I/S from River Kallong	Potential	90.00	90.00
iii) Rupahi I/P		40.00	40.00
<b>2) New Schemes</b>			
i) Puthimari I/P	Preliminary	50.00	51427.00
ii) Burisuti I/P	Investigation	50.00	255275.00
iii) Buroi I/P	Work	40.00	21613.00
iv) Dikhow I/P		50.00	24156.00
v) ERM of Sukla I/P		50.00	15000.00
<b>3) AIBP</b>			
i) Dhansiri I/P	30108	900(SS)+8100(CA)=9000.00	56705.70
ii) Borolia I/P	2803	122.50(SS)+1102.50(CA)=1225.00	15803.00
iii) Buridehing I/P	250	35(SS)+315(CA)=350.00	2347.00
<b>4) One time ACA</b>			
	1050	0.00	4722.00
<b>5) NABARD</b>			
	0	100(SS)+500(NS)=600.00	12120.00
<b>B) 4702 CO.Minor Irrigation</b>			
i) State Plan	340	200.00	0.00
ii) SCSP	4028	3105.00	6580.87
iii) TSP	1779	925.00	2110.038
iv) NABARD	4670	4500.00	15407.40
v) AIBP		46374(CA+SS)	
AIBP (Spill over)	44084	1575.00(Spill over of 2013-14)	144646.48
vi) CM's Special Package (2 Nos)	400	147.00	550.00
vii) State Specific Scheme (4 Nos.)	2000	3000.00	3000.00
viii) Assam Vikash Yojana (8 Nos.)	423	0.00	326.74
<b>C) 4552 CO.CADWM</b>			
i) NLCPR (1 No.)	250	1345.47	6523.21
ii) NEC (2 Nos.)	635	1021.52	847.63
<b>D) 4705 CO.CADWM</b>			
i) Normal Works		150.00	
ii) CAD to Kaldiya I/P		12(SS)+108(CA)=120.00	120.00
iii) CAD to Dekadong I/P		9(SS)+81(CA)=90.00	90.00
iv) CAD to Pahumara I/P	8500	55(SS)+495(CA)=550.00	550.00
v) CAD to Bordikarai I/P		75(SS)+675(CA)=750.00	750.00
New CAD works			
CAD to Dhansiri I/P		200(SS)+1800(CA)=2000.00	16347.80
CAD to New Minor FIS (22 nos.)		50(SS)+450(CA)=500.00	1092.87

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## CHAPTER – VII

## FLOOD AND FLOOD CONTROL MEASURES

Assam is situated in the north-east region of India between 90° to 96° East longitudes and 24° to 28° North latitudes and lies in the middle reach of the river Brahmaputra and Barak. The geographical area of Assam is 78,438.00 Sq. Km out of which 56,194.00 Sq. Km and 22,244.00 Sq. Km fall under the Brahmaputra and Barak Valley including the hill districts respectively. The average width of the Brahmaputra valley is 80 Km. The river Brahmaputra that originates from the Kailash ranges of Himalayas at an elevation of 5300m enters India through Tibet and flows through Arunachal, Assam and Bangladesh before it joins Bay of Bengal. The Brahmaputra is one of the largest rivers in the world and is ranked fifth with respect to its average discharge.

The catchment area of Brahmaputra in Tibet is 2,93,000 Sq. Km; in India and Bhutan is 2,40,000 Sq. Km and in Bangladesh is 47,000 Sq. Km. The Brahmaputra basin extends over an area of 5,80,000 Sq. Km up to its confluence within Bangladesh out of which 70,634 Sq. Km falls in Assam. The average width of Brahmaputra is 5.46 Km. The average annual discharge is about 20,000 cumec and average dry season discharge is 4,420 cumec.

The Barak valley has a geographical area of 6922.00 Sq. Km excluding 2(two) hill districts. The local rainfall run off of the valley along with that of adjacent hilly areas flows through river Barak and its various tributaries and is drained out to Bangladesh. The Katakhal, Jiri, Chiri, Modhura, Longai, Sonai, Ruksni and Singla are the main tributaries of the valley. The tributaries are mainly rain fed and cause flood problems when precipitation occurs.

Flood and Erosion are two main natural disasters being faced by the state. The flood prone area of the state is 31,500.00 Sq Km as assessed by the Rastriya Barh Ayog, which is about 9.40 percent of total flood prone area of the whole country. The flood prone area of the State is 39.58 percent of the total area of the State and of the country as a whole is about 10.2 percent of the total area of the country. It signifies that the flood prone area of Assam is four times the national mark of the flood prone area of the country. Records show that average annual area affected by flood is 9.31 Lakh Hectares. The flood protected area of the state is 16500.00 Sq. Km till date.

The severity of flood problem of the state has been further aggravated by the acuteness of erosion on both banks of river Brahmaputra and its tributaries. Study reveals that an area of 4.27 Lakh Hectare of the state has been eroded by the rivers since 1950, which is about 7.40 percent of area of the state. The average annual rate of erosion is 8000.00 hectare.

### FLOOD AND EROSION PROBLEM OF THE STATE

The Brahmaputra and Barak rivers with their 48 nos. of major tributaries and innumerable sub-tributaries have crises-crossed the plains of both valleys. Floods, bank erosion and drainage congestion are major problems faced by the state during the monsoon season. The flood of this region is a recurring phenomenon, every year several waves of flood cause damage to huge areas in the state. The loss to people in terms of houses, crops and cattle is immense. The figures of loss run into hundreds of cores every year apart from huge damages to roads, bridges, schools, communication systems and other such facilities. This reduces the wealth of the nation and has adverse effects on the development of the State.

During post independence period, Assam faced major floods in 1954, 1962, 1972, 1977, 1984, 1988, 1998, 2002 and 2004. Almost every year three to four waves of flood ravage the flood prone areas of Assam. Average annual loss due to flood in Assam is to the tune of ₹200.00 Crore and particularly in 1998, the loss suffered was about ₹500.00 Crore and during the year 2004 it was about ₹771.00 Crore.

After the unprecedented floods in the country in 1954, the Govt. of India announced a National Policy on Floods comprising three phases viz.-

- The immediate,
- The short term and
- The long term measures.

The flood control activities in Assam started mainly after the announcement of National Water Policy. Subsequently, "Outlined plan for flood control in Assam" along with various comprehensive plans were prepared and the priority areas, which need immediate and urgent attention were identified.

Till date, the Water Resources Department has taken up works primarily for the general development of the rural sector and for the protection of major townships in both the Brahmaputra and Barak valley. Schemes have also been taken up to relieve the drainage congestion in the cities and other important areas.

- Construction of Embankments and Flood walls
- River training and bank protection works
- Anti erosion and town protection works
- River channelization with pro siltation device
- Drainage improvement/ Sluices
- Raised Platform
- Flood forecasting and warning
- Flood zoning

The Water Resources Department, Assam has been implementing various flood management schemes from the beginning of 2nd Five Year Plan and is continuing till now. The physical achievement of the Department during the Tenth Plan, Eleventh Plan and up to March 2014 of the Twelfth Five Year Plan is shown below.

**TABLE - 7.1**  
**PHYSICAL ACHIEVEMENT DURING THE 10<sup>TH</sup>, 11<sup>TH</sup> AND 12<sup>TH</sup> FIVE YEAR PLAN**

Nature of Work	10 <sup>th</sup> Plan (2002-2007)		11 <sup>th</sup> Plan (2007-2012)		12 <sup>th</sup> Plan (2012-2017)	
	Achievement during the plan	Total	Achievement during the plan	Total	Achievement up to 30.03.14	Total
Construction of Embankments (Km)	6.929 (0.2%)	4465.85	7.97 (0.2%)	4473.82	-	4473.82
Town Protection & Anti Erosion Works (Nos.)	23 (3%)	746	138 (15.6%)	884	27 (3.0%)	911
Construction of Major Sluice (Nos.)	2 (2.3%)	86	8 (8.5%)	94	-	94
Construction of Minor Sluice (Nos.)	-	539	6 (1.1%)	545	-	545
Drainage Channel (Km)	6.00 (0.7%)	854.19	20.776 (2.4%)	874.966	-	874.966
Raising & Strengthening of Embankment (Km)			527.758 (100%)	527.758	104.46 (16.5%)	632.22

NB: The figures in bracket shows physical achievement during plan period over the total up to the end of the plan period.

Source: Water Resource Department, Govt. of Assam.

The achievements during the plan periods have provided reasonable protection to about 16.50 lakh hectares of flood affected areas i.e. about 53 percent of the total 31.05 lakh hectare of flood prone area identified by the Rashtriya Barh Ayog. The above table shows that physical achievement on construction of embankments during the 10<sup>th</sup> Plan and 11<sup>th</sup> Plan period is almost same. The table also shows an achievement of 15.6 percent of town protection and anti erosion works over the total during the 11<sup>th</sup> plan in comparison to 3 percent achievement during the 10<sup>th</sup> plan period.

The embankments were constructed with a sense of urgency to provide maximum coverage to protect the inundated areas because of topographical features and thick population settlement in both Brahmaputra and Barak valley. Erosion along the embankments and natural banks of the river system has been a serious problem because of the fact that most of the embankments were constructed very near to the bank line with a view to protect as many area as possible during those period. But, due to natural change taking place in the meandering pattern of river, many reaches have been subjected to erosion threatening the embankments. Though embankment systems gave reasonable protection from recurring floods, the system itself had to withstand massive active erosion in many places. So, it has been necessary to take up anti erosion measures to protect the embankments as well as the river bank.

TABLE - 7.2

**UTILISATION OF FUND  
during 10<sup>th</sup> Plan, 11<sup>th</sup> Plan and 12<sup>th</sup> Plan (Up to March 2014) (Rs. in Lakh)**

Amount utilised during	ACA	FMP	NABARD	State Plan	NEC	NLCPR
10 <sup>th</sup> Plan (2002-2007)	11922.00	8217.82	3432.29	879.37	539.74	6159.78
11 <sup>th</sup> Plan (2007-2012)	17789.34	55203.64	13970.99	2909.09	765.38	265.88
12 <sup>th</sup> Plan (2012-2017)	678.50	23130.92	4481.21	1747.83	0.00	457.40

Source: Water Resource Department, Govt. of Assam.

**BUDGET ALLOCATION AND FINANCIAL ACHIEVEMENT DURING 2013-14**

The table below shows budget allocation for different works proposed to be undertaken during 2013-14 and financial achievement at the end of the year.

TABLE - 7.3

**BUDGET ALLOCATION, EXPENDITURE/UTILISATION OF FUND, 2013-14**

(Rs. in Lakh)

Plan / Non plan fund	Budget allocation of the Department (Works only)	Amount received by the Department (Works only)	Amount of expenditure/ utilization by the department (Works only)
Non-Plan	5732.00	5746.11	5746.11
State-Plan	1000.00	943.46	943.46
A.C.A	350.00	328.50	328.50
NABARD	3458.20	2352.38	2352.38
N.E.C.	627.16	0.00	0.00
J.R.C.	Nil	Nil	Nil
N.L.C.P.R.	801.00	457.40	457.40
FMP	94500.00	1562.16	1562.16
Projected State Share	10500.00	0.00	0.00
EAP	10100.00	9843.38	9843.38
FDR/CRF	Nil	0.00	0.00

Source: Water Resource Department, Govt. of Assam.

**IMPLEMENTATION OF VARIOUS SCHEMES AND ACHIEVEMENTS**

The Department has undertaken flood control and anti-erosion measures in the State through various schemes. A brief description on financial and physical achievement under different schemes is presented below:

**ADDITIONAL CENTRAL ASSISTANCE (ACA) SCHEMES**

During 2011-12, Govt. of India approved two schemes to take anti erosion measures at Nazira and Amguri from the erosion of river Dikhow and Kanamara respectively with an estimated amount of ₹680.00 lakh and ₹603.50 lakh respectively. The target and achievement of the schemes is presented below.

TABLE - 7.4

**SCHEMES UNDER ACA, 2011-12**

(Rs. in lakh)

Name of the scheme	Estimated Amount	Cumulative Expenditure (upto 31-2-13)	Annual Plan outlay (2013-14)	Cumulative Expenditure (upto 31-3-14)	Target and achievement (Financial)	
					Target	Achievement (%)
Anti erosion measures to Dikhow bund left bank	680.00	300.00	380.00	660.00	380.00	95.00
Anti erosion measures from the erosion of river Kanamakra (R/B)	603.50	435.00	168.50	603.50	168.50	100.00

Source: Water Resource Department, Govt. of Assam.

During 2012-13, under the Additional Central Assistance, Govt. of India approved a scheme to take anti erosion measures for protection of Simaluguri town and its adjoining areas from the erosion of river Dikhow. The estimated amount for implementing the scheme is ₹740.00 lakh.

#### **FLOOD MANAGEMENT PROGRAMME (FMP)**

The Govt. of India launched a Flood Management Scheme during the Eleventh Five year Plan for providing central assistance to the State Governments for taking up works related to river management, flood control, anti-erosion, drainage development, flood proofing works and restoration of damaged flood management works. The funding pattern for Assam is 90 percent central assistance and 10 percent state share.

During 2008-09, the Department took 43 numbers of schemes under FMP out of which, 8 numbers of schemes has achieved 100 percent financial achievement up to 31<sup>st</sup> March 2014.

During 2010-11 three numbers of schemes including emergent measures for protection of Rohmorja area in Dibrugarh district were undertaken under FMP and in 2011-12 under FMP, 17 numbers of schemes were taken up for various flood control measures.

The first meeting of the Inter Ministerial Committee on Flood Management Programme for the Twelfth Five Year Plan recommended 41 numbers of schemes with an estimated amount of ₹1386.97 crore for 2013-14 of which ₹1198.60 crore is estimated for 39 schemes to be completed in 2014-15 and ₹188.36 crore is estimated for 2 number of schemes to be completed in 2015-16.

#### **NABARD (RIDF-XV) 2011-12**

Under the RIDF XV, the Department has undertaken 13 numbers of schemes with an estimated expenditure of ₹50.61 crore in 2011-12. An amount of ₹45.86 crore has been utilised up to March 2014 showing 91 percent financial achievement.

#### **NABARD (RIDF-XVII) 2012-13**

Under RIDF XVII, seven numbers of schemes were taken up during 2012-13 with an estimated amount of ₹37.55 crore. Though the Annual Plan outlay for 2013-14 was ₹37.55 crore for the seven schemes, works on five schemes were taken up and an amount of ₹8.76 crore was utilised up to March 2014.

#### **NABARD (RIDF-XVIII) 2013-14**

Under RIDF XVIII, 17 numbers of schemes with an estimated amount of ₹78.53 crore was proposed with benefitted area of 87,256 hectare for the year 2013-14. During the year, work for protection of Dhakuakhana Town from erosion of river Charikaria was taken up with an Annual Plan Outlay of ₹3.10 crore of which an amount of ₹2.68 crore was utilised up to March 2014 thereby achieving a financial target of 86 percent.

#### **NABARD (RIDF-XIX) 2014-15**

To take various flood control measures, 24 numbers of schemes under RIDF XIX has been proposed with an estimated amount of ₹107.64 crore. The schemes are expected to be completed during the year 2015-16.

#### **STATE PLAN**

During 2011-12, three numbers of schemes were taken up under the State Plan with an estimated amount of ₹16.74 crore. Up to March 2014 only one scheme to protect the Sonari Town from the river Towaka has been taken up and an amount of ₹1.50 crore has been utilised against the estimated amount of ₹2.90 crore.

#### **NORTH EAST COUNCIL (NEC)**

During 2011-12, a scheme under NEC to protect Raimona village and its adjoining area from erosion of river Janali in Kokrajhar district was taken up with an estimated amount of ₹3.74 crore. The cumulative expenditure on the scheme up to March 2014 is ₹2.67 crore.

Under NEC, a scheme to take anti erosion measure to protect Ranipur and its adjoining areas from the river Pekua was taken up during 2012-13 with an estimated amount of ₹3.43 crore. Works on the scheme is going on and up to March 2014 an amount of ₹1.00 crore has been utilised.

#### **NON-LAPSABLE CENTRAL POOL OF RESOURCES (NLCPR) 2012-13**

Two numbers of schemes to take anti erosion measures to protect Naharkatia town and Dihingporia village near Margherita town from the river Buridihing were taken up under NLCPR in 2012-13 with an estimated amount of ₹12.71 crore. Up to March 2014, an amount of ₹4.57 crore has been utilised.

## **SCHEMES UNDER THE AEIGES OF ADB**

The Government of Assam has formed a multidisciplinary Special Purpose Vehicle (SPV) under the nomenclature "Flood and Riverbank Erosion Management Agency, Assam" (FREMAA) to protect river banks from flood and erosion with the financial assistance from the Asian Development Bank (ADB).

The project includes comprehensive riverbank protection at Dibrugarh, Palasbari-Gumi. The project includes upgradation and construction of embankment at Dibrugarh and Palasbari. The project incorporates some new technology of international standard such as use of sand filled Geo-textile bags at apron of the riverbank revetment.

Another project proposal for protection of Kaziranga National Park and its adjoining areas from flood and erosion was also prepared by FREMAA but the project could not be started yet due to non-receipt of clearance from the Forest & Environment Ministry, Govt. of India.

### **DIBRUGARH SUB-PROJECT**

Estimated Cost: ₹80.235 crore, Benefitted area: 32,614 hectare.

Objectives : Securing the Dibrugarh Town and Preventing the flood and to take Community based support program for flood.

Population Benefited: 5,00,000 numbers.

### **PALASBARI SUB-PROJECT**

Estimated Cost: ₹172.3559crore; Benefitted area: 62152 hectare.

Objectives : Securing the suburban and productive agriculture area of Palasbari-Gumi from Brahmaputra floods and preventing major river erosion and avulsion.

Population Benefited: 200000 numbers.

## **NEW INITIATIVES TAKEN BY THE DEPARTMENT**

For proper planning, design and execution as well as functioning of different flood management/ erosion control works the department has taken up new ideas from time to time.

### **I) ESTABLISHMENT OF ASSAM WATER RESEARCH & MANAGEMENT INSTITUTE (AWRMI)**

The existing River Research Station of the Water Resources Department has been upgraded to "Assam Water Research and Management Institute" (AWRMI), with a view to modernize all the instruments, laboratories and to facilitate the Institution to a Training and Capacity building Institution. Moreover, AWRMI will act as a Data Centre for all water related issues in Assam.

It will be made a 'State of the Art' institute to facilitate planning, design and implementation of river erosion and flood protection works in Assam. The institute will co-relate with all state departments as well as Central Govt. departments in collecting hydro-metrological, river hydraulic, sediments transport and morphological data to make it an active Data Centre.

The management of flood and erosion based on a long term perspective plan is yet to be achieved. The Institute will induce scientific study on behavior of the Brahmaputra and other major rivers of the State with experts groups within and outside India to achieve a long term solution for flood and erosion protection along the Brahmaputra and Barak valley.

Initiative has already been taken to enroll the Institute under Assam Society Act as per decision of the Government of Assam.

### **II) SETTING UP BRAHMAPUTRA GALLERY**

Process has been started for setting up Brahmaputra Gallery in Assam. For this purpose, MOU has been signed between Assam Water Research and Management Institute (AWRMI) and National Academy of Sciences, India (NASI). The purpose for setting up the Gallery is to expose the different aspects of mighty Brahmaputra to the nation and abroad in a documented pictographic manner. The NASI has started to develop the gallery within AWRMI premises at Basistha, Guwahati.

### **III) CONVENING ASSAM WATER CONFERENCE**

The Water Resources Department, Assam has taken up the holistic approach for inviting national and international expertise in reaching a sustainable and feasible scientific solution for mitigating flood and erosion problem in Assam by convening the Assam Water Conference. In this regard, two conferences have already been organized during February' 2013 and February' 2014 with focal theme of "Management of Water Resources in North East Region with special reference to Flood and Erosion Management" and "Sustainable Development of Water Resources in Northeast Region" respectively. A galaxy of experts in the field of watershed management from the country as well as abroad took active part in the conference and several important aspects were thoroughly discussed. The conference is itself a major milestone in the field of flood management within the flood ravaged state of Assam.

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## CHAPTER – VIII

## LIVESTOCK, ANIMAL HUSBANDRY AND DAIRY DEVELOPMENT

Animal Husbandry is potentially one of the most important sectors for rapid socio-economic development of the State. Livestock is basically a component of production system and is contributing to sustainable agricultural system. Fast growth is essential not only to achieve higher productivity levels in livestock products but also for income generation of rural households of the State. Livestock in the State is thus highly livelihood oriented and is generally owned by small and marginal farmers and landless agricultural labourers.

Assam economy continues to be an agrarian economy as more than 85 percent of the population is living in the rural areas and about 52 percent of the total labour force is found to be engaged in agriculture and allied activities. Animal Husbandry sector has significant impact on employment generation in the State and plays a vital role in income generation of both the rural and semi-urban economy. The Animal Husbandry and Veterinary Department of the State has been implementing various developmental programmes to create gainful employment/income opportunities in the rural areas with the objectives to boost up the socio-economic condition of the rural economy and act to enhance the volume of livestock and poultry products in the State so as to reduce the gap between demand and supply of these products.

TABLE: 8.1

## CONTRIBUTION OF ANIMAL HUSBANDRY TO GROSS STATE DOMESTIC PRODUCT

[AT CONSTANT 2004-05 PRICES]

Year	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13 (P)
Contribution to Agril & Allied Sector (%)	5.33	5.14	3.65	4.83	5.00	4.83	8.30
Contribution to GSDP (%)	1.32	1.25	1.00	1.11	1.12	1.06	1.77

P: Provisional. Source: Directorate of Economics and Statistics, Assam

To achieve the goal, the Animal Husbandry and Veterinary Department of the State has been providing animal health care service and breed improvement facilities by setting up different type of veterinary infrastructures which are spread around the State. According to the Animal Husbandry and Veterinary department there are 581 veterinary hospitals/dispensaries, 767 Veterinary Sub-Centers, 10 ICDP centers, One Frozen Semen Production Centre, 7 Frozen Semen Bank, 226 A.I. Centers, 14 hatcheries, 22 poultry farms, 12 pig farms, 2 sheep/goat farms, 4 Govt. Live stock farms, 6 Training Institutes/Centres etc.

However, existence of a large and low productive population of non-descript animals and birds, the State has to depend on import of livestock products from outside the State to meet the increasing demand.

TABLE:8.2

## LIVESTOCK AND POULTRY POPULATION IN ASSAM

Sl No	Livestock species	2007	2012	Growth (%)
1	Total cattle	1036558	1030760	-0.56
	a. Crossbreed	690419	395902	-42.66
	b. Indigenous	9675164	9911702	2.44
2	Buffaloes	525835	435265	-17.22
3	Sheep	360379	518067	43.76
4	Goat	4376150	6169193	40.97
5	Horses & Ponies	10953	14153	29.22
6	Pigs	2133431	1636022	-23.31
7	Dogs	782937	527521	-32.62
8	Elephant	1033	445	-56.92
9	Rabbit	6639	6170	-7.06
10	Fowls	2593108	1871820	-27.82
11	Ducks	1318110	7300402	-44.61

Source: Directorate of Animal Husbandry &amp; Veterinary, Assam.

## CENSUS OF LIVESTOCK POPULATION

According to the Livestock Census 2012, the cattle population constitutes the largest group with more than one crore but the cattle population is (-) 0.56 percent less compared to 2007 Livestock Census. In respect of Cross breed cattle this decrease is about 43.0 percent. Buffalo, Pig and Elephant also counted 17.22 percent, 23.31 percent and 57.0 percent decrease during the 19<sup>th</sup> Livestock census, 2012 as against the previous Livestock Census. On the other hand, the population of Horse & Ponies, Sheep and Goat population counted increase during the Livestock Census, 2012 compared to the previous Livestock Census. The total goat population is counted at 61.69 lakh and Sheep 5.18 lakh during the Livestock Census, 2012.

The poultry population in the State, as revealed from the Livestock Census 2012, has registered decrease of 33.5 percent over the previous census 2007. The category-wise decrease of population of these species during Livestock Census, 2012 was fowls 28.0 percent and duck 45.0 percent. The table 8.2 provides the species-wise comparative picture of livestock population with growth rate in Assam as per Livestock Censuses 2007 and 2012.

### LIVESTOCK AND POULTRY POPULATION AND TREND OF PRODUCTION

The estimated livestock and poultry population [ as per Sample survey] of different category for 2013-14 published by the State Animal Husbandry and Veterinary Department reveal that the population of indigenous cattle has decreased by 3.7 percent during 2013-14 compared to the previous year. This decrease was also recorded for buffaloes were 7.3 percent during the same period. On the other hand, population of cross breed cattle and goats have recorded increase of 3.0 percent and 3.2 percent respectively during the year 2013-14 over 2012-13. The estimation also revealed that the while the growth of fowl population was marginal, the growth of duck population recorded 4.0 percent during the same period.

Table 8.3 below shows the estimated population of livestock and poultry during the period 2008-09-06 to 2013-14.

**TABLE – 8.3**  
**TREND OF ESTIMATED LIVESTOCKS/POULTRY POPULATION IN ASSAM**

PERIOD: 2008-09 TO 2013-14

Year	Category-wise Livestock & Poultry Population (Numbers)					
	Indigenous Cattle	Crossbreed Cattle	Buffaloes	Goats	Fowls	Ducks
2008-09	7729249	424544	561212	2807366	9035338	3343114
2009-10	7762572	446185	571756	2828529	7942817	3106136
2010-11	8040874	467546	573572	2579952	8119210	3129544
2011-12	8469106	469654	543575	2796448	8579096	3228485
2012-13	9093384	469847	535317	3129014	11113287	4178048
2013-14	8754988	483567	496062	3230577	11118230	4340883

Source: Directorate of Animal Husbandry & Veterinary, Assam.

The trend of production of Livestock products from 2006-07 to 2013-14 is shown in the Table 8.4.

**TABLE – 8.4**  
**TREND OF PRODUCTION OF LIVE STOCK PRODUCTS IN ASSAM**

Item	2006- 07	2007-08	2008-09	2009- 10	2010-11	2011-12	2012-13	2013-14
<b>Milk</b> (million litres)	823	824	827	830	832	838	845	857
<b>Egg</b> (million nos)	535	490	466	468	470	471	471	472
<b>Meat</b> (^000 tonnes)	28.8	29.9	30.7	32.0	34.0	34.19	36.63	38.34

Source: Directorate of Animal Husbandry & Veterinary Department, Assam.

### SOME IMPORTANT ACTIVITIES

#### BREED UP-GRADATION THROUGH ARTIFICIAL INSEMINATION PROGRAMME

Despite having sizeable number of cattle, milk production in the State is not upto the satisfactory level as the major percentage of the cattle population in the State are of none-descript type. Implementation of World Bank funded scheme as well as the Scheme under National Project on Cattle-Buffalo Breeding [NPCBB] although assisted increase of milk production to a considerable extent in the State, achievements in case of production of cross breed animal was not very satisfactory. At present, breed up-gradation programme is carried out under AACP, RKVY and NPCBB Schemes.

The State Animal Husbandry & Veterinary Department has proposed to incorporate the following activities to enhance milk production:

- The State of the ART Frozen Semen production centre which is being set up in Barpeta will be strengthened to enhance semen production;
- Out sourcing of A.I. Services to boost artificial insemination activities;
- Improvement of Animal Health Services through holding of training and awareness campaign, organizing Health Camps;
- Induction of High Yielding indigenous breed of cattle like Sahiwal, Red Sindhi, etc in addition to routine A.I. activities;
- The number of frozen semen banks would be increased to improve the network of A.I. activities;
- Stall feeding practices and quality animal rearing would be promoted on cluster basis for better milk production.

### **POULTRY DEVELOPMENT**

The Animal Husbandry & Veterinary Department, Assam is encouraging backyard poultry rearing in the State for enhancing meat and egg production. As this sector generates employment and enhance rural income, a large number of people are directly or indirectly engaged in poultry sector in the state. The broiler raising programme under Chief Minister's Special Employment Generation Programme implemented in the State by the Department created directed employment to 824 people and indirect employment to more than 10 thousand people in the State. In addition, production of chicken achieved more than double of the targeted production.

Considering the achievement the State Animal Husbandry & Veterinary Department proposed to implement several schemes under the Assam Livestock & Poultry Development Corporation(ALPCO), strengthen the existing feed mill at Sonapur, rejuvenate the existing Poultry farm at Golaghat and Pork Processing Plant at Nazira, broiler raising programme through entrepreneurship development and distribution of poultry units to beneficiaries.

### **GOATERY AND PIGGERY DEVELOPMENT**

The State of Assam produces highest quantity of pork in the country. But the production is found to be too little to meet the demand of the State and the region. The importance of piggery sector in poverty alleviation cannot be ignored including its role in inclusiveness of agricultural growth. In order to meet the demand of improved germplasm and breeding animals, the National Research Centre on Pig(ICAR) has been established in the State and Artificial Insemination(AI) technology on pig is adopted by the centre need to be replicated in the potential area. Moreover, with the growing demand of pork in the State the growth of this sector is essential. To boost production of pork, the Animal Husbandry & Veterinary Department, Assam has planned to upgrade all the departmental Pig Farms to produce pure breed high yielding piglets for sale to the rural pig farmers. Steps have also been taken for breed upgradation of local pig through natural breeding by distributing quality Boar to meet the gap of meat production. The Department also took steps to encourage pig rearing through individual farmers, SHGs, CIGs etc., and establish "Pig Villages" to create organized network for more production of meat and to create gainful employment. Moreover, focused attention is also proposed to be given to encourage the people of rural areas to rear goat in a systematic manner and the scheme is planned to be implemented through individual farmers and through SHGs.

### **FODDER DEVELOPMENT**

Though feed and fodder is one of the most important contributing factors for the growth of livestock sector, development of this sector is necessary. It is estimated that 60-70 percent of the total cost of livestock production is due to feed and fodder. At present the quantum of green fodder production in the State is 13683MT while the requirement is 21144MT. Due to heavy rainfall in the region and for availability of wild grass in the monsoon season; farmers are not habituated with fodder cultivation. The Department has planned to popularize fodder cultivation at institutional waste land, strengthen and revamp the Regional Feed Testing Laboratory, located at Khanapara and establish Silage making unit in each Government Livestock Farm for demonstration purpose.

The Animal Husbandry and Veterinary department, Assam has also proposed establishment of 6(six) numbers of feed mill and fodder block making units in PPP mode to provide available source of fodder for cattle to enhance milk production.

## FROZEN SEMEN AND ASSAM LIVESTOCK DEVELOPMENT AGENCY (ALDA)

The semen station at Khanapara was initiated at 1968-69 under Intensive Cattle Development Project (ICDP). Later the station was updated in the year 1975-76 under the Indo-Australian cattle Breeding Project (IACBP) for production of chilled semen till the beginning of 1995-96. In the year 1995-96 under the ARIASP, Khanapara semen station was strengthened with new Bulls and equipments for production of frozen Semen.

ALDA was constituted under the society Act as per guidelines of national Project on Cattle and Buffalo Breeding (NPCBB) and it started functioning from 2004. The main objective of ALDA is to produce good quality semen, to improve training facilities for extending breeding network. All the objectives are targeted for improving milk production in the State.

The no. of A.I. done during the year 2013-14 : 315474 nos.

The no. of Calf borne during the year 2012-13 : 109207 nos.

## COORDINATED CATTLE BREEDING PROJECT (S.E)

C.C.B.P (S.E) was launched in the year 1980-81 with the objective to select Proven Bulls having high genetic merit by Sire evaluation through their field progeny testing which has great importance in extensive breed improvement programme of the state cattle breeding policy. Here selective breeding in elite herd is done to get the progeny with higher milk production ability, draught ability and adaptability to meet the local requirements and thus to generate rural self-employment as well as to boost up the rural economy.

Rearing of Cows for milk is still a tradition for most of the livestock farmer in Assam but most of them own only one or two cows that too indigenous type. The milk production in Assam is mainly from these indigenous non-descript type cattle with very low milk production. Therefore, the CCBP was launched to infuse superior germplasm into the non-descript low producing stock by artificial insemination with the sole aim to increase productivity.

## LIVESTOCK PRODUCTS: REQUIREMENT AND AVAILABILITY OF MILK, EGG AND MEAT

According to the Sample survey results for the year 2013-14 published by the Directorate of Animal Husbandry & Veterinary, Assam reveal that there exists large gap between the requirement and availability of livestock products in the State. It is seen that quantity of milk, egg and meat is available in the State is 35.4 percent, 8.2 percent and 10.9 percent respectively during the year 2013-14.

The table below shows the requirement and availability of livestock products during the last five years:

**TABLE – 8.5**

### REQUIREMENT AND AVAILABILITY LIVESTOCK PRODUCTS IN ASSAM

Year	Milk (million ltrs)		Egg (in million nos.)		Meat (in'000tones)	
	Requirement	Availability	Requirement	Availability	Requirement	Availability
2009-10	2286	830 (36.3)	5414	486 (9.0)	330	33 (10.0)
2010-11	2308	833 (36.1)	5474	470 (8.6)	334	34 (10.2)
2011-12	2338	838 (37.1)	5542	471 (8.5)	336	35 (10.4)
2012-13	2395	845 (35.3)	5677	471 (8.3)	347	37 (10.7)
2013-14	2423	857 (35.4)	5744	472 (8.2)	351	38.3 (10.9)

Figure in bracket shows the 'Availability' to 'Total Requirement'  
Source: Directorate of Animal Husbandry and Veterinary, Assam

## MILK PRODUCTION

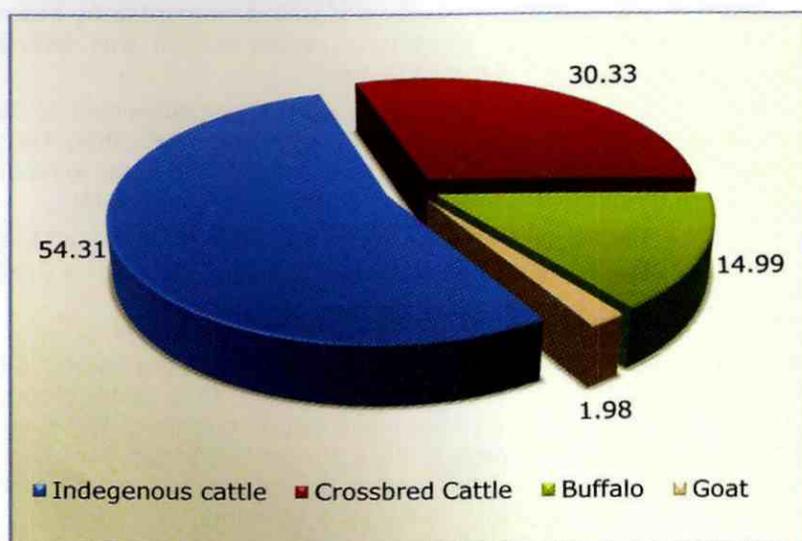
The total milk production of the State for the year 2013-14 was estimated at 857.39 million liters as against 844.9 million liters in the previous year.

It reveals that the growth of milk production has increased by 1.48 percent over the previous year. Further during the year indigenous cattle milk is observed to have constituted 54.31 percent of the total milk production of the State while the contribution of crossbred cattle milk is 28.82 percent and thus the cattle milk together contributes 83.12 percent to the total milk. Buffalo and goat milk contributes 14.99 percent and 1.88 percent respectively to the total milk production. It means that about 16.88 percent of the total milk production is shared by buffalo and goat milk.

From the available milk use data published by the State Animal Husbandry and Veterinary Department, Assam it revealed that approximately 40

percent of the total milk produced in the State is consumed by the households as fluid milk. Out of the remaining quantity 42 percent sold as fluid milk and 22 percent used as milk product.

Despite increase in milk production in the State over the years, the estimated per capita/per day milk availability remained more or less at the same level due increase in population. The estimated per capita/per day milk availability of milk was 74 ml during the year 2013-14 which was at the same level when compared with the per capita/per day availability of milk during the previous year. The availability of milk per capita/per day in the State during the year, however, was far below the ICMR recommended milk requirement norms of 208 ml per head per day.



**TABLE - 8.6**  
**TREND OF TOTAL MILK PRODUCTION IN ASSAM**  
(in million liters)

Season	Cattle			Buffalo	Goat	Total
	Crossbred Cattle	Indigenous Cattle	Overall			
Annual 2013-14	247.17	465.61	712.68	128.56	16.15	857.39
Annual 2012-13	247.07	450.42	697.49	128.72	18.68	844.90
Annual 2011-12	236.53	455.49	692.02	123.41	22.94	838.37
Annual 2010-11	230.79	471.14	701.93	106.19	24.60	832.72
Annual 2009-10	202.15	495.55	697.70	107.52	24.64	829.86
Annual 2008-09	183.60	507.36	690.96	109.89	26.14	827.01
Annual 2007-08	181.33	506.42	687.75	109.26	27.38	824.39
Variation (%) 2013-14 over 2012-13	(+)0.04	(+)3.4	(+)2.2	(-)0.12	(-)13.5	(+)1.5

Source: Directorate of Animal Husbandry and Veterinary, Assam

## EGG PRODUCTION

According to the Animal Husbandry and Veterinary Department, Assam, the estimated layer population of fowl and duck for the year 2013-14 is estimated at 2988.95 and 1196.99 thousand numbers respectively. It reveals that the growth of layer population in respect of fowl and duck was 0.62 percent and (-) 3.08 percent respectively during the year 2013-14 compared to the previous year. The layer population of Improved Fowl is found to have declined by 16.43 percent while the layer population of improved duck is found to have increased by 3.06 percent according to sample survey estimation. Further, desi layer fowl constitutes 97 percent of the total layer fowl population and shares 69.26 percent of the total layer population comprising fowl and duck population.

**TABLE – 8.7**  
**TREND OF LAYER POPULATION GROWTH IN ASSAM**

Season	Fowl		Total Layer Fowl	Duck		Total Layer Duck
	Desi	Improved		Desi	Improved	
Summer	2846.66	102.85	2949.51	1055.13	106.91	1162.04
Monsoon	2900.81	85.55	2986.35	1077.60	115.89	1193.49
Winter	2950.45	80.54	3030.99	1124.56	110.89	1235.41
Annual 2013-14	2899.30	89.65	2988.95	1085.76	111.23	1196.99
Annual 2012-13	2863.17	107.28	2970.44	1127.08	107.93	1235.01
Annual 2011-12	2929.86	141.56	3071.42	1028.68	114.02	1142.70
Annual 2010-11	2853.23	164.59	3017.82	1033.14	122.35	1155.49
Annual 2009-10	3043.23	117.31	3160.54	1026.31	131.04	1157.35
% Change in 2013-14 over 2012-13	(+) 1.3	(-)16.4	(+) 0.62	(-)3.4	(+) 3.1	(-)3.1

Source: Directorate of Animal Husbandry and Veterinary, Assam.

Total egg production in the State was estimated at 4717 lakh numbers compared to estimated 4712 lakh numbers during the previous year. Annual average yield rate of Fowl egg was 110 and 181 numbers per layer/ year for local and improved fowl respectively during the year. In respect of duck egg, the yield rate of per layer/ year was 108 and 169 for local and improved duck respectively during the year under reference. The Table below shows season wise total egg production in the State based on the estimated average egg yield per layer/year for the last five years. In the context of average yield rate per layer, the contribution of improved layer birds constituting both fowl and duck is high. But slow growth of improved category layer birds affected production of egg in the State. Moreover, the birds rearing in the State are mostly used for meat purposes and not for egg production.

**TABLE – 8.8**  
**TREND OF EGG PRODUCTION AND AVERAGE YIELD PER LAYER IN ASSAM**

Season	Total egg production (in lakh nos.)					Average yield per layer (in nos.)			
	Fowl		Duck		Total	Fowl		Duck	
	Desi	Improved	Desi	Improved		Desi	Improved	Desi	Improved
Summer	853.96	57.62	305.92	53.47	1270.96	30	56	29	50
Monsoon	870.18	45.33	312.49	56.79	1284.79	30	53	29	49
Winter	1476.12	57.93	550.17	77.38	2161.59	50	72	49	70
Annual 2013-14	3200.25	160.88	1168.58	187.63	4717.35	110	181	108	169
Annual 2012-13	3093.13	197.78	1230.10	191.14	4712.15	108	184	109	177
Annual 2011-12	3168.94	212.51	1121.37	205.81	4708.63	108	150	109	180
Annual 2010-11	3075.89	326.41	1082.02	215.78	4700.12	107	188	105	180
Annual 2009-10	3114.71	210.03	1120.34	238.97	4684.07	100	185	109	186

Source: Directorate of Animal Husbandry and Veterinary, Assam.

## MEAT PRODUCTION

The total meat production in the state is estimated based on the number of animals /birds of different types slaughtered per season / per year and average meat yield. The total meat production during 2013-14 was estimated at 38.34 thousand tons as against estimated 36.63 thousand tons meat production in 2012-13 showing about 4.7 percent increase in meat production over the previous year. The number of animals/birds slaughtered, average meat yield and total meat production during the year is shown in the table below.

It reveals from the table that pig meat contributes 42.0 percent of the total meat production in the State followed by goat& sheep meat (20 percent).The poultry meat, on the other hand, shares 16.0 percent of the total estimated meat production in the State during the year under reference.

**TABLE – 8.9**  
**MEAT PRODUCTION IN ASSAM DURING THE YEAR 2013-14**

Item	Animals/Birds Slaughtered (in No.)	Average meat yield per animal / bird (in kg)	Meat production (in kg)
Cattle	64712	58	3749916
Buffalo	1362	63	82173
Goat	1608526	7.28	7565765
Sheep	80020	7.43	187451
Pig	550400	29	15962182
Fowl	5237613	0.947	5065974
Duck	1408957	1.162	1111703

Source: Directorate of Animal Husbandry and Veterinary, Assam

### DAIRY DEVELOPMENT

The Dairy Development in Assam was initiated in the latter part of the Second Five Year Plan period with the basic concept to develop the Dairy industry in the State through establishment of Town Milk supply scheme almost in all important towns of Assam to feed the consumers hygienic, clean milk at reasonable price. Till February 1982 the Dairy Development activities were carried out by the Director of A.H. & Veterinary Department. To expand the role of Dairy activities in the state economy, the Govt. of Assam created a separate Directorate of Dairy Development bifurcating it from the Animal Husbandry and Veterinary Department during the year 1982. The primary focus areas of Dairy Development, Assam are:

- i) Procurement, processing and distribution of milk aiming at economic upliftment of rural milk producers and help urban consumers to get quality milk at a reasonable price.
- ii) Developing adequate infrastructure to ensure procurement and processing of milk produced in the State.
- iii) Organizing milk producers for efficient procurement, processing and marketing
- iv) Awareness among milk producers, traders and consumers regarding clean milk production and consumption.
- v) To modernize the supply of inputs like A.I., Feed, Fodder, Animal Health coverage and Training etc. to the Dairy farmers in the milk shed areas linked with Milk Supply Schemes and Milk Plants.
- vi) To help the villagers in marketing their produce by setting up of suitable transport and marketing organization.

### PRESENT STATUS

- The milk production in Assam has been increased from 824 million litres in 2006-07 to 857 million litres in the year 2013-14.
- The milk processing capacity has been increased from 15,000 litres per day in 2006-07 to 115,500 litres per day in 2011-12.
- Delivery of clean milk to the consumers, concept of Any Time Milk through Milk Vending machine has been started from 2008-09.
- Comprehensive network of Bulk Milk Coolers has been initiated in the state to facilitate processing of milk from the year 2009-10.
- Automatic Milk Collection units in 57 locations in the state are being setup since 2008-09.
- Organised 312 Dairy Cooperative Societies.
- Organised 300 Milk Producer Institutions.
- For efficient maintenance of cold chain from producer level to consumers level following steps have been taken:
  - a) Upgraded 2 numbers of Milk Processing Plants from 2000 ltrs to 5000 ltrs.
  - b) Revived 10 defunct Chilling Plants.
  - c) Established 59 numbers of bulk coolers in the State.
  - d) Established 53 Milk Collection Centre with Automatic Milk Collection Units.
  - e) Procured 17 numbers of Road Milk Tanker.
  - f) Established a Central Milk Testing Laboratory at Khanapara for checking quality of milk for the consumers.

**TABLE – 8.10**  
**TRENDS OF MILK PRODUCTION IN ASSAM AND INDIA**

(In'000 Tonne)

Year	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
Assam	747 (0.77)	751 (0.74)	752 (0.72)	753 (0.69)	756 (0.67)	791 (0.69)	796 (0.62)	800 (0.60)	815 (0.59)
All India	97061	100869	104842	108587	112540	114305	127904	132431	13766

\*Figure in bracket shows the share of Milk production in Assam to All India.

Sources: Directorate of Animal Husbandry and Veterinary, Assam.

### STRATEGIES DURING TWELFTH FIVE YEAR PLAN

- ❖ To give thrust on the programmes to enhance the milk production of the state and programme benefitting the rural dairy farmers for economic upliftment through self employment scope.
- ❖ To continue all projects/schemes existing at the end of the eleventh five year plan with rational proposition for further strengthening wherever it feels to be necessary.
- ❖ To create one milk surplus district per year in convergence with Veterinary department.
- ❖ To avail more benefit out of centrally sponsored schemes under NEC, schemes under World Bank and schemes funded by other related agencies.

To achieve the objectives following ongoing schemes/projects under State Plan, Centrally Sponsored Scheme, World Bank Aided Projects and other schemes are proposed to be taken up during the twelfth Five Year Plan:

### ENHANCEMENT OF MILK PRODUCTION

Thrust has been given upon the projects to enhance milk production of the State through integrated dairy activities. The Dairy Development Department proposed to create opportunities for self employment for economic up-liftment of both the rural as well as urban/peri-urban dairy farmers during the twelfth Five Year Plan period. Accordingly the following steps have been taken:

- Integrated Support Services Scheme for creation of milk surplus district.
- Establishment of Commercial Dairy Unit.
- Milk Marketing.
- Support inputs to dairy farmers.

### MILK PROCESSING FACILITY

To achieve the minimum per capita availability of 208 ml per day as recommended by ICMR, the Dairy Development Department has given thrust in increasing milk production as well as to increase milk processing facility to maintain cold chain covering the entire State for economic upliftment of rural dairy farmers. To achieve the goal following steps have been proposed to be taken:

- To re-establish and develop processing infrastructures of Dairy Development to assist milk producers in enhancing milk production and to establish market linkages.
- Renovation/upgradation of existing milk processing plants and setting up of new Central Dairy/Milk processing plants in potential milk shed areas.
- Establishment of Bulk Milk Coolers in milk potential areas.
- Incorporation of INSULATED Milk Tankers for maintaining cold chain with Bulk Milk Coolers, Milk Processing Plants and Central Dairy.
- Establishment of Milk Vending machines in strategic locations ensuring Any Time Milk to the consumers.
- Establishment of milk booths in major milk consuming areas.
- Establishment of Milk Parlor in each district to ensure availability of quality of quality milk and milk product for the urban consumers.

The Dairy Development Department also planned to organize 20000 rural farmers into Dairy Cooperative Societies (DCSs), SHGs and Milk Producer Institutions (MPIs) so that opportunities can be availed by the groups including training on clean milk production and management practices.

## IMPLEMENTATION OF VARIOUS PROJECTS

The State Dairy Development Department have been implementing various schemes/projects to increase milk production in the State.

### ASSAM AGRICULTURAL COMPETITIVENESS PROJECT (AACP) (Externally aided project)

The objective of the project in respect of Dairy Development is to organize the dispersed dairy farmers into Dairy Cooperative Society (DCS) and Self Help Group (SHG) and Milk Producers Institutions (MPIs) to provide both forward and backward linkage to them in order to strengthen their capacity, make them more competitive and economically sustainable and to make them able to take advantage of emerging commercial opportunities. A substantial number of dispersed dairy farmers have been organized in viable groups with assured linkages under the Assam Agricultural Competitiveness Project (AACP).

### CHIEF MINISTER'S SPECIAL PACKAGE FOR DHEMAJI DISTRICT

The Dairy Development department has proposed to establish 13 nos. of Commercial Dairy farms in the District as well as to complete ongoing project of 5000 LPD Dairy Plant. In addition, the Department has planned for upgradation of existing Lahowal Milk Processing Plant.

### INTEGRATED SUPPORT SERVICES FOR CREATION OF MILK SURPLUS DISTRICT

The scheme envisages providing support services to identify dairy clusters of Barpeta District and Sadiya Sub-Division for enhancement of milk production and livelihood avenues to the poor dairy farmers and to create the district as milk surplus district. The dairy development department has proposed to implement the projects at the cost of ₹365.00 lakh during 2014-15.

### SUPPORT INPUTS TO DAIRY CO-OPERATIVE SOCIETIES (DCSS)

The Dairy Co-operative Societies organized under AACP and IDDP are doing well in milk production. To provide input support for clean milk production as well as enhance milk production, the State Dairy Development Department proposed to give cattle feeds, Green fodder, Milk procurement inputs, feed supplements etc., to the members of DCSs .

### EMPLOYMENT GENERATION

- All the existing or new Schemes/projects under the Dairy Development, Assam will be carried out in synchronization with each other irrespective of source of fund to achieve the common objective: to increase overall milk production in the state, thereby giving livelihood avenues to the poor dairy farmers.
- The proposed acquisition of Bulk Milk Cooler which will be installed under different Dairy Cooperatives to create employment avenues in the State.
- The Department proposed to provide financial assistance to prospective dairy entrepreneurs to establish Commercial Dairy Farm in Periurban/rural areas for which 66.66 percent of the total unit costs will be provided through bank finance and remaining 33.33 percent will be as Government as subsidy. The department proposed to implement the scheme by setting up 5 numbers of such units to generate employment.

### SCHEMES FOR WOMEN

Though women play an important role in livestock management, their control over income from livestock products and its product is negligible. To empower and economic upliftment of the womenfolk involved in dairy farming, the Dairy Development department has taken special initiative since 2013-14 by forming women groups like Dairy Cooperative Societies, Self Help Groups so that they can avail easy credit, inputs and marketing facilities under the Milk Village scheme. The department also initiated training to give updated exposure and skill development on the animal rearing front and other management activities including marketing of their produce.

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## CHAPTER – IX

## FISHERIES

The State has vast water resources suitable for pisciculture, covering an area of 4.77 lakh hectares of which beels, ponds & tanks form about 2.85 lakh hectares, in addition to two major river systems viz., the Brahmaputra and the Barak with their tributaries. However, with abundance water resources the State has still not been able to tap the potential area for inland fish production. The state has 217 fish species of which over 50 are ornamental value with international importance. More than 90 percent people of the state are in habitual of eating fish, which indicates high potentiality for development of this sector in the state. The sector has registered an average growth of 6.40 percent during the 11th Plan period. Till date the contribution of Fishery sector to State Domestic Product [at constant 2004-05 prices] is very nominal and it is estimated at around 2.0 percent.

Fish production in the State has reached the level of 266.7 thousand tonne in 2013-14 which is about 5.0 percent more than the previous year. However, against the current economic demand of 279.53 thousand tonne, there is a shortfall of 12.83 thousand tonne. The gap between present production and requirement is partially met by importing fish from other states. From the point of minimum nutritional requirement the present fish production in the State [the current estimated requirement of fish is 318.1 thousand tonne calculated on the basis of minimum nutritional requirement of 11 kg per capita per annum] is far below. The present per capita availability of fish is about 9 Kg.

At present the following major fishery infrastructures are available in the state:

IMC hatcheries (Department)	: 17 Nos
IMC hatcheries (Private)	: 347 Nos
Hapa Breeders (Private)	: 400 Nos.
Departmental Farm	: 141 Nos
Departmental Training Centre	: 9 Nos.
Fish Feed Mill	: 8 Nos
State Fish Laboratory	: 1 No

TABLE - 9.1

## WATER SPREAD AREA AVAILABLE FOR FISHERY IN ASSAM-2013-14

Resources	Number	Water Spread Area
River Fisheries	Main River 2	4820 km
	Tributaries-53	
Beels /Ox-bow lakes	Registered: 430	60215 hact.
	Unregistered: 767	40600 hact.
Forest Fisheries	71	5017 hact.
Derelict water bodies/ swamps/low lying	3887	116444 hact.
Reservoir fisheries	2	2553 hact.
Individual Ponds	361393	55090 hact.
Community Tank	6308	5140 hact.

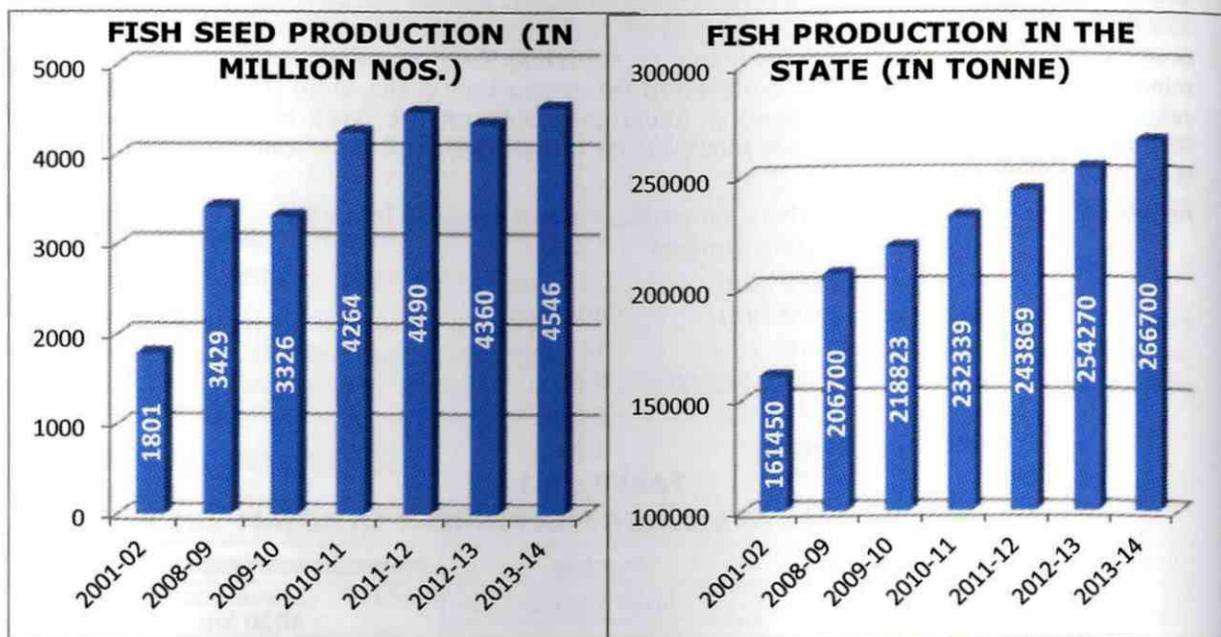
Source: Directorate of Fisheries, Assam.

Considering the potential and development prospect of the fishery sector and with a view to increase the per capita availability of fish and to narrow down the production-requirement gap, both the central and state governments have come up with a number of positive interventions/schemes to help the cause of the fish farmers. Horizontal expansion is being accomplished through creation of new ponds and reclamation and renovation of existing wet land areas followed by scientific fish farming through community/ Self Help Groups and subsequent bank linkage. On the other hand thrust on vertical expansion is given through productivity enhancement with adoption of improved & advanced culture techniques and better sustainable management practices. Emphasis has also been laid down for making the best animal protein source in the form of fish available to all as well as creation of self-employment opportunities.

**TABLE - 9.2**  
**STATUS OF FISH PRODUCTION IN ASSAM**  
**AND IMPORT OF FISH FROM OUTSIDE THE STATE**

Year	Fish Production in Assam(in '000 tonne)	Fish Imported from outside the State (in MT)
2008-09	206.70	19150
2009-10	218.00	18870
2010-11	232.34	17920
2011-12	243.87	17560
2012-13	254.27	16446
2013-14	266.70	12830

Source: Directorate of Fisheries, Assam.



#### MAJOR DEVELOPMENT SCHEMES / PROGRAMMES IMPLEMENTED DURING THE YEAR 2013-14:

##### FISH & FISH SEED FARMING

Fish production in the state of Assam during the year 2013-14 has reached to the level of 267 thousand ton. However, a considerable gap still exists between the present production and the demand. Under this scheme activities are basically aimed at increasing production and productivity of both fish and fish seeds. Strategies adopted to narrow the gap between actual production and requirement areas horizontal expansion through creation of new areas and vertical expansion through utilization of existing culturable areas for fish production. Expected fish farming in newly created areas are capable of yielding ranging 2.5 MT to 3.0 MT/Hectare/year initially. Although initial expenditure for new pond construction is comparatively high, the break-even point can be achieved in a very short period through sustainable management practices. It also opens the avenue for self employment to address this rising issue.

##### MUKHYA MANTRIR AMAR PUKHURI ASONI [CONSTRUCTION OF NEW POND THROUGH SHG/ COMMUNITY]

This programme is implemented under the scheme "Fish and Fish Seed Farming" where 100 percent financial assistance is provided to selected SHG/ Community for construction of new ponds followed by fish culture. Amount granted is maximum of ₹3.00 lakh per ha for civil work and ₹0.90 lakh for one year input.

### **WOMEN EMPOWERMENT PROGRAMME [CONSTRUCTION OF NEW PONDS - WOMEN SHG]**

Empowerment of women is a very important aspect in the present context as this section of the society forms the supporting pillars. Fisheries department has been implementing the programme under **Mukhyamantri Mahila Sambridhi Yojona - 'Lakhimi'** targeting women SHGs for increasing fish production through construction of new ponds followed by fish culture. Amount granted is maximum of ₹3.00 lakh per ha for civil work and ₹0.90 lakh for one year input.

### **MUKHYA MANTRIR MATSYA MITRA ASONI [ONE TIME ASSISTANCE TO FISHERMEN DURING FISHING LEAN PERIOD]**

To support the poor fishermen during the lean fishing period as a means of livelihood sustenance the scheme- "Mukhya Mantrir Matsyamitra Asoni" is being implemented under which one-time financial assistance @ ₹10000/ is provided to fisherman families.

### **MUKHYA MANTRIR SWANIYOJAN ASONI [RECLAMATION OF DERELICT WATER BODIES]**

The State of Assam is endowed with more than 1 lakh hectare of derelict water bodies, swamps and low lying areas capable of yielding sufficient quantity of fish through proper development. Most of these potential resources are still lying under-utilized. These areas are reclaimed for enhancing fish production under this "**Reclamation of Derelict Water Bodies**" programme through involvement of and post-development management with comparatively less capital expenditure. 100 percent financial assistance is given to the beneficiaries @ ₹2.00 lakh per hectare for civil works and ₹0.90 lakh for one year inputs.

### **DEVELOPMENT OF WATER AREA THROUGH COMMUNITY FOR FISH HARVEST DURING LEAN PERIOD (UNDER TANK RESERVOIR FISHERIES)**

Due to implication of fishing restriction during the period April to July under the Assam Fish Seed Act and Rules, availability of local fish in the market is at minimum. Because of large gap in demand and supply, the fish prices tend to increase considerably during the period. The objective of the Scheme is to partially cater the temporary scarcity of fishes in the market during the fishing lean period. The department has introduced the Scheme during the year 2013-14 and proposed to continue in the year 2014-15. Under the scheme atleast 1 hectare of existing community tank will be taken up in each Development Block of the plain districts of the State. After renovation of the tank, fish culture will be taken up and post development management will be vested on the community concerned under the supervision of the departmental extension machinery.

#### **NEW INITIATIVES:**

#### **(A) CULTURE OF AIR-BREATHING FISHES AND KUCHIA ON PILOT BASIS**

Under the scheme Fresh water eel, locally known as Kuchia and other air-breathing fishes like Magur, Singhi, Kawoi, etc are culture on pilot/experimental basis in small scale. Basic aim of the scheme is to diversification of species, popularization of new and innovative technology and enhancing production of fishes with high consumers' preference having therapeutic value.

#### **(B) HOLISTIC DEVELOPMENT OF HIGH DENSITY CLUSTERS**

With a view to develop a self sustained fish production pockets on commercial scale, the Fishery department of the State proposed to take up high density cluster villages for holistic development comprising of production facilities for both fish and fish seeds with support for marketing & transport and other allied service to provide market information to the producers so that they can get remunerative prices.

#### **(C) "JAYANTI ROHU" BROOD FISH FARM MANAGEMENT AT DEPARTMENT FARMS**

Jayanti Rohu is a genetically improved strain developed through selective breeding by Central Institute of Freshwater Aquaculture (CIFA), Bhubaneswar which is capable of growing more than 40 percent faster than normal rohu due to better food conservation ration. The department has proposed to procure brood fish and fish seed of this strain to be raised in the departmental Fish Farm for distribution to the farmers in the state.

### **RURAL INFRASTRUCTURE DEVELOPMENT FUND [RIDF]**

This is a NABARD programme for infrastructure development in the rural areas contributing towards agriculture growth, rural connectivity and other social sector development. Primarily beel fisheries are developed under this programme through Assam Fisheries development Corporation Ltd.

According to NABARD following steps are required to be taken to fisheries development in the State:

- Reclamation of derelict water bodies;
- Extension services/training facilities for fishermen-Establishment of Block Level fishery extension service centres;
- Strengthening data base on potential and fish production through comprehensive water bodies;
- Marketing and transport facilities for fish-Mobile refrigerated vehicles for transportation of table fish and fish products – development of cold chain;
- Employment generation through promotion of SHGs in fisheries sector;
- Eco/aqua-tourism development;
- Running water/Jhora fisheries;
- Eco-hatchery for fish seed production in some potential districts and seed rearing farms for rearing spawn up to advance fingerlings in most of the districts;
- Establishment of fish disease & water quality diagnostic centres;
- Establishment of fish meal plants.

### **CENTRALLY SPONSORED SCHEMES**

Fresh Water Aquaculture under "Fish Farmers Development Agencies" is the main Centrally Sponsored Scheme is being implemented with provision of new pond construction and development of existing pond for fish culture. Funding pattern of the scheme is 75:25 (75% central share and 25% state share) as per norms. Besides, other CSS schemes like Housing, Saving-cum- Relief and Insurance of Fishermen under National Welfare Fund for Fishermen are also being implemented.

### **RASTRIYA KRISHI VIKASH YOJANA (RKVY)**

RKVY, a flagship programme of Government of India was introduced in the State during 2008-09 supported by 50 percent subsidy to the fish farmers against the schematic cost. The list of beneficiaries under RKVY is recommended by Zila Parishads. The major schemes under RKVY are Development of existing pond, low-lying areas, construction of new ponds and creation of nursery & rearing tanks. One of the remarkable successes under RKVY programme is Fresh water prawn seed production in artificial sea water in the Freshwater Prawn Hatchery established at Meen Bhawan Complex, Guwahati. Production in two other such hatcheries at Dhubri and Silchar is under process.

### **C. EXTERNALLY AIDED PROJECT (EAP) ASSAM AGRICULTURAL COMPETITIVENESS PROJECT (ACP AND ACP-ADDITIONAL FINANCING)**

The objective of the scheme is to improve Assam fish industry in an integrated and systematic manner to increase competitiveness among poor and marginal communities/ farmers dependent on fish for primary or secondary income as well as to alleviate poverty with thrust on production. This ACP scheme has been implemented in the State since 2004-05. From 2012 ACP-Additional Financing is being implemented in the State with activities aimed at expanding the area coverage through taking up the programmes in those areas which were not covered under the on-going project to make impact on sustainable livelihood. The Additional Financing is targeted to be implemented in 12 districts which are very potential in terms of available resources and achieve maximum production.

### **D. AQUACULTURE DEVELOPMENT UNDER NATIONAL FISHERIES DEVELOPMENT BOARD (NFDB)**

Schemes implemented in the State with financial support from National Fisheries Development Board (NFDB) are construction of New Pond, Eco-hatchery and Fish feed Mill, Renovation of existing ponds, development of departmental fish farms, Training & Demonstration and awareness programmes. Significant infrastructure established with

NFDB's support is 3 Hygienic Whole Sale Fish Market at Nagaon, Cacahar and Nalbari. More such markets are in the pipeline for construction.

## APENDIX-9.1

## DISTRICTWISE NUMBER AND AREA UNDER FISHERIES IN ASSAM, 2013-14

(Area in hect.)

Districts	Beel Fisheries		Ponds & Tanks		Derelict water Bodies/ Swamp		Reservoir Fisheries		Forest Fisheries	
	Nos.	Area	Nos.	Area	Nos.	Area	Nos.	Area	Nos.	Area
Kokrajhar	14	955	7514	1019	163	1029	-	-	2	35
Dhubri	156	7000	21622	2825	283	8280	-	-	-	-
Goalpara	57	6820	8851	1576	70	677	-	-	-	-
Barpeta	23	6299	24068	3865	160	6119	-	-	11	131
Morigaon	84	8300	10803	1695	163	1583	-	-	9	955
Nagaon	134	9919	40984	6298	143	23578	-	-	8	410
Sonitpur	60	7032	14394	1704	132	461	-	-	6	270
Lakhimpur	20	6499	10597	1750	68	4273	1	840	-	-
Dhemaji	16	4575	3898	434	160	731	-	-	8	900
Tinsukia	36	2957	7944	1522	126	394	-	-	5	240
Dibrugarh	38	5289	6405	771	115	310	-	-	3	46
Sivasagar	66	3878	9068	1171	216	7129	-	-	3	92
Jorhat	124	6298	6353	1007	245	7592	-	-	-	-
Golaghat	15	2600	7311	972	102	557	-	-	12	1720
Karbi-Anglong	19	60	7948	1421	106	332	-	-	-	-
Dima-Hasao	1	3	625	114	13	5	1	1713	-	-
Cachar	75	3359	36727	6400	437	10049	-	-	-	-
Karimganj	37	3459	21614	3848	52	31240	-	-	-	-
Hailakandi	35	1241	34449	6650	225	2343	-	-	-	-
Bongaigaon	47	4348	6786	990	70	1606	-	-	2	51
Chirang	16	145	2987	349	16	60	-	-	-	-
Kamrup	59	1418	21690	3032	116	322	-	-	2	167
Kamrup (M)							-	-		
Nalbari	19	2248	22550	2686	515	3645	-	-	-	-
Baksa	18	151	8888	1791	93	326	-	-	-	-
Darrang	27	5959	23518	6311	78	3713	-	-	-	-
Udalguri	1	5	107	29	20	90	-	-	-	-
<b>ASSAM</b>	<b>1197</b>	<b>100817</b>	<b>367701</b>	<b>60230</b>	<b>3887</b>	<b>116444</b>	<b>2</b>	<b>2553</b>	<b>71</b>	<b>5017</b>

Source: Directorate of Fisheries

**APPENDIX- 9.2**  
**DISTRICTWISE NUMBER OF HATCHERIES AND**  
**PRODUCTION OF FISH SEED AND FISH IN ASSAM, 2013-14**

District	No. of Hatcheries		Production of Fish Seed (in Million Nos.)		Production of Fish (in Tonne)	Fish imported (in Tonne)
	Govt.	Pvt.	Govt.	Pvt.	Assam	Other State
Kokrajhar	1	6	-	66.35	3911	89
Dhubri	1	9	0.16	14.53	13600	325
Goalpara	-	8	-	15.02	7880	580
Barpeta	1	43	1.20	1832.70	16550	105
Morigaon	-	31	-	120.30	13650	437
Nagaon	1	113	1.60	1075.38	27030	150
Sonitpur	1	7	1.68	41.49	7984	680
Lakhimpur	1	9	0.28	28.46	12350	115
Dhemaji	-	8	-	13.70	5260	110
Tinsukia	-	11	-	17.26	7100	235
Dibrugarh	1	8	0.06	52.35	9175	275
Sivasagar	1	3	0.22	13.97	10190	500
Jorhat	-	6	-	36.64	13170	950
Golaghat	-	9	-	29.00	9300	370
Karbi-Anglong	1	-	-	-	2280	525
Dima-Hasao	-	-	-	-	760	60
Cachar	1	5	5.20	77.80	20350	980
Karimganj	-	25	-	820.00	17074	920
Hailakandi	-	2	-	21.80	10317	115
Bongaigaon	1	5	-	14.18	7147	185
Chirang	-	1	-	93.10	1950	95
Kamrup	1	10	-	6.14	20350	3900
Kamrup (M)	2	2	0.40	2.1	-	-
Nalbari	-	9	-	26.80	10800	177
Baksa	1	5	-	45.50	4672	105
Darrang	2	10	1.20	69.15	12000	745
Udalguri	-	2	-	-	1850	102
<b>ASSAM</b>	<b>17</b>	<b>347</b>	<b>12.00</b>	<b>4533.72</b>	<b>266700</b>	<b>12830</b>

Source: Directorate of Fisheries.

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## CHAPTER – X

## FORESTRY

Forestry is a vital sector of the State. The State Forest Department has been entrusted the maintenance and management of Forest, Forest Produce and Wild life in the State. In the recent past the importance of environment protection and conservation of natural resources has been given wide attention at state and national level. As a result various NGO's along with the Forest Department has come forward to protect and maintain the Forestry sector of the State. The State of Assam is enriched with extensive forest area and wealth like valuable forest products and also rich with different species and strains of floras and faunas. People of Assam from time immemorial have also depended upon the forests to meet their daily needs. According to the National Forest Policy, the minimum desired area which is considered safe for a tropical country like India is about 33 per cent. As per broad policy recommendations, about 60 per cent of the area in the Himalayas and the Peninsular hills and 20 per cent in the Great Plains should be under forests.

**RECORDED FOREST AREA**

The recorded forest area of Assam is 26,832 sq. Km accounting for 34.21 percent of the total geographical area of the State and shares 3.48 percent of total forest area of the country as per India State Forest Report, 2013. Out of the total recorded forest area Reserved Forests constitute 17864 sq.km [or 66.58 percent] and un-classed Forests 8968 sq.km or 33.42 percent.

**FOREST COVER**

According to the biennial "India State of Forest Report 2013" there has been an increase of 5,871 sq km of the country's forest area since 2011, even as moderately dense forest areas have depleted due to population increase, grazing and encroachments. The North-eastern States account for one-fourth of the country's forest cover and there is a net decline of 627 sq km in the forest cover compared to 2011.

The forest cover in the state, as per India State Forest Report 2013 is 27671 sq.km which is 35.28 percent of total geographical area of the State. The total forest cover of the state is 2 sq.km less in 2013 compared to the figure published in the State Forest Report 2011 [According to the State Forest Report 2011 the forest cover of Assam was 27,673 sq km of the State's geographical area]. This decrease in forest cover in the State, according to the assessment report, is due to encroachment in forest land, biotic pressure and shifting cultivation.

In terms of forest canopy density classes, the State has 1,444 sq km very dense forest, 11,345 sq km moderately dense forest and 14,825 sq km open forest. It reveals from the table below that while there was depletion of 59.0 sq.km of moderately dense forest cover in the State, there was addition of 57.0 sq.km open forest during the assessment period 2011 and 2013. Besides forest cover there is 1582 sq.km tree cover in the state according to the report and thus total of forest cover and tree cover is calculated at 37.29 percent of the total geographical area of the State and 3.70 percent of the total forest and tree cover of the country. The per capita forest cover and tree cover in the State is also calculated at 0.094 hectare.

The trend of state forest cover during the assessment years 2009, 2011 and 2013 may be evident from the table 10.1 below.

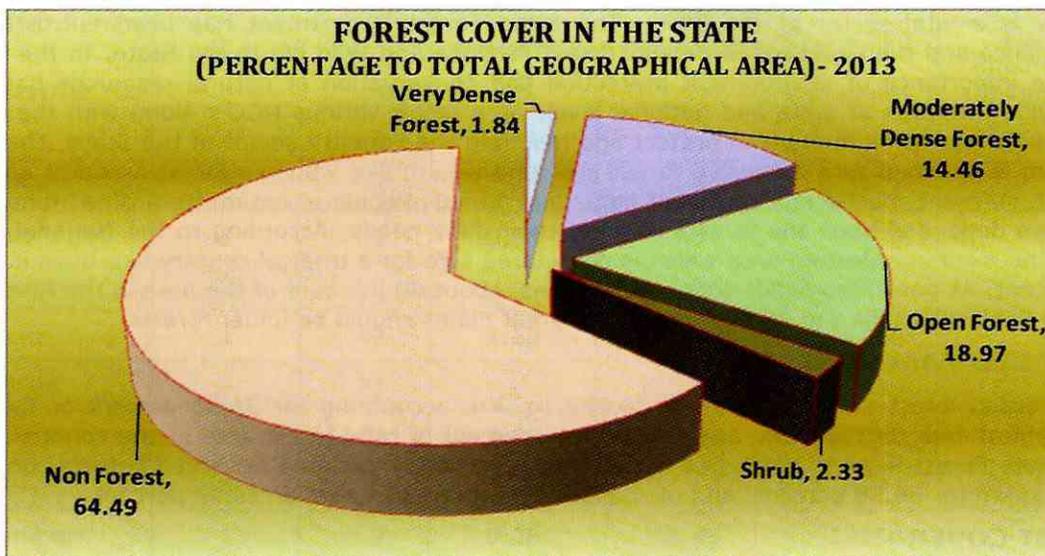
**TABLE-10.1**  
**TREND FOREST COVER IN THE STATE**

Item	(Area in sq.km)					Geographical Area
	Very Dense Forest	Moderately Dense Forest	Open Forest	Shrub	Non Forest	
2013 Assessment	1444 (1.84)	11345 (14.46)	14882 (18.97)	182 (2.33)	50585 (64.49)	78,438
2011 Assessment	1444 (1.84)	11404 (14.46)	14825 (18.90)	182 (2.33)	50583 (64.49)	78,438
2009 Assessment	1481 (1.84)	11558 (14.73)	14673 (18.71)	179 (0.23)	50567 (64.47)	78,438
Net Change in 2013 over 2011(-)/(+)	0	-59	+57	0	+2	

Figures in Bracket are percentage to geographical area of the State.

Source: Forest Survey of India, 2011 and 2013.

Figures of Table 10.1 reveal that there has been a decrease of 17 sq. km in respect of very dense forest and 154 sq. km in moderately dense forest an increase of 152 Sq. km in the open forest. The National Forest Policies (1952 and 1988) aimed at having one third of country's land area under forest and tree cover.



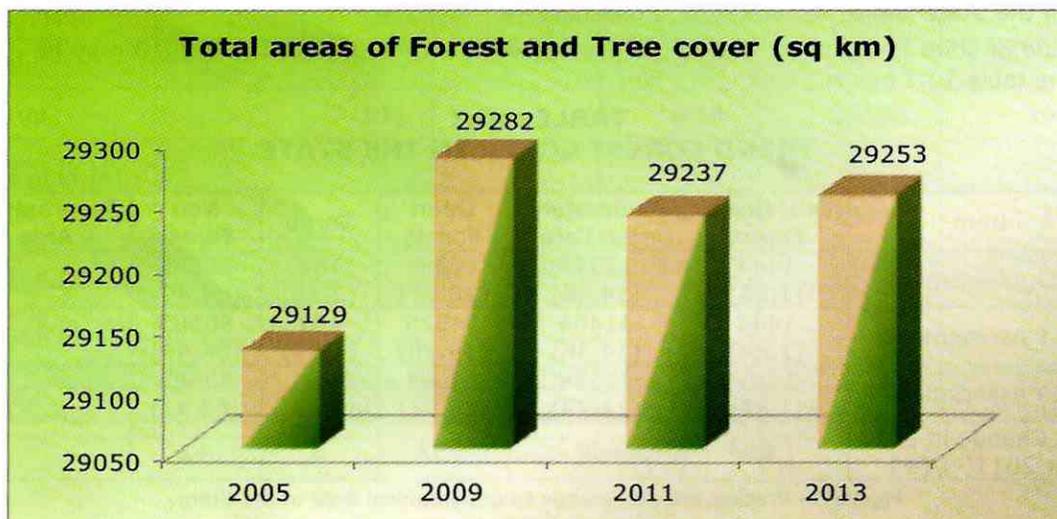
**TREE COVER**

As per forest survey assessment published by the Ministry of Forest and Environment, Govt. of India, the estimated tree cover in State is 1582 sq.km in 2013 which is 2.0 percent of the total geographical area of the State. In 2011 assessment the estimated tree cover in the State was 1564 sq. km or 1.99 percent of the total geographical area of the State.

**TABLE - 10.2  
FOREST AND TREE COVER IN THE STATE**

Forest and Tree cover	Unit	2005	2009	2011	2013
Area of Forest cover	Sq km	27645	27692	27673	27671
Area of Tree cover	Sq km	1484	1590	1564	1582
Total areas of Forest and tree cover	Sq km	29129	29282	29237	29253
Forest and Tree cover to the total Geographical area of the State.	% age	37.13	37.33	37.27	37.29

Source: Forest Survey of India (F.S.I) Report, 2005, 2009, 2011 and 2013.



## URBAN TREE COVER

Trees grown outside forest in urban areas have contributed significantly not only in cleaning the urban environment but also in fulfilling the timber and fuel wood requirement of poor people living in the urban areas of the country. The total urban Tree cover in the State, according to the State Forest Report, 2013 is estimated to be 128.0 sq.km or 13.27 percent of the total urban area in the State. In addition estimated 5.0 million trees are found in the urban area of the State and the total volume in the urban tree has been estimated to be 1.2 million cum.

## BAMBOO RESOURCES IN THE FOREST

The North East Region has highest concentration of Bamboo, i.e. around 60 percent of the total Bamboo of the country. As an extensive Bamboo grown State, Assam has ample scope for Bamboo based industry. The extent of bamboo bearing area in the forests of the State is 7,238 sq. km. density-wise details, are presented in the Table 10.3.

**TABLE - 10.3**  
**BAMBOO BEARING AREA BY DENSITY IN RECORDED FOREST AREA**  
(Area in sq. km)

Recorded Forest Area	Pure Bamboo	Dense Bamboo	Scattered Bamboo	Clumps hacked	Bamboo regeneration	Area without Bamboo
26,832	105	4,049	2,878	166	40	19,594

Source: Forest Survey of India, 2011.

## STATE FOREST PROFILE

As per Forest profile of the State, the Reserved Forest area and Proposed Forest area is 13973 sq km and 1757 sq km respectively in 2012-13 as against 13507 sq km and 1539 sq km reported in 2011-12 by the State Forest Department. The Reserved forest area is 72 percent of the total forest area of the State. The total Forest area excluding unclassified State Forest is 19352 sq km and 3621 sq km area is under protected area in 2012-13, as reported. The reserved forest area constitutes around 18 per cent and the total forest area excluding unclassified forest constitutes around 25 per cent of the total geographical area of the State. However, the scenario within the notified area depicts a gloomy state in terms of degradation during the last 20 years due to various biotic factors and encroachment. As a result, considerable rich bio-diversity has been lost which need to be re-built again.

The thrust areas identified by the State Forest Department are as below:

- Preservation of the existing biodiversities.
- Arresting the trend of degradation and reverting the process by re-afforestation and extension forestry with multiple stake holders.
- Preservation and development of the existing Protected Area Network (PAN) and their expansion in suitable areas.
- Improvement of research and development activities in Forestry and Wildlife.
- Bridging the gaps in infrastructural & Logistical front.

## FOREST ROAD

For patrolling inside the Forest Area and to harvest the forest produces improvement and development of creation of infrastructure is very essential from the forest management point of view. Accordingly, the State Forest Department has given special emphasis on the matter and proposed to improve 150 km forest road with 50 numbers of culverts during the 12<sup>th</sup> Five Year Plan period. Statistics of forest roads in Assam may be evident from the table below:

**TABLE -10.4**  
**FOREST ROADS IN ASSAM (Cumulative)**

(Length in km)

Category of Roads →	Surfaced	Unsurfaced	Motorable	Non-Motorable
2012	635.84	8631.03	5060.26	3570.77
2013	640.635	10672.647	6235.357	4437.29

Source: Office of the principal chief conservator of forest and head office of forest force.

## OUT-TURN OF FOREST PRODUCE AND REVENUE

The forest products of the State mainly comprises of industrial wood, fuel wood, bamboo, stone, sand and gravel, thatch etc. A good amount of revenue is earned by the State Government from its various forest produces. During 2012-13, the Department has earned ₹3350.15 lakh as revenue from the forest product which is 52.2 percent less than that of the previous year. The out-turn of Major and Minor forest products for 2009-10, 2010-11, 2011-12 and 2012-13 are as follows:

**TABLE-10.5**  
**PRODUCTION OF FOREST PRODUCT OF THE STATE**

Forest Produce	Unit	2009-10	2010-11	2011-12	2012-13
<b>Major forest produce</b>					
Industrial Timber	Cubic Metre	9839	34142	19782	10804
Fuel wood	Stack Cubic Metre	16063	1289	807	461
<b>Minor forest produce</b>					
Sand	Cubic Metre	2905333	2470587	3153610	1009242
Gravel/Stone	Do	34269919	1979815	1801173	1193385
Silt/Clay	Do	2243569	1730252	771577	248126
Others		4192455	6579400	3164926	1051568

Source: Office of the Principal Chief Conservator of Forest, Assam.

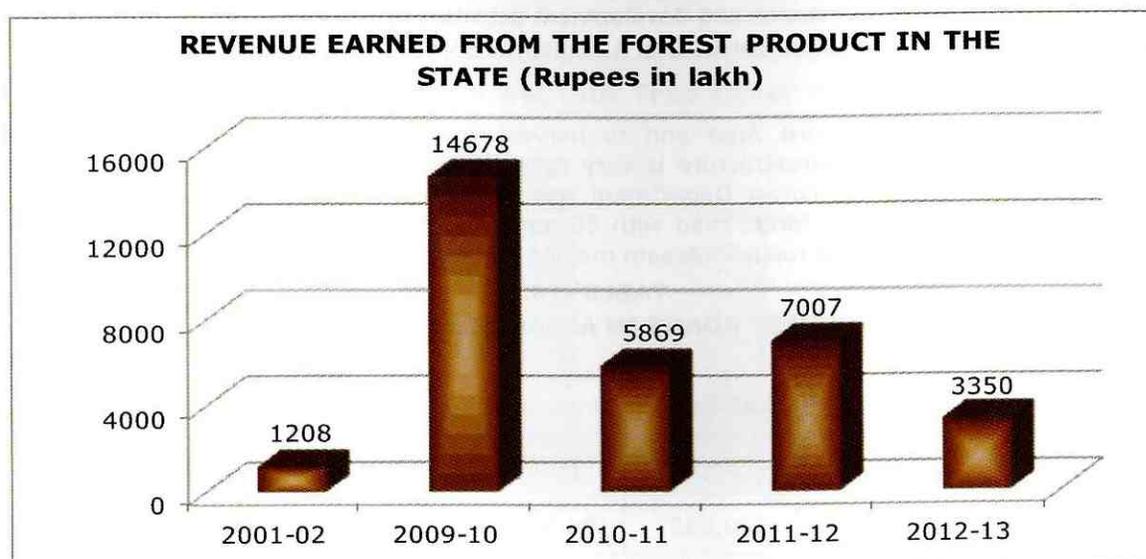
The amount of revenue earned from the various forest products during the last few years are shown in the following table:

**TABLE 10.6**  
**REVENUE EARNED FROM THE VARIOUS FOREST PRODUCTS IN THE STATE**

Items	2010-11	2011-12	2012-13
Timber	815.17	713.80	405.40
Fuel wood	1.17	1.35	1.39
Sands	2720.78	3153.60	1034.27
Gravel/Stone	1360.39	2431.58	1551.40
Silt/Clay	257.19	115.73	65.97
Others	713.82	590.74	291.72
Total	5868.52	7006.80	3350.15

(Rupees in lakh)

Source: Office of the Principal Chief Conservator of Forest, Assam.



## PROTECTED AREA-WILDLIFE AND NATIONAL PARKS & SANCTUARIES

The Wildlife Act provided for setting up national parks and sanctuaries for Wildlife. The total Wildlife Protected Areas in the State of Assam is 3925 Sq. Km. The protected area network in Assam includes five (5) National Parks and eighteen (18) Wildlife Sanctuaries covering an area of 3592.94 sq km constituting 4.6 percent of the geographical area. During 12<sup>th</sup> five year plan a sum of ₹1550.00 lakh is proposed for implementation of development and management schemes for Wildlife and National Parks and a sum of ₹100.00 lakh is proposed for 2013-14.

The category wise Wildlife Protected Area is as follows:

**TABLE -10.7**

### AREA OF THE NATIONAL PARK AND WILDLIFE SANCTUARIES IN ASSAM

Name of the National Park	Location (District)	Area in Sq. Km.
Kaziranga National Park	Golaghat, Nagaon & Sonitpur	858.98
Manas National Park	Chirang and Baksa	500.00
Orang National Park	Udalguri and Sonitpur	78.81
Nameri National Park	Sonitpur	200.00
Dibru-Saikhowa National Park	Dibrugarh and Tinsukia	340.00

### WILDLIFE SANCTUARIES (WLS)

Name of the Wildlife Sanctuaries	Location (District)	Area in Sq. Km.
Bhejan-Borajan-Padumoni WLS	Tinsukia	7.22
Panidehing WLS	Sivasagar	33.93
Gibbon WLS	Jorhat	20.98
Nambor-Doigurung WLS	Golaghat	97.15
Garampani WLS	Karbi Anglong	6.05
Nambor WLS	Karbi Anglong	37.00
East Karbi Anlong WLS	Karbi Anglong	221.81
Marat Longri WLS	Karbi Anglong	451.00
Burhachapori WLS	Sonitpur	44.06
Laokhowa WLS	Nagaon	70.13
Pabitora WLS	Morigaon	38.80
Sonai-Rupai WLS	Sonitpur	220.00
Barnadi WLS	Udalguri	26.22
Chakrasila WLS	Kokrajhar	45.56
Dihing-Patkai WLS	Dibrugarh and Tinsukia	111.19
Barail WLS	Cachar	326.25
Amchang WLS	Kamrup (Metro)	78.64
Deepor Beel Wildlife Sanctuary	Kamrup (Metro)	4.1

### PROPOSED WILDLIFE SANCTUARIES

Name of the Proposed Wildlife Sanctuaries	Location (District)	Area in Sq. Km.
North Karbi Anglong WLS	Karbi Anglong	96.00
Bardoibam Beelmukh WLS	Lakhimpur	11.25

Source: Chief Conservator of Forest (WL), Assam.

## PROJECT TIGER

The State has three Tiger Reserves, namely Kaziranga, Manas and Nameri. To ensure conservation of Tiger, the State Government has further notified the Tiger Conservation Rules, 2010 and Government of India has been requested for direct funding to these Tiger Conservation Foundations. Kaziranga National Park and Manas Wildlife Sanctuary are in the list of World Heritage sites. During the 12<sup>th</sup> Five Year Plan a sum of ₹2200.00 lakh is proposed for preservation of Tiger population under the component for 3 numbers of Tiger Reserve on 50: 50 Central and State share basis. A sum of ₹300.00 lakh is proposed during 2014-15 to implement the scheme to preserve Tiger population by providing all round protected measure.

Emphasis has also been given for conservation of one horned Rhinos, the pride of the state. As per census reports the Rhino population in the State is increasing. The elephant population is also increasing in the State according to Elephant Census Report. The National Parks & Wildlife Sanctuaries of State totalling 25 in numbers are managed with the assistance under Development of National Parks & Sanctuaries. The expenditure on ex-gratia relief for loss of life and property due to Wild Elephant Depredation has been met from the fund received under Project Elephant. A sum of ₹100.00 lakh is proposed for the year 2013-14 for development and maintenance of Wildlife Sanctuaries including Kaziranga National Park. The development & maintenance is included maintenance of roads, watch towers, anti-poaching camp, Vehicle and other logistic support for management and protection of wildlife.

Table below shows the Rhino and Elephant population in the State during different census period.

TABLE -10.8

## POPULATION OF RHINO, ELEPHANT, TIGER, AND SWAMP DEER IN THE STATE

Year of Census	Rhino Population	Area
2006	2006	In all National Park (Kaziranga NP, Manas NP, Orang NP), Wild Life Sanctuary (Pobitora WLF) and all Protected Areas.
2009	2201	
2012	2505	
2013	2544	
<b>Elephant Population</b>		
2002	5246	All the Protected Areas, Elephant Reserves, Reserved Forests and Unclassified State Forests in Assam.
2007	5281	
2009	5620	
<b>Tiger Population</b>		
2006	70	All the Protected Areas, Elephant Reserves, Reserved Forests and Unclassified State Forests in Assam.
2009	143	
<b>Swamp Deer</b>		
1998	526	All the Protected Areas, Elephant Reserves, Reserved Forests and Unclassified State Forests in Assam (as per NTCA Report)
2007	681	All the Protected Areas, Elephant Reserves, Reserved Forests and Unclassified State Forests in Assam (as per NTCA Report)
2011	1169	

Source: Department of Forest and Environment, Assam.

## SCHEME FOR MAN-ELEPHANT CONFLICT RESOLUTION

The Hon'ble Chief Minister, Assam has given emphasis to reduce the "Man-Elephant Conflict". Therefore, the following activities has been proposed for next five year i.e. 2012-17 which comprises-

- Erecting Solar Power fencing in 25 km long stretch of the vulnerable areas in effected district
- Enhancement of 100 hectare Plantation of species like outenga, kathal, sam, gamari, koro, odal, cane & bamboo etc. palatable to the elephant shall be taken up in Assam. In this regard the total amount comes to ₹3439.00 lakh for next five years against which a provision of ₹400.00 lakh is earmarked during 2014-15.

**Assam Project on Forest and Biodiversity Conservation:** It is an externally Aided Project (EAP) which will be funded by French Development Agency under Indo- French Development cooperation. Since the State of Assam is a part of eastern Himalaya Bio-diversity hot spot, conservation of Forest and Biodiversity in the state assumes significant importance in face of mounting anthropogenic pressure and anticipated impacts of climate change on forest ecosystems. Further, forest in Assam provide important livelihood support to the marginalised sections including tribal population as well as the ecological services they deliver in terms of soil and water conservation.

As more than 50 percent of the notified forest area in the State falls under the category of "Open Forest" restoration of such forests as well as enhancing the human and infrastructural capacity of the State Forest Department coupled with the need to provide livelihood opportunities and alternatives to the forest dependent communities requires infusion of funds at a very enhanced scale.

The project has four technical components-

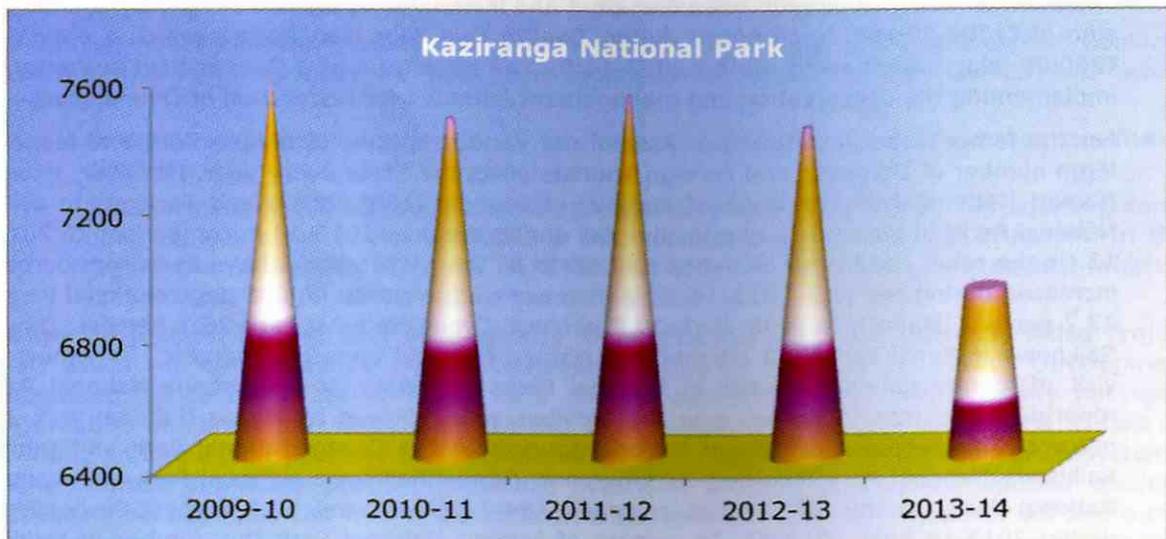
- (1) Forest Department Institutional Strengthening
- (2) Multi level strategic Planning
- (3) Sustainable Forest Management
- (4) Adding value and opening market opportunities for forest and biodiversity goods and services and Project Management as the non technical component.

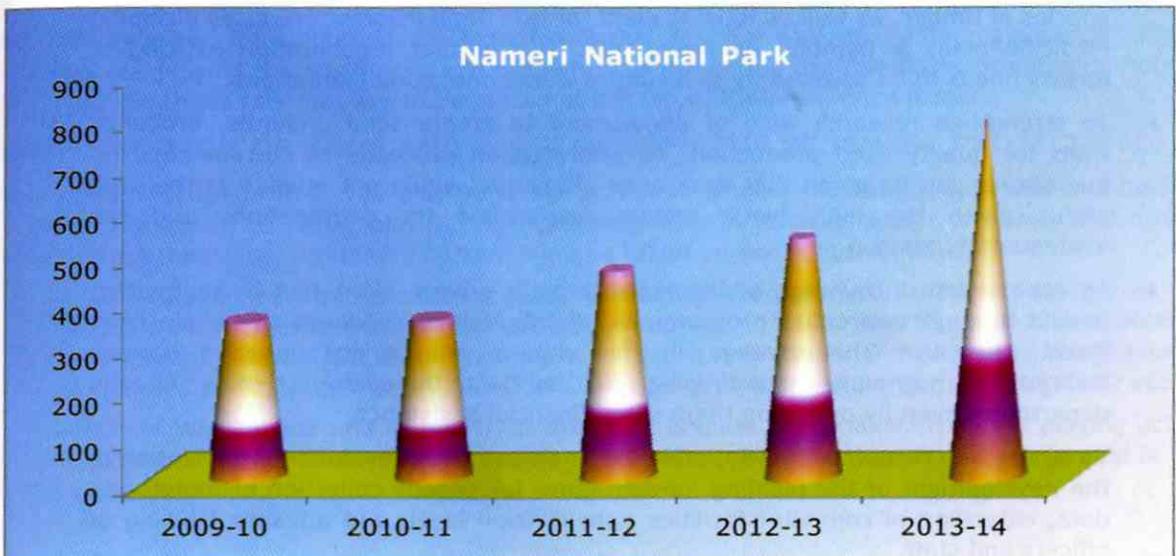
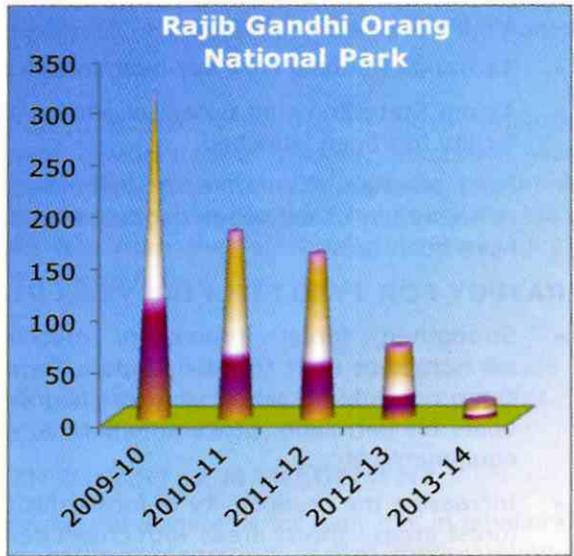
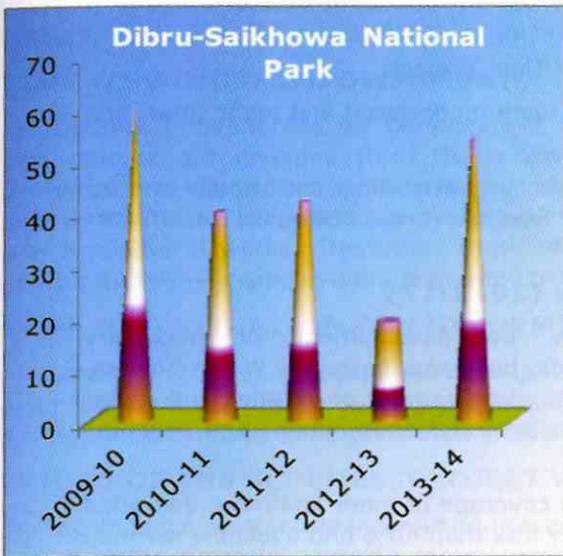
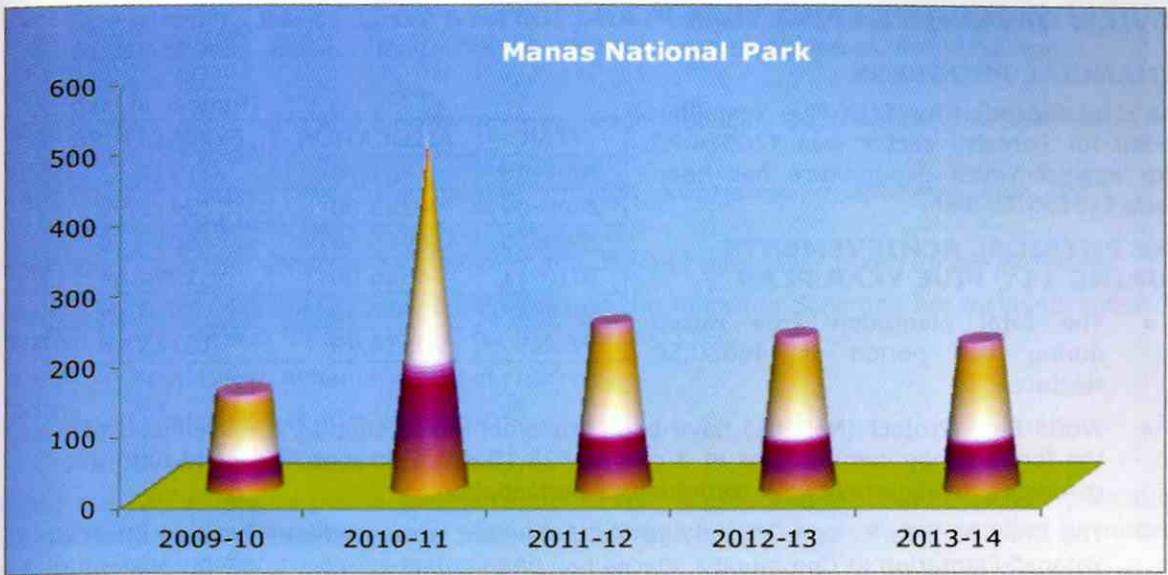
## WILDLIFE MANAGEMENT

- **Project Elephant:** The scheme is proposed for the payment of Ex-gratia for loss of life and property due to elephant depredation, procurement of Arms & Ammunition, setting up of anti depredation squads of villagers to scare away Wild elephants, establishment of squads with temporary camp, mobile power fencing to protect villagers from elephant under logistic circumstances etc. A sum of ₹600.00 lakh is earmarked for the year 2014-15.
- **Integrated Development of Wildlife Habitat Area:** The scheme includes preparation of Management Plan, Survey & demarcation of boundary for protection of Wildlife habitat area, prevent anti poaching activities etc. Besides, some community development activities such as furniture and education implements to schools under eco-development activities are also covered by this scheme. A sum of ₹700.00 lakh is earmarked for the scheme during 2014-15.
- **Project Tiger:** The objective of the Scheme is to preserve tiger population by providing all round protected measures. The scheme for strengthening the infrastructure, habitat restoration/improvement, eco-tourism, anti -poaching activities etc, in the three Tiger Projects: Kaziranga Project Tiger, Manas Project Tiger and Nameri Project Tiger a sum of ₹300.00 lakh is proposed for the year 2014-15.
- Raising of Plant of Non Timber Forest Produce including Medicinal Plant, Bamboo Plantation Scheme and ACA for Accelerated Programme Restoration & Re-generation of Forest cover: A sum of ₹650.00 lakh is earmarked for implementation of these programme.
- **Financial Assistance to conservation and Management of Deepar Bill Wetland:** The Deepar Bill located in the southwest and 10 kilometre away from Guwahati city and it is considered as one of the large and riverine wetland in lower Assam. Originally the beel had its natural linkages with the river Brahmaputra through the Sola Beel and the swampy area of Pandu to the Northeast. Due to construction of residential buildings, NH-37 and Railway line the main link has already been disrupted and it remains as a small secondary channel. A sum of ₹1500.00 lakh is proposed during Twelfth Five Year Plan against which a provision ₹200.00 lakh is earmarked during 2013-14 for the setting up of a Deepar Beel authority in implementing the conservation and management initiative for restoration of Deepar Beel.
- For the famous one horn Rhino of Assam and various species of unique flora and fauna a large number of Domestic and Foreign Tourists visits the State every year. However, except Nameri National Park, the visit of number of tourists (both Indian and Foreign) in other National Parks of Assam has marginally fall during the year 2013-14 in comparison to 2012-13. On the other hand, visit of Indian tourists to all the wildlife parks have been considerably increased during the year 2013-14. This increase was recorded in Kaziranga National Park - 27.2 percent, Manash National Park-29.2 percent, Orang National Park-26.1 percent, Dibru-Saikhowa National Park-59.3 percent and Nameri National park-34.2 percent. In respect of visit of foreign national tourists in National Parks of Assam, the Kaziranga National Park reported 6.7 percent decrease over the previous year followed by Manas National Park-3.2 percent. The decrease of foreign national tourists in the Orang National Park and Dibru-Saikhowa National Park recorded 77.1 percent. Dibru-Chaikhowa National Park and Nameri National Park, on the other hand, recorded 184.2 percent and 52.3 percent respectively during 2013-14 over 2012-13. In respect of Nameri National Park the number of foreign visitors has increased in 2012-13 as compared to previous year.

The number of Tourists arrival in National Parks and revenue collection out of tourists' visits during the last few years is presented below.

Name of National Park	Year/Month	No. of visitors		Revenue (₹in lakh)
		Indian	Foreign	
Kaziranga National Park	2009-10	1,05,264	7,580	121.68
	2010-11	1,12,392	7,447	136.73
	2011-12	1,17,308	7,521	149.46
	2012-13	93,747	7,418	205.76
	2013-14	119289	6922	268.66
Manas National Park	2009-10	8,030	139	16.96
	2010-11	10,843	503	14.67
	2011-12	19,705	237	21.17
	2012-13	15,890	218	25.48
	2013-14	20527	211	30.93
Rajib Gandhi Orang National Park	2009-10	1,628	325	3.11
	2010-11	1,702	180	1.82
	2011-12	2,678	159	2.44
	2012-13	1,847	70	2.76
	2013-14	2329	16	2.43
Dibru-Saikhowa National Park	2009-10	2,613	62	0.61
	2010-11	2,351	40	0.55
	2011-12	3,970	42	0.89
	2012-13	2,656	19	1.08
	2013-14	4230	54	2.09
Nameri National Park	2009-10	4,342	346	2.79
	2010-11	4,460	352	2.72
	2011-12	5,601	457	3.50
	2012-13	4,370	528	4.54
	2013-14	5866	806	11.26





## REVIEW OF ELEVENTH FIVE YEAR PLAN (2007-08 TO 2011-12)

## FINANCIAL PROGRESS

The total allocation for 11th Five Year Plan period for Forestry sector was ₹26514.79 lakh against which expenditure has been made ₹16165.18 lakh.

[Rupees in lakh]

YEAR	ALLOCATION	EXPENDITURE
2007-08	1881.79	1312.52
2008-09	4225.00	3419.92
2009-10	6915.00	6019.56
2010-11	6546.00	1894.54
2011-12	6947.00	3518.64
Total	26514.79	16165.18

THE PHYSICAL ACHIEVEMENTS DURING 11<sup>TH</sup> FIVE YEAR PLAN

- The total plantation area raised during the period is 46080.56 Hectare.
- World Bank Project (NaRMIL) have been implemented to support the livelihood of the forest fringe communities at a cost of ₹28.10 crore through improved natural resources management with communities participation.
- The Chief Minister's special package for the sector, a new scheme "Assam Biksh Yojana"-Plantation in Community Places has been launched from 2008-08 onward and on the first phase extensive plantation has been in 1163 nos. of school and 1566nos. benefited from it
- Kaziranga National Park has been included in Tiger project
- Assam State Zoo cum Botanical garden has been modernized and night safari ride facility has been launched.
- For protection of Wild life, 2<sup>nd</sup> AFPF Battalion has been raised exclusively and for reforestation of extensive degraded area in Reserve Forest Ecological Task forces have been raised.

## STRATEGY FOR TWELFTH FIVE YEAR PLAN (2012-17)

- Strengthen forest protection machinery by development of necessary infrastructure and Logistic support like roads, buildings, barracks, Watch Towers, camp huts, demarcation of forest boundaries, procurement of vehicles and motor boats for patrolling, procurement of wireless sets and ammunition, anti poaching equipments etc.
- Increasing the productivity of forest through coverage of more and more degraded forest areas, forest areas with crown density less than 40% and available revenue land under plantation of Indigenous, fast growing and economically important species of timber, as well as Raising plant of Non Timber forest produces including Medicine plant & Bamboo plantation etc. The natural regeneration existing in forests needs to be assisted by silvi culture works and aided plantations.
- To strengthen research wing of department to create seed orchards, progeny trails for quality seed production. As afforestation proceeds at current pace no guarantees can be given that area once afforested would not relapse to their old status given the high biotic factors responsible for degradations and the inadequate funding.
- To expand forest coverage of the state through private plantation by motivating people through awareness programmes, distribution of seedlings to people from forest nurseries. The strategy in this regard will be to associate various communities, groups, associations, NGO's/FDA's in such activities of the department even by providing them some financial assistance.
- To strengthen resources survey, planning, monitoring and evolution organization of the development of the building infrastructure for speedy collection of monitoring data, extension of computer facilities upto division level; and advance training of officers and staff.

- Strengthening wildlife conservation through intensive patrolling, deployment of adequate man power along with all requisite patrolling gears including arms, wireless etc.
- Develop short term and long term measures for reducing depredation of elephants and other wildlife.
- Enlisting support of local people through awareness programme and eco development activities.

Some other important schemes have been continuing and also newly taken up are as follows:

The Hon'ble Chief Minister, Assam has announced the following Schemes are included under the "Mukhya Mantrir Assam Bikash Yojana" for the year 2011-12.

- i. Seuji Dhora Achani for School children
- ii. Outside Forest area plantation
- iii. Guwahati Hills area plantation

During the 12<sup>TH</sup> Five year plan a sum of ₹3200.00 lakh is proposed for creation School plantation-500 numbers community plantation / Hills area plantation-1800 hectare and creation of nursery-10 numbers .etc under the above component.

A sum of ₹300.00 lakh is proposed for the year 2013-14 for creation of school plantation-500 numbers, Plantation-300 hectare & Creation on Nursery-10 nos. etc. under the above component.

#### **SCOPE OF WOMEN EMPOWERMENT**

The Schemes implemented for Development of Forests & Wildlife are mostly labour oriented & these labours are engaged from the forest fringe dwellers. The Nursery, plantation works, maintenance of plantations by weeding, climber cutting etc. are done by engaging labours & in these works mostly women labours take active participation while the male members are busy in other Agricultural works. Therefore, these women folk from the forest fringe villages get the opportunity for their employment & thereby get their Livelihood.

#### **SCOPE OF GENERATION OF EMPLOYMENT**

The Schemes/Projects proposed to be implemented during the 12<sup>th</sup> Five year Plan Period are labour intensive activities providing employment to people living in and around Forest areas. The total no. of persondays to be generated annually is estimated at 13,53,704.

#### **LIKINGS OF THE SCHEMES/PROJECT WITH DISASTER MANAGEMENT**

The forests plays pivotal role in avoiding preventing natural disaster & for their role in amelioration of flood water dynamics, erosion control, soil and water conservation, carbon sequestration etc. Therefore, the forestry schemes as proposed in the Annual Plan 2011-12 comprise of the activities like Afforestation, Rehabilitation of Degraded Forest etc. by way of creating plantation. These schemes are playing the positive role in preventing & mitigating the calamities threatening human existence. So these schemes are to be placed at the top of the preference ladder.

#### **PARTICIPATION OF NGOS AND PEOPLES WITH THE SCHEMES/ PROJECT ETC.**

Involvement of NGOs and civil players is integrated in project implementation and monitoring. These are quite a few NGOs playing very proactive role in forestry sector and they and others including academicians, prominent citizens may be taken on board in this matter.

"NGOs" are running environmental awareness generation Programme in different Villages of the district and is keen to implementing the project in support of NAEB. The National Afforestation & Eco-Development Board (NAEB) is implementing the N.A.P (National Afforestation Programme) through Forest Development Agency (FDA) and Joint Forest Management Committee (JFMC) etc.

In the field of Wildlife, the role of N.G.O. in the State is quite appreciable. They are playing active part in awareness programme amongst people and Eco-Development Committees are formed in the fringe village of NAP.

**APPENDIX – 10.1**  
**AREA UNDER FOREST IN ASSAM (As on 30.01.2013)**

(Area in hectare)

Sl. No.	Forest Division	Reserved Forest	Proposed Reserved Forest	Protected Area	Total Forest (Excluding Un-classed State Forest)
1.	Goalpara	22946.563	11387.510		34334.073
2.	Kamrup East	37052.356	11596.460		48648.816
3.	Kamrup West	75549.276	568.850		76118.126
4.	North Kamrup	4412.197	1141.400		5553.597
5.	Dibrugarh	20728.678		11119.420	31848.098
6.	Digboi	49598.074	5479.150	8712.000	63789.224
7.	Doomdooma	29404.176	4252.750		33656.926
8.	Golaghat	80154.089	133.450	9715.000	90002.539
9.	Jorhat	26096.841		2098.621	28195.462
10.	Sivasagar	24092.903		3393.000	27485.903
11.	Hamren	27454.539			27454.539
12.	Karbi Anglong East	61995.937	84089.600	34042.000	180127.537
13.	Karbi Anglong West	109282.007	3525.000	451.000	113258.007
14.	Dima-Hasao	63776.154			63776.154
15.	Baska	13542.551			13542.551
16.	Lakhimpur	31097.441			31097.441
17.	Dhemaji	42468.430	9400.000	1121.800	52990.230
18.	Nagaon	35310.086	3573.000		38883.086
19.	Nagaon South	64873.521			64873.521
20.	Sonitpur East	73927.302			73927.302
21.	Sonitpur West	44129.201	910.000		45039.201
22.	Silchar (Cachar)	34199.791		7386.900	41586.691
23.	Hailakandi	78145.833	170.000		78315.833
24.	Karimganj	48057.303	6489.090	32625.000	87171.393
25.	Aie Valley	6144.969	5901.730		12046.699
26.	Dhubri	6082.060	865.770		6947.830
27.	Haltugaon	63806.919	2949.000		66755.919
28.	Kachugaon	82199.117	213.000		82412.117
29.	Dhansiri	17812.765	3963.000	2822.000	24597.765
30.	Parbotjhora	28041.484	17732.910		45774.394
31.	Chirang	55957.550	1400.000		57357.550
32.	West Assam Wild life			42000.000	42000.000
33.	Tinsukia Wild life	32677.785		34722.000	67399.785
34.	Nagaon Wild life	2155.000		11417.040	13572.040
35.	Mangaldoi Wild life			7881.000	7881.000
36.	Assam State Zoo	175.000			175.000
37.	Kokrajhar Wild life			4556.000	4556.000
38.	Manas Tiger Project	2837.120		50000.000	52837.120
39.	East Assam WL Bokakhat	1130.855		85898.000	87028.855
40.	Guwahati Wild life			12155.000	12155.000
	<b>Total Area</b>	<b>1397315.873</b>	<b>175741.670</b>	<b>362115.781</b>	<b>1935173.324</b>

Source : Office of the Principal Chief Conservator of Forest &amp; Head of Forest Force, Assam.

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## CHAPTER – XI

## INDUSTRY, TRADE AND MINING

Assam is a house of natural and precious mineral resources. Assam though finds its place in the industrially developed map of the world during the pre- independence period, the continuous process of economic and industrial development of the State was almost stopped after attainment of independence and at present Assam is amongst the industrially under- developed States in the Country. Therefore, industrial scenario of the State is confined within the growth of employment oriented SSI Sector. Assam is still making efforts desperately for gearing up industrial activities by harnessing the un-tapped resources available in the State through various growth-inducing factors as well as by removing the infrastructure inadequacies primarily in the power sector. Despite existence of constraints a favourable industrial climate is gradually being created in the State as discernible from the increasing interest shown by investors both from within the State as well as from outside the State. The communication and transport sector, on the other hand, has shown some improvement during the recent past. The declaration of the North East Industrial Investment Promotion Policy-2007, removal of notified area concept and introduction of neutrality of location clubbed with Excise duty exemption, Income Tax exemption, Capital Investment Subsidy, Interest Subsidy, Comprehensive Insurance Subsidy, Incentive to Bio-Technology Industry, Incentive on Power Generation Industry, Transport Subsidy etc., are the major steps towards industrialization of the state. The thrust has been given both by the State and Central Government to enhance benefits to those entrepreneurs' desirous to set up their units. The State Government in turn has to provide supplement effort by development of infrastructure and offers its participation in the form of Government share or partner in the PPP models of projects which are of prime importance considering the location of the State.

The performance of annual growth of industrial sector, a combination of Manufacturing, Mining & Quarrying, Electricity Gas & Water Supply and Construction sectors, showed some recovery during the last three years (2011-2014) after sudden slow down in the year 2010-11. However, the contribution of Industrial sector to the state economy remained 24.0 percent annually during the period 2004-05 to 2013-14. Poor performance of individual sectors like Mining & Quarrying and erratic growth of Electricity, Gas & Water supply sector has some impact on the growth of industrial sector. On the other hand, Construction sector has claimed remarkable growth during the last two years i.e., 2012-13 and 2013-14. Sector-wise analysis may be evident from the graph above.

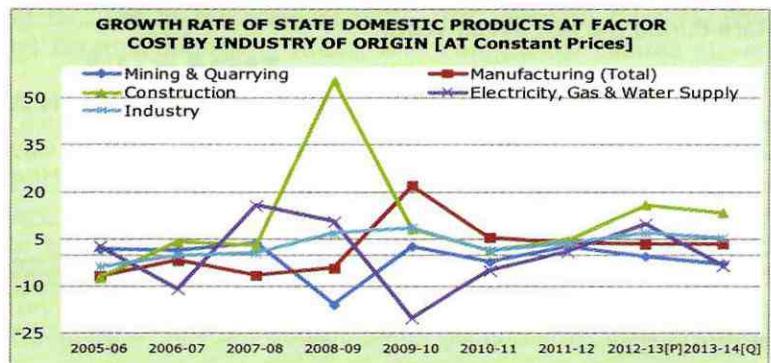


TABLE - 11.1

**ANNUAL GROWTH AND CONTRIBUTION OF INDUSTRIAL SECTOR IN ASSAM AT CONSTANT (2004-05) PRICES**

(Figure in percentage)

Year	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13 (P)	2013-14 (Q)
*Annual Growth	(-)3.5	(-)0.1	0.7	6.9	8.8	1.6	3.8	7.2	5.5
Contribution to GSDP	25.7	24.5	23.6	23.8	23.8	23.0	22.8	23.2	22.8

Source: Directorate of Economics and Statistics, Assam

Although the manufacturing and processing industries have ruled the Industry Sector in the State, the contribution of these industries to the State economy was not as much impressive as was expected. The contribution of the Registered Manufacturing sector to the total State economy was 5.0 percent and accounted for 22.0 percent share of the total Industry Sector contribution to the GSDP [at constant (2004-05) prices] during 2013-14 (Quick Estimates). The Index of Industrial Production in respect of manufacturing sector has shown some improvement and (Provisionally) reached 178.13 level in 2013-14 (Base: 2004-2005=100) as against 170.48 in 2012-13. Production of some selected industries may be evident from the table-11.2

**TABLE – 11.2**  
**PRODUCTION OF SOME SELECTED INDUSTRIES IN ASSAM**

Year	Tea (000 tonnes)	Wheat Flour (000 tonnes)	Coal (000 tonnes)	Jute Textiles (Tonnes)	Crude Oil (000 tonnes)	Cement (000 tonnes)	Fertilizer (000 MT)
2007-08	486	837	1101	9494	4361	213	346
2008-09	484	848	1147	11249	4673	446	313
2009-10	498	1044	1203	12511	4738	644	338
2010-11	525	1198	1110	12904	4714	736	325
2011-12	501	866	590	19956	5023	984	394
2012-13	588	898	605	22717	4861	1181	514
2013-14	629	1003	665	25625	4718	1107	515

Source: Tea: Tea Board of India; Minerals: Indian Bureau of Mines, Nagpur;  
Others: Individual Industrial Units.

### MINING SECTOR

Impact of slow down in the production of mining sector during the year 2013-14 compared to the previous year is also another contributing factor for weak industrial performance in Assam despite the State is richly endowed with mineral resources. The reason behind low production is due to existence of deposits in disadvantageous locations. During the year 2013-14, except production of Sulphur, the production of coal was 40.0 percent less compared to the production in 2010-11, production of Crude Oil was 6.1 percent less over 2011-12, Natural Gas production was 2.6 percent less over 2011-12, Lime Stone production was 28.8 percent less over 2012-13. The production of Sulphur, on the other hand, recorded 44.0 percent increase during the year 2013-14 over the previous year. The Table -11.3 shows the trend of some major minerals exploited in the State during the last seven years.

**TABLE – 11.3**  
**MINERAL PRODUCTION IN ASSAM**

Year	Coal (‘000MT)	Crude Oil (‘000MT)	Natural Gas Utilised (MCM)	Limestone (‘000MT)	Sulphur (‘000 MT)
2007-08	1151	4308	2417	367	224
2008-09	1147	4673	2603	363	566
2009-10	1203	4738	2476	402	665
2010-11	1110	4714	2500	334	2991
2011-12	590	5023	2726	245	5457
2012-13	605	4861	2681	292	3706
2013-14	665	4718	2655	208	5334

Source: Indian Bureau of Mines.

The index of mineral production in Assam (Base 2004-2005=100) was 102.48 in 2013-14 as against 105.15 in 2012-13. The index of mineral production was 103.73 in 2009-10. The Table 11.4 shows the index of mineral production in Assam during the period 2009-10 to 2013-14.

**TABLE – 11.4**  
**INDEX OF MINERAL PRODUCTION IN ASSAM**  
(Base 2004-2005=100)

MINERALS	2009-10	2010-11	2011-12	2012-13	2013-14
Coal	191.56	176.75	93.95	96.34	105.89
Petroleum (Crude)	100.30	99.79	106.33	102.9	99.87
Natural Gas (Utilised)	120.60	121.77	132.78	130.59	129.32
Limestone	100.25	83.29	60.35	72.82	51.87
All Minerals	103.73	103.08	108.35	105.15	102.48

Source: Directorate of Economics and Statistics, Assam.

The revenue in terms of royalty etc., earned by the State of Assam has been increasing gradually. In the year 2012-13, total royalty earned by the State was ₹1617.55 crore. The royalty collection during the year 2013-14 is expected to be ₹1700.00 crore.

## THRUST AREA DURING 12<sup>TH</sup> FIVE YEAR PLAN PERIOD

The State Industries and Commerce Department, besides employment generation has also focused in industrial growth in the State to ensure regionally balanced, socially equitable and economically inclusive growth. Therefore following strategies has been adopted for attainment of environmentally harmonious and sustainable industrial growth with social equity in the natural capital during the Twelfth Five Year Plan period:

- Up-gradation of skilled human resource;
- Development of Industrial Infrastructure;
- Capital investment;
- Identification of clusters with the competitive/comparative advantage;
- Up-gradation of technologies and adoption of best practices in tea gardens for higher production and productivity & MSME Sector;
- Expeditious mechanism for facilitating clearances;
- Re-orientation of administration for building up an investor friendly environment.

## INDUSTRIAL ESTATE AND INDUSTRIAL GROWTH CENTRE

Creation of environment for industrialization by setting up Industrial infrastructure in the perspective of industrial development and attract investment through proper planning is the prime objective of the State Government. The declaration of the North East Industrial Investment Promotion Policy, 2007 supplemented by State Industrial Policy, 2008 has been another important feature for industrialization of the State. To achieve the goal the department is creating a good numbers of infrastructural facilities as well as upgrading the existing ones located in different districts of the state. Infrastructural facilities in the form of EPIP, IIDC, Growth Centers, Food Processing Industrial Park, Industrial Estates, Industrial Areas, and Commercial Estates etc are spreading throughout the State.

At present, there are 19 Industrial Estates, 8 Mini Industrial Estates, 17 Industrial Areas and 12 Growth Centres in the State where all total 638 numbers of Industrial units are functioning. One Export Promotion Industrial Park (EPIP) has also been established with world class infrastructure at Amingaon in Kamrup district where 40 numbers of industrial units are producing some export quality product of various kinds. In addition, 11 nos. of Industrial Infrastructure Development (IID) Centre in 11 different districts and 3 numbers of Industrial Growth Centre and one Food Park at Chaygaon in Kamrup District are under implementation. Most of the IID projects are completed. At present a total of 683 numbers of industrial units are functioning in the industrial infrastructures created in the State so far.

## SMALL SCALE INDUSTRIAL UNITS (SSI)/ MICRO, SMALL & MEDIUM ENTERPRISES AND HANDICRAFTS UNITS

The strategy for industrial growth in Assam must focus on generating jobs for unemployed youth to ensure regionally balanced, socially equitable and economically inclusive growth. The Small Scale Industries have played vital role in fulfilment of socio-economic development perspectives in Assam. Presently the small-scale industries have been sub- divided into Micro, Small and Medium Enterprise (MSME) under the Micro, Small and Medium Enterprises Development Act 2006. The categorization of enterprises is made based on their investment in plant and machineries in case of manufacturing sector or in equipments in case of service sector. In this context, special focus has been given by the State Government on development of the MSME sector for generation of economic activities and skill development in employable trades with a view to generate rural income and employment. For speedy growth of this sector, the Government of Assam has already brought some simplification in its procedures in respect of registration as well as declared incentives in its Industrial Policy – 2008.

There are 39028 SSI/MSME units in Assam and provided employment to **2.16** lakh persons till the end of March 2014. The Table – 11.5 shows some annual statistics in respect of setting up of SSI/MSME units upto 31-03-2014. It is evident from the table that average employment per unit of manufacturing enterprises in Assam is around 6(six) person during the period 2005-06 to 2013-14 and average investment per unit is ₹15.64 lakh.

**INITIATIVES OF GOVT. OF ASSAM IN MICRO AND SMALL ENTERPRISES (MSE) SECTOR**

- Scheme for providing soft loan with a nominal interest rate and hand-hold facilities for the first generation micro entrepreneurs in the form of "Angel Fund" was implemented during the year 2013-14. ₹10.00 crore is allocated for implementation of the Scheme during the 2014-15. An MoU was signed by the State Government and Regional Rural Bank, Assam Gramin Vikash Bank on 19<sup>th</sup> September 2014. A maximum loan amount of ₹5.00 lakh at only 5 percent interest per annum with no interest to be charged during the moratorium period for maximum 10 months would be extended for setting up micro enterprises. Under the Scheme, around 80 percent of the project cost for existing units and 85 percent for new units without mortgage are being offered under the special fund.
- As announced in the State Budget, common facilities centre in identified pockets for production of handicraft, bamboo and other such economic activities, including common facilities centres will be set up for fruit processing.

Source: State Focus Paper: 2015-16, Assam - Published by NABARD, Assam Regional Office.

**TABLE - 11.5**  
**GROWTH OF SSI/MSME UNITS, EMPLOYMENT,**  
**INVESTMENT AND PRODUCTION IN ASSAM**  
(as on March)

Year	No. of SSI/MSME units	No. of Employment	Average no of Employment per unit	Investment on Plants & Machinery (Rs. in lakh)	Average investment per Unit (Rs in lakh)
Upto 31.03.2005	23658	108467	4.6	46085.89	1.95
2005-06	2082	10780	5.2	23776.88	11.42
2006-07	2172	11852	5.5	9282.72	4.27
2007-08	1692	10471	6.2	26637.42	15.74
2008-09	1711	12914	7.5	26348.26	15.40
2009-10	1678	12787	7.6	29901.68	17.82
2010-11	1506	10458	6.9	27662.92	18.37
2011-12	1218	13203	10.8	27007.84	22.17
2012-13	1451	11671	8.0	27397.47	18.88
2013-14	1860	12971	7.0	31099.08	16.72

Source: Office of the Commissioner of Industries & Commerce, Assam.

**ASSAM GAS CRACKER PROJECT/PLASTIC PARK**

A joint venture company viz., Brahmaputra Cracker and Polymer Limited (BCPL) is implementing the Assam Gas Cracker Project. The total project cost has been revised to ₹8920.00 crore. Overall financial achievement is ₹7179.00 crore or 86 percent (approx). Out of the total equity contribution of Govt. of Assam amounting to ₹126.90 crore, ₹126.89 crore has already been released.

The project profile indicates a total polymer production of 280 thousand tonnes per annum. Government of Assam will provide exemption for entry tax on capital goods; works contract tax and sales tax on feed and products for 15 years. The Central Government will provide excise duty and income tax relief for 10 years. The project will offer direct employment to 800 persons and indirect employment to 1 lakh persons. The project will open up avenues of opportunities in multi-faceted directions. Besides opening of various socio-economic linkages, scope for setting up of chain of downstream industries is expected to open on completion of the project.

The Assam Gas Cracker Project is in the fast track and overall physical progress is around 96 percent. Civil and structural works for the entire plant have been completed and finishing works are in progress. Mechanical and other related activities are going on in Process Plants, Utilities and Offsite areas. Electrical and Instrumentation works are also in progress. Gas Dehydration unit & Compressor Station at Duliajan, Gas Sweetening & C2+ Recovery and Utilities & Offsite units at Lepetkata are mechanically complete and pre-commissioning activities are in progress. One train of Utilities & Offsite has been partially commissioned.

To facilitate the growth of downstream industries of the Gas Cracker Project under implementation at Lepetkata in Dibrugarh District of Assam has started implementation of a Plastic Park at Gelapukhuri in Tinsukia district. The proposed site for the Plastic Park is located 3-4 km from the Tinsukia town and about 45 km from the Gas Cracker project site. The proposed Plastic Park will have a world class infrastructure and business environment to attract large units in the country. All the common facilities like training, designing, tool room, recycling units etc. will be integrated into the project to make itself sufficient in all respect. The Steering Committee of the Department of Chemicals & Petro-chemicals (DoC&PC), Govt. of India has accorded approval in-principle of the Project. AIDC Ltd. which has been designated as the nodal agency for implementation of the Plastic Park project has taken possession of land measuring 1166.34 Bigha for the project.

Facilities to be provided in the Plastic Park are:

- Developed plots.
- Internal roads.
- Water supply system.
- Cap tire power plant.
- Internal drainage system.
- Boundary wall.
- Street lighting.
- Medical/ recreation/ canteen etc.

#### **ASSISTANCE TO STATE FOR DEVELOPING EXPORT INFRASTRUCTURE & ALLIED ACTIVITIES (ASIDE)**

Ministry of Commerce, Govt. of India launched ASIDE scheme for Development of Export Infrastructure and Allied Activities. Commissioner of Industries & Commerce, Assam has been notified as the Export Commissioner and AIDC Ltd., is the disbursing agency under the scheme. Fund amounting to ₹20120.50 lakh has been received out of which ₹13343.11 lakh has been already been disbursed to the implementing agencies. During the year 2014-15, "Integrated Tea Park" project is proposed to be taken up under ASIDE.

#### **INTEGRATED TEA PARK**

AIDC Ltd. is implementing "Integrated Tea Park" project at Choudhury Para located at Chaygaon in Kamrup District for addressing the issues of warehousing and storage for marketing of Assam Tea globally, maintaining quality through stringent quality research and monitoring mechanism, auctioning and other logistical issues. As per pre feasibility report prepared by ICICI Winfra, Kolkata estimated project cost is ₹23.40 crore out of which ₹16.80 crore will be funded under ASIDE and the balance ₹6.60 crore is Govt. of Assam & AIDC share. For preparation of DPR including technical and financial feasibility and undertaking bid process management for the proposed Tea Park, AIDC Ltd. has appointed M/S Grant Thornton, Gurgaon as Consultant.

#### **NORTH EAST MEGA FOOD PARK, TIHU**

With the objective of providing adequate infrastructure for the food processing industries of the region along with the value chain from farm to market, a Mega Food Park is under construction at Nathkuchi (Tihu) in Nalbari district. The park is being developed in PPP model with assistance from the Ministry of Food Processing Industries, GOI in an area of 50 acres. The total project cost is ₹7598.00 lakh where central share is ₹5000.00 lakh and State share is ₹402.72 lakh and promoters' contribution is ₹2195.28. The park is located on NH-31 at a distance of 90 km from Guwahati.

#### **FOOD PROCESSING INDUSTRIAL PARK**

The Ministry of Food Processing Industries, Government of India has approved for setting up of a Food processing Industrial Park at Chaygaon in Kamrup District with a project cost (revised) of ₹496.00 lakh. The Central Govt. share is ₹350.00 lakh and the State share is ₹146.0 lakh. The Government of India has released ₹262.50 lakh while the Government of Assam has released ₹146.00 lakh against their respective share upto the year 2013-14. The Project is completed and allotted plots to food processing industries.

## BAMBOO PARK

A bamboo park at Chaygaon in Kamrup is under construction. The proposed park is being developed in PPP model with the assistance from Ministry of Commerce & Industry, GOI, State Govt. and private promoters. The cost of the Project is ₹62.28 crore out of which the Central Govt. contribution is ₹52.63 crore. The objective of park is to create integrated infrastructure for promotion of bamboo based industries in the State.

### NEW INDUSTRIAL AND INVESTMENT POLICY OF ASSAM, 2014

The Government of Assam has announced the "New Industrial and Investment Policy of Assam, 2014" which is effective from March, 2014. The broad objectives of the policy are as under:

- To increase Gross Domestic Product by way of facilitating growth of various economic activities including Manufacturing and Service sector;
- To create income & employment especially in the rural areas.
- To encourage sustainable Investment in the MSME sector on local resource.
- To build a vast pool of skilled personnel.
- To give special thrust on economic activities based on local resources.
- State Capital Investment Subsidy to Micro units at the rate of 30 percent subject to ceiling of ` 10 lakh.
- Vat exemption for 15 years to industries set up after March 1, 2014.
- The Entry Tax will be exempted for all eligible units, including State PSUs, on procurement of plant and machinery from other States.
- The State Government, with an aim to encourage small and traditional industries, has tied up with the Assam Gramin Vikash Bank (AGVB) which will facilitate hassle-free loan to entrepreneurs. Under this Angel Fund Scheme, loan upto ` 5 lakh would be given to promising entrepreneurs' corpus of Rs.12 crore has been kept as initial fund.
- The policy also proposed to provide assistance to traditional industries in the state and it is proposed to provide Artisan Identity Card(IAC) to get bank loan upto ` 2 lakh and to reimburse 50 percent interest payable against bank loan.

### PRIME MINISTER ROJGAR YOJANA (PMRY) / PRIME MINISTER EMPLOYMENT GENERATION PROGRAMME (PMEGP)

Prime Minister Employment Generation Program (PMEGP) has been introduced by merging the PMRY and REGP with the same aims and objectives of Prime Minister Rojgar Yojana (PMRY). The KVIC is implementing the PMEGP scheme as the nodal agency at the national level and at the State level KVIC Directorate, State KVIB and the District Industries and Commerce Centres and Banks implement the scheme in Assam. The Government subsidy under the scheme is being routed by the KVIC through the identified Banks. The Government subsidy under the scheme is being routed by the KVIC through the identified Banks.

Table 11.6 shows achievements of implementation of PMEGP in Assam during the year 2008-09 and 2013-14.

**TABLE - 11.6**  
**TARGET AND ACHIEVEMENTS OF PMEGP IN ASSAM**

Year	Physical target (in nos.)	Financial Target (margin money) (Rs. in Lakh)	Total Cases sanctioned (Rs. in Lakh)	Physical achievement (in no.)	Financial achievement (Rs. in lakh)	Remarks
2008-09	685	820.22	861	617	676.95	Information represents DICC part only
2009-10	1292	1550.00	2440	2440	1899.71	For the State
2010-11	3193	4469.66	4756	4756	4801.10	For the State
2011-12	5047	7065.80	5280	5280	5544.99	For the State
2012-13	4644	6500.20	7336	7336	5801.15	For the State
2013-14	4588	6210.97	8049	8049	7219.90	For the State

Note: Physical and financial targets are subject to revision from time to time.

Source: Office of the Commissioner of Industries & Commerce, Assam.

**IMPLEMENTATION OF SOME SPECIAL EMPLOYMENT ORIENTED PROGRAMME**

**Chief Minister Self Employment Scheme (CMSS) and Vocational Training under Assam Bikash Yojana:**

For the purpose of assistance in the field of self employment of the interested unemployed youth of the state, Industries and Commerce Department, Assam has continuing the 'Vocational Training' programme. Under the Vocational Training programme, the unemployed youths are provided six months industrial training within the state on their interested fields. The cost of the training is fully borne by the Govt. of Assam. The State Govt. has released ₹50.00 lakh for General, ₹50.00 lakh for SCSP and ₹14.00 lakh TSP for implementation of vocational training programme during the year 2011-12. During the year 2012-13, an amount of ₹30.00 lakh was released for implementation of vocational training for "general" only. During the year 2013-14, the State Govt. has decided to continue the programme and sanctioned ₹30.00 lakh for general only. The following table shows some information on the achievement of vocational training for the year 2011-12 and 2013-14.

**TABLE - 11.7**  
**IMPLEMENTATION OF VOCATIONAL TRAINING PROGRAMME**

Year	Physical target			Financial target (Rs. in lakh)			No of trainees sponsored			No. of trainees completed training		
	Gen	SCSP	TSP	Gen	SCSP	TSP	Gen	SCSP	TSP	Gen	SCSP	TSP
2011-12	520	520	135	50.00	50.00	14.00	520	520	135	520	520	135
2012-13*	310	Nil	Nil	30.00	Nil	Nil	310	Nil	Nil	310	Nil	Nil
2013-14	310	350	78	30.00	34.00	8.00	310	350	78	Under Implementation		

\* No sanction for TSP and SCSP

Source: Office of the Commissioner of Industries and Commerce, Assam.

**MUKHYAMANTRIR KARMAJYOTI AACHANI**

The basic objective of the scheme is the upliftment of traditional artisans through financial assistance from the Government and skill development of traditional artisans. Traditional trade like manufacturing of decorative textile, blacksmithy, pottery, carpentry, toy making etc will cover under the scheme. Implementation of the scheme is continuing from the year 2005-06 under the sponsorship of the Government of Assam.

The following table shows some information on the implementation of Mukhyamantrir Karmajyoti Aachani during the year 2005-06 to 2013-14.

**TABLE - 11.8**  
**ACHIEVEMENTS OF THE MUKHYAMANTRIR KARMAJYOTI AACHANI**  
**[PERIOD 2005-06 to 2013-14]**

Year	Target		Achievement		Remarks
	Physical (In Nos.)	Financial (Rs. in Lakh)	Physical [No. of Artisans Benefitted]	Financial (Rs. in Lakh)	
2005-06	1,02,500	900.00	1,19,145	895.74	-
2006-07 & 2007-08	54,000	195.00	54,000	192.52	Implementation for both years done together
2008-09	40,000	145.00	40,000	144.61	-
2009-10	2480 (SHG)	200.00	24,800	200.00	-
	21,325 (Individual)	75.00	21,325	75.00	SCCP
2010-11	660 (SHG) and 1000(Individual/trained person)	835.00	640	113.82	Under process
2011-12	2560 nos. SHG/individual trained person	514.00	2168	452.70	Machines/equipments distributed/to be distributed
2012-13	4621 nos. SHG/individual trained person	595.00	1903	178.62	Supply order issued/ to be issued (remaining target under process)
2013-14	5027	900.00	1257	422.65	Process continuing

Source: Office of the Commissioner of Industries and Commerce, Assam.

## MULTI DISCIPLINARY SKILL DEVELOPMENT PROGRAMME

The Multi Disciplinary Skill Development Programme is a flagship programme taken up by the State Industries and Commerce Department during the year 2011-12. It has been designed to effectively address the issue of skill development, enhance employability of rural youths as well as to take advantage of the growing demand for skilled manpower nationwide with the growth of the economy. The objective of the scheme is not only to train youths for acquiring skill but also plans to extend handholding support to these trained youths for placement by creating a Job Studio. The Scheme also has provision for training entrepreneurs to enhance their skills to compete internationally. Accordingly, sizeable number of entrepreneurs will be sent for training in reputed institutions within and outside the State so that they can acquire both hard and soft skills that are necessary to produce internationally standard Goods and Services and compete globally. The scheme will continue during the 12<sup>th</sup> five year plan.

The State Industries and Commerce Department has started construction of 4(four) numbers of Multi-Disciplinary Skill Development Training Centres at – Badarpurghat (Karimganj), Bilashipara (Dhubri), Bajiagaon (Nagaon) and Margherita (Tinsukia) along with up-gradation of existing training institute "Cottage Industries Training Institute" located at Kalapahar, Guwahati. In addition, construction of another 23 numbers of Multi-Disciplinary Skill Development Training Centres is going to provide one training centre in each district. Till completion of the training centres, the State Industries and Commerce Department has arranged training at few recognized national institutes of repute [as shown below] within and outside the State. In addition, The State Government has also decided to impart training at Block level under the ongoing scheme.

- (a) National Academy of Construction, Hyderabad.
- (b) MSME Tool Room Training Centre, Guwahati.
- (c) CIPET, Changsari, Guwahati.
- (d) Cottage Industries Training Institute, Kalapahar, Guwahati.
- (e) NSIC, Guwahati.
- (f) NEITCO, Guwahati.
- (g) Handicraft Design and Research Centre, Industrial Estate, Guwahati.
- (h) NEISBUD, New Delhi.
- (i) NI-MSME, Yousufguda, Hyderabad.
- (j) National Centre for Design and Product Development, Okhla Industrial Estates, New-Delhi.

**Training expenses:** The State Industries and Commerce Department bears the cost of training which includes:

- (a) Course fee.
- (b) Food and lodging.
- (c) To and fro expenditure from place to place of origin to the training institutes.
- (d) Insurance coverage of ₹2.00 lakh per trainee under "Nagarik Suraksha Yojana" of Oriental Insurance Company for 4 months.

**TABLE – 11.9**

### ACHIEVEMENTS OF MDSO DURING THE YEAR 2011-12 TO 2013-14

Year	Physical target (in nos)	Financial target (Rs. in lakh)	No. of trainees sponsored	No. of trainees completed training
2011-12	1600	200.00	537	537
2012-13	1600	200.00	433	433
2013-14	1500	450.00	1390	1390

Source: Office of the Commissioner of Industries and Commerce, Assam

## TEA INDUSTRY

The Tea industry occupies an important place in Assam and plays a very special role in the State economy. The first Indian tea produced in Assam was sent to United Kingdom for public sale in the year 1838. Although the tea cultivation was extended to other parts of the country between 50's and 60's of the last century, as of today, Assam Tea has maintained its international reputation and commands significant share in the World Tea Market. The total area under tea cultivation in Assam is accounting for more than half of the country's total area under tea. In addition to existing big & large tea gardens owned by reputed both Indian and multinational Companies, the profession of tea plantation in the State has been taken up by common people as business venture at present, especially by unemployed youths. The tea industry in Assam also provides average daily employment to more than 6.86 lakh persons in the State, which is around 50 percent of the total average daily number of labour employed [on an average 11.1 lakh labour employed per day] in the country.

Assam has witnessed a spurt in the growth of small holdings during the last three decades and there is more than 1.0 lakh small holdings accounting for 200 hundred million kgs of made tea. Most of the STGs are first generation young and educated entrepreneurs who have started contributing immensely towards transformation of socio-economic life of rural Assam. According to the Tea Board of India, there are about 68.5 thousand registered small tea growers [STG] in Assam producing about 106881 thousand KG in 88674 hectares of land in Assam.

The State Government has also given special emphasis for the growth and development of STGs in the State. "The Small growers segment in the State comprises around 78,000 tea growers. It is proposed to launch a massive awareness campaign on good plantation practices for ensuring quality tea production.....a corpus fund with proceeds of tea cess collected from the small growers for taking up schemes for development and welfare of the small tea growers." [Source: Budget Speech of Finance Minister, Assam, 2012-2013]. Moreover, the State Government has decided to provide various incentives to Small Tea Growers with the help of Tea Cess Utilisation Policy. [Source: Budget Speech of Finance Minister, Assam, 2013-14]

Assam alone produces more than half of India's tea production. The estimated production of tea in Assam was 629.1 thousand tonnes in 2013 compared to estimated production of 590.12 thousand tonnes in 2012. Statistics of area and production of Tea in Assam are shown in the Table 11.10.

**TABLE – 11.10**  
**TEA STATISTICS OF ASSAM AND INDIA**

Year	No. of Tea Gardens		Area under Tea (in'000 hectare)		Total Tea Production (in 000 kg.)		Average yield (kg/ hectare)	
	Assam	India	Assam	India	Assam	India	Assam	India
2007	825	NA	321.3	578	511885	986427	1593	1705
2008	760	1385	321.4	560	487497	980818	1517	1750
2009	760	1385	321.7	561	499997	978999	1554	1746
2010	760	1385	322	561	480286	966403	1492	1724
2011	765	NA	322	560	589110	988323	1830	1764
2012	78856	NA	322	579	590120	1111760	1833	1919
2013	69220	NA	322	564	629050	1208780	1952	2143

Note : 1. No. of Tea Gardens shown from 2007 to 2011 refers to only Tea Gardens having area above 10.12 Ha and excluding Small Growers.

2. Area, Production and Average yield estimated and subject to revision.

Source: Tea Board of India.

The Guwahati Tea Auction Centre is actively taking part in trading of the Tea produced mainly in the North-eastern States since its establishment. Statistics of quantity and average price of tea sold in the Guwahati Tea Auction Centre is shown in the Table 11.11.

**TABLE – 11.11**  
**QUANTITY AND AVERAGE PRICE OF TEA SOLD**  
**IN THE GUWAHATI TEA AUCTION CENTRE**

Year	Leaf				Dust			
	CTC		Orthodox		CTC		Orthodox	
	Quantity (million Kg.)	Average Price (Rs. per Kg)	Quantity (million Kg.)	Average Price (Rs. per Kg)	Quantity (million Kg.)	Average Price (Rs. per Kg)	Quantity (million Kg.)	Average Price (Rs. per Kg)
2005	101.94	61.11	0.61	61.62	40.30	59.19	-	-
2006	100.75	67.96	0.72	78.18	40.90	68.27	-	-
2007	106.88	70.09	4.16	73.93	41.51	73.02	0.001	50.00
2008	110.14	90.20	0.56	92.39	41.99	95.73	-	-
2009	98.33	108.52	0.44	111.21	39.74	115.10	-	-
2010	87.33	113.06	0.36	122.09	38.94	116.26	-	-
2011	86.2	108.74	0.254	109.28	36.23	107.93	-	-
2012	70.84	138.27	0.551	163.07	30.97	143.17	-	-
2013	87.36	130.11	0.91	168.58	38.30	137.34	-	-
2014 (upto July)	19.48	164.44	0.20	164.73	10.07	168.99	-	-

Source: Guwahati Tea Auction Centre.

## RUBBER INDUSTRY

The rubber cultivation has gained its popularity in Assam due to congenial agro-climatic condition as well as its eco-friendly environment. The Rubber Board has identified Assam as a "Potential State" from the "productivity" point of view as the State too has ample scope of rubber plantation. Considering the said conditions, the Rubber Board has planned to enhance rubber plantation area to 2 lakh hectares at the end of Twelfth Five Year Plan from the 28102 hectare at present to cope with the growing demand of rubber in the country which is expected to touch 1.78 lakh MT at the end of 2025. The area under rubber cultivation has grown from 16.5 thousand hectares in 2006-07 to 49.0 thousand hectares in 2013-14. The tapping area as well as production of rubber has also been increased considerably during the same period. The growth of coverage of the rubber plantation area as well as production in the State is presented in the Table 11.12. Considering the growth of plantation areas and rubber production trends, there is vast potential for setting up of rubber industries in the State.

**TABLE – 11.12**  
**AREA AND PRODUCTION OF RUBBER IN ASSAM**

Year	Area (in hectare)	Production (in MT)	Tapping Area (in hectare)	Employment Generation (Mandays)
2006-07	16508	3050	NA	1503550
2007-08	18271	4750	3320	1762591
2008-09	20975	5097	3518	2040686
2009-10	23075	9832	6505	2710230
2010-11	27083	10213	7686	2767450
2011-12	30791	10437	8608	3034993
2012-13	34537	11054	7634	381992
2013-14	49001	13700	10001	417425

Source: The Rubber Board, Zonal Office, Guwahati.

## SERICULTURE

Traditionally, sericulture is a major cottage industry in the State. Sericulture has been practiced in Assam from time immemorial and continues to be an important labour-intensive and agro based cottage industry providing gainful occupation to around 2.50 lakh person in rural and semi-urban areas of Assam. Of this a sizeable number of male workers belong to the economically weaker section of the society and women. Moreover, sericulture is a sustainable farm-based economic enterprise positively favouring the rural poor in the un-organized sector because of its relatively low requirement of fixed capital and higher returns on investment.

The State of Assam is proud of traditionally producing Muga, Eri and Mulberry and lastly the Oak tassar in the hills districts. The State accounts for highest production of non-mulberry silk, muga and eri in the country. Assam has the monopoly in the world in the production of Muga, the "Golden Silk", as more than 97 percent of Muga Silk is produced in Assam. Assam has also achieved the right of 'Geographical Indication' for Muga thread. The State is also a Major producer of Eri Silk (about 65 percent).

This industry has undergone a number of changes with the changes in loom, fabric, design, technology etc. Non-mulberry silk in general and Muga silk in particular has been closely associated with the rituals and traditions of Assam and thus, silk production and its usage has been an important household activity in the State over the years. Muga Silk and Eri Silk have good demand in the national and international market. Rearing of Eri, Muga and Mulberry silkworm are playing an important role in the economic development of a large section of rural population of the State. It is practiced in 11411 villages at present and provides employment to 2.8 lakh families of the State.

The production of silk in the State was 2700 MT during the year 2013-14 which is 31.0 percent more than the previous year. The State recorded highest production (2545.6 MT) of Eri raw silk during the year. Considerable increase of production has been noticed in respect of Muga raw silk (17.0 percent) and Mulberry raw silk (9.0 percent) during the year 2013-14 over the previous year.

The total area under Silkworm Food Plants recorded increase to 33790 hectare in 2013-14 from 26826.5 hectare [+26.0 percent] during 2012-13.

The performance of Sericulture is presented in the table below.

**TABLE - 11.13**  
**SERICULTURE ACTIVITIES IN ASSAM**

Item		2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
1.	Sericulture Villages (Nos.)	9373	9537	10532	10532	10740	10746	11411
2.	No. of Families Engaged	239281	238578	260707	254134	254516	291592	282073
3.	Area under Silk Worm food Plants (In Hect.)	18548	18556	21229	21301	24268	26827	33790
3.1	Eri	7531	7538	7623	7670	8044	9172.5	15796
3.2	Muga	7305	7305	8902	8908	9400	10230	10371
3.3	Mulberry	3712	3713	4704	4723	6824	7424	7623
4.	Yield of Cocoons							
4.1	Ericut Cocoons (in MT)	1046	1080	1089	1108	1622.51	2514.16	3182
4.2	Muga Cocoons (in lakh Nos.)	4302	5040	4436	6368	5812	5450	6361
4.3	Mulberry Reeling Cocoons (in MT)	110	100	84	110	129.28	225.0	340.5
5.	Production of Silk Yarn (in MT)	884.81	921	916.17	935.66	1187.42	2068.0	2700.04
5.1	Eri Raw Silk	784.26	810	819.09	810.98	1061.61	1934.0	2545.6
5.2	Muga Raw Silk	91.07	101	88.73	113.28	114.56	109.0	127.2
5.3	Mulberry Raw Silk	9.48	10	8.35	11.4	11.25	25.0	27.24

Source: Directorate of Sericulture, Assam.

As 70 to 80 percent of sericulture farmers are women so these farmers are proposed to be brought under the coverage of Gender Budgeting so as to provide them training on spinning and also proposed to supply 150 Eri Spinning Charkha to 150 women SHGs at 80 percent subsidy as a follow up action, silk worm rearing equipment support to 250 women rearers.

At present Muga silk worm rearing in Assam is suffering due to high climatic pollution, extreme temperature and continuous rearing under domestic nature. To overcome the problem and to regain its wild nature and strength to survive with the present topography, the department proposed to release some muga silk worm in wild plantation in the Assam-Meghalaya border area near Boko in collaboration with State Forest Department. This will help improvement of domesticated Muga silk worm for quality seed production. The department also proposed to provide financial assistance to re-vitalize the Muga Research Sub-Station located at Dhakuakhana and other research organizations/private farms for conducting different experiments/researches for conservation and protection of muga silk worms.

## HANDLOOM

In Assam, Handloom Weaving is inexorably linked with Assamese Culture and Heritage. Handloom Industry of Assam provides maximum number of employment after agriculture is known for its rich glorious tradition of making handloom and handicraft products. Handloom is a precious part of generational legacy and has been kept alive by the skilled weavers engaged in the age old tradition of weaving since antiquity in Assam. Contrary to use of modern technology and tools in the textile sector in present days, the handloom sector continued to play very important role in terms of employment generation and the socio-economic development of Assam. Handloom sector in Assam has gradually grown to the expected level for commercial production. As per handloom census more than 14.01 lakh weavers and 11.11 lakh looms available in Assam. Besides more than 16.43 lakh handloom workers are working in handloom sector. Thus, about 30.44 lakh weavers and allied workers involved with handloom activities in the State. In respect of cooperative coverage at present there is about 50 percent of the weaver population of the State which is far below the National coverage. In the Twelfth Five Year Plan period, the cooperative coverage has been targeted to be raised to 55 percent.

The Handloom and Textiles Department of Assam, at present, directly runs 102 Handloom Training Centres, 4 Handloom Training Institute, 1 Product Procurement Centre, 1 power loom Centre, 98 Weavers' Extension Service Units and 20 Handloom Production Centre, 1(one) Handloom Research and Designing Centre. All these institutes are functioning for the benefit of weavers outside the Cooperative sector. The Assam Government Marketing Corporation Ltd is the State Level organization to look after the weavers of the State. The three-pronged Cooperative (organized) Sector consists of more than 3634 Primary Weavers Cooperative Societies level, 22 District Handloom Cooperative Societies, 2 Regional Handloom Cooperative Societies and 2 Apex Cooperative Societies. Assam is the home of Muga and Eri and also produces Mulberry Yarn to some extent.

At present, the Directorate of Handloom and Textiles cover 13576 villages of the State under its 209 Handloom Demonstration Circles with 1316163 weavers for its Handloom activities. The 98 Weavers' Extension units and 20 Handloom Production Centres produces 65.3 thousand mtrs Handloom fabrics during the year 2013-14.

The State Government has given thrust on upgradation of technology and Skills to enhance production and to create additional employment opportunities and higher value addition and higher income generation of reelers, spinners and weaver. Accordingly, emphasis has been given to create adequate infrastructure, expansion and marketing facilities to strengthen the handloom sector as well as to increase productivity, production and self-employment.

The Development Commissioner for handlooms, Govt of India, Ministry of Textiles, New Delhi has introduced a new scheme namely Textile Promotions for NER during the 12<sup>TH</sup> Five year Plan for development of handloom weavers. The components of the scheme are skill up-gradation, basic input, corpus fund, engagement of designer, setting up of common facility centres and construction of worksheds for weavers. Accordingly 126 numbers of project proposals has been submitted by the state handloom department to the Development Commissioner for Handlooms, Govt. of India.

The Development Commissioner for handlooms, Govt of India, Ministry of Textiles, New Delhi has also introduced a new scheme namely comprehensive handloom development scheme under "National Handloom Development Programme" and comprehensive handloom cluster development scheme(CHCDS) Mega Handloom Cluster during 12<sup>TH</sup> Five Year Plan for development of handloom weavers through the development of Mega handloom cluster located in identifiable geographical locations that specialised in specific product in the cluster by improving the infrastructure facilities with better storage facilities, technology up-gradation, skill development etc. Emphasis has also been given to implement the programme through Public Private Partnership (PPP) model in the form of collaboration between the Govt., beneficiary weavers and their group, financially credit worthy and commercially linked marketing enterprises and the financial institutions.

Government of India has also taken steps to implement the scheme of integrated handloom development on Cluster approach under special central assistance in the districts of Tinsukia, Dibrugarh, Sivasagar, Jorhat, Golaghat, Lakhimpur and Dhemaji. This scheme is proposed to be implemented through Tai Ahom Development Authority as Special Purpose Vehicle (SPV).

## **TRADE AND INVESTMENT**

### **North East Industrial Investment Promotion Policy (NEIIPP)**

The announcement of the North East Industrial Investment Promotion Policy (NEIIPP), 2007 by the Government of India was another important step towards industrialization of the State where special emphasis has been given on the word "**INVESTMENT**". Through this Policy, the Government of India had approved a package of fiscal incentives and other concession for the entire North Eastern Region (NER) and Assam will be the leading State to reap benefit from it. Some of the important features incorporated in the Policy are-

- All new units as well as existing units (which go for substantial expansion) and commence commercial production within the 10 years period (w.e.f. 1-4-2007 to 31-3-2017) set up anywhere in the NER will be eligible for incentives for a period of 10 years.
- 100 percent Excise Duty Exemption will be continued on Finished Products made in the NER.
- 100 percent Income Tax exemption will continue as was available under NEIP – 1997.
- Capital Investment Subsidy @ 30 Percent will be available on investment of Plant and Machinery and limit for automatic approval at rate will be ₹1.5 crore etc.
- Interest Subsidy will be available @ 3 Percent on working capital loan.

Further, special provisions like providing comprehensive insurance subsidy, incentives for setting up of Bio-Technology Industry, Power Generating Plants (both from conventional and non-conventional sources) up to 10MW, Transport Subsidy Scheme etc are incorporated into the Policy to attract more and more investors to the region.

To achieve the objective, beside effective implementation of the policy, priority should be given on building up of a unified and integrated common market for the region, as NE States are economically inter-dependent.

Assam intends to attract maximum Foreign Direct Investment (FDI) and will put sustained efforts to achieve the objective. The State Government has constituted a separate cell – The Industrial Investment Secretariat Cell (IISC) to facilitate investment and a High Level Committee to accord fast track clearance for investment proposals. The Cell will function as a single point of contact for all inquiries for investors including supplying of information pertaining to permissions/procedures/guidelines.

## **BORDER TRADE**

### **Border Trade Centre-Infrastructure Development**

Assam is sharing international border with Bangladesh, Bhutan and Myanmar and thus has ample scope to enhance trade with these countries. To facilitate foreign trade with various neighbouring Countries bordering North-East India, Government of India has taken a new initiative to create all infrastructure facilities for the exporter of the region for development of Trade & Commerce. The State Government has approved for setting up of five numbers of Border Trade Centres- one at Sutarkandi in Karimganj district, at Mankachar and Golokganj in Dhuburi district, Darranga in Baksa district and Jagun in Tinsukia district to facilitate border trade with neighbouring countries like Bangladesh, Bhutan etc.

**a) Border Trade Centre, Sutarkandi**

The Border Trade Centre, Sutarkandi project in Karimganj district was approved by Government of India in the year 2000 under Critical Infrastructure Balance (CIB) and ASIDE scheme. The total project cost (both 1<sup>st</sup> and 2<sup>nd</sup> phase) was ₹2563.00 lakh, sharing between central and state govts as ₹2400.00 lakh and ₹163.00 lakh respectively. Till 2013-14 Government of India has released ₹2358.17 lakh and the State Government has released ₹163.00 lakh respectively against their share. Both the phase of the project has been completed. The project has been implemented through AIIDC and normal trade is going on.

**b) Border Trade Centre, Mankachar**

The Government of India has approved for setting up of a border trade centre at Mankachar town in Dhuburi district under ASIDE scheme. The centre also has a linkage with Tura of Maghalaya. The approved project cost of this project is ₹466.00 lakh. The central share is ₹380.83 lakh and the state government share is ₹85.17 lakh. Up to the year 2013-14 Government of India has released ₹380.83 lakh and state government has released ₹85.00 lakh for this project out of their share. The project has already been completed and trade is going on. The Project was implemented by AIDC.

**c) Trade Facilitation Centre, Jagun, Tinsukia**

A Trade Facilitation Centre (TFC) has been created at Jagun in Tinsukia district which is about 3 Km away from Jairampur (Assam-Arunachal Pradesh border point) and 20 Km from Panchu Pass (Indo-Myanmar Border on Stilwell Road). The Trade Centre has been constructed with a project cost of ₹5.98 crore and completed. Facilities like warehouse, Parking Yard, loading & unloading platform etc., are created in this centre.

**d) Border Trade Centre, Darranga, Baksa (Indo-Bhutan Border)**

In view of growing Indo-Bhutan trade and to encourage formal trade, a Border Trade Centre is proposed to set up at Darranga, Baksa district of Assam. The estimated cost of the project is ₹14.33 crore and construction is in progress. The infrastructure facilities will be available in the centre are: Cold storage, Parking yards, warehouse, weighbridge, loading & unloading platform etc. The project is expected to be completed by the end of march 2015.

**e) Border Trade Centre, Golokganj, Dhubri**

This Border Trade Centre is under construction near the Gate no.24 of Sonahat in Dhubri district and the project is implemented by AIDC Ltd. This centre has a competitive advantage and may become a Hub of trade in the coming years. This centre is expected to be completed by March, 2015. On 28th April, 2014, the first consignment of coal crosses the border point to Bangladesh.

**TOURISM**

Tourism is a fastest growing industry in the world. Tourism is not only a growth engine but also an employment generator that has the capacity to create large scale employment both direct and indirect, for diverse sections in society, from the most specialized to unskilled workforce. Tourism in Assam is based on wildlife, natural beauty, unique flora & fauna, holy shrines, lush green tea gardens, turbulent rivers, vibrant and colourful cultural festivals. Assam has immense tourism potentials, which are to be explored as commercial resources. Eco-tourism is one of the fastest growing tourism segments and therefore the Government of Assam has given tremendous thrust with relevant to natural beauty and bounty.

The State Tourism Department has witnessed a considerable success and all round development both in respect of infrastructure development and creation of other facilities over the years with the financial assistance from the Central as well as the State Government. It is felt that to explore tourism potentials, adequate investments and integrated, coordinated and concerted efforts from all concerned departments are necessary. However, the State Tourism department has undertaken various steps for promotion/ infrastructure development in the State both individually and jointly with private sector.

For the growth of tourism sector, special emphasis has been given on Tourism Circuit Development, Destination Development, Wayside Amenities etc., through public and private partnership to tap the unexplored potential opportunities. Assam Tourism Policy, 2008 has also been adopted by the State Government giving special emphasis to encourage private investment in Tourism sector by providing financial and logistic support. The State Government has made all basic arrangements for construction of chain of 5[Five] Star Hotels in collaboration with private investors and Indian Hotel Company Ltd.

Eco-tourism is aimed at the appreciation of both natural world and traditional cultures existent in natural areas and to protect natural and cultural assets. Assam has several ethnic groups residing in harmony in spite of the differences in rites and rituals, festivals and attires. One may discover the fascinating legacy of art and crafts in Assam, the proud producer of three unique varieties of Silk, the Golden Muga, the White Pat and Warm Eri. In Assam, one can hear the rhythms of the shuttles of looms in the craft village, which get momentum with the advent of spring. Special priority for development of Religious Tourism & Cultural festivals like "Ambubachi Mela" in Maa Kamakhya Temple, Dol Utsav in Barpeta has also given to attract both Indian and foreign tourists. The Brahmaputra Beach Festival, Kite festival, Kaziranga Golf Competition etc., are organised in collaboration with the Tourism Department is another important step to attract Indian and Foreign tourists to Assam.

Assam is also blessed with minerals especially petroleum. It is worth mentioning that India's first oil well was drilled in Digboi. The world's third oil refinery and the first oil refinery in India and too in Asia was established and located at Digboi has also special importance from the tourism point of view.

River cruise on the Brahmaputra from Guwahati, organised by Government as well as Private tour operators are major attractions. One can opt for short cruises or can avail longer sailing to Kaziranga National Park or to the ethno-religious island of Majuli or to the remnants of the Great Ahom Kingdom in Sivasagar. "M.V. Mahabahu"- the latest addition for river cruise with starred facility is new attraction for adventure tourism. Of let, Brahmaputra cruises has been recognised as one of the top 10 most adventures cruises by the CNN International in 2013.

The Table 11.14 shows the volume of tourist traffic and magnitude of revenue earning by the State over the last seven years.

**TABLE -11.14**  
**NUMBER OF INDIAN AND FOREIGN TOURIST TO ASSAM**  
**AND REVENUE EARNED FROM THE TOURISTS**

Year	Tourist staying in Tourist Lodges		Tourist Staying in other accommodation like Hotel etc.		Total Revenue earned from Tourist Lodges only (Rupees in lakh)
	Indian	Foreign	Indian	Foreign	
2006-07	20279	649	3459591	13008	81.30
2007-08	24057	960	3465757	12839	94.99
2008-09	26439	674	3672267	13859	103.92
2009-10	25665	664	3869860	14030	131.63
2010-11	25831	594	4101616	15039	143.60
2011-12	26439	696	4381897	15964	184.49
2012-13	22057	711	4522609	16997	248.19
2013-14	26394	726	4417999	18360	191.32

Source: Directorate of Tourism, Assam.

Except increase of visit of number of foreign national tourists in Nameri National Park, the visit of number of tourists (both Indian and Foreign) in other National Parks of Assam has marginally fall during the year 2013-14 in comparison to 2012-13. On the other hand, visit of Indian tourists to all the wildlife parks have been considerably increased during the year 2013-14. This increase was recorded in Kaziranga National Park - 27.2 percent, Manash National Park - 29.2 percent, Orang National Park - 26.1 percent, Dibru-Saikhowa National Park - 59.3 percent and Nameri National Park - 34.2 percent. In respect of visit of foreign national tourists in National Parks of Assam, the Kaziranga National Park reported 6.7 percent decrease over the previous year followed by Manas National Park - 3.2 percent. The decrease of foreign national tourists in the Orang National Park recorded 77.1 percent. Dibru-Chaikhowa National Park and Nameri National Park, on the other hand, recorded 184.2 percent and 52.7 percent increase respectively during 2013-14 over 2012-13. The Table below shows the trend of number of tourists visited various National Parks in Assam during the last six years.

**TABLE – 11.15**  
**NUMBER OF TOURIST VISITED NATIONAL PARKS IN ASSAM**

Year	Kaziranga National Park		Manas National Park		Orang National Park		Dibru-Saikhowa National Park		Nameri National Park	
	Indian	Foreign	Indian	Foreign	Indian	Foreign	Indian	Foreign	Indian	Foreign
2007-08	53640	6106	6391	624	1631	215	1766	53	4154	524
2008-09	100384	5767	1104	240	1285	267	2567	74	5489	479
2009-10	105264	7580	8030	139	1628	325	2613	62	4342	346
2010-11	112392	7447	10843	503	1702	180	2351	40	4460	352
2011-12	117308	7521	19705	237	2678	159	3970	42	5601	457
2012-13	93747	7418	15890	218	1847	70	2656	19	4370	528
2013-14	119289	6922	20527	211	2329	16	4230	54	5866	806

Source: The Principal Chief Conservator of Forest (Wildlife), Assam and Directorate of Tourism, Assam.

#### **EMPLOYMENT GENERATION SCHEME FOR EDUCATED UNEMPLOYED YOUTHS**

Thrust has been given to provide incentive under Chief Minister's Self-employment generation scheme "**Assam Bikash Yojana**" to local educated unemployed youths for undertaking tourism promotional activities like transport, wayside amenities, food kiosk, restaurants, dhabas, and Home stay facilities, resorts etc. For capacity building, youths studying in the institute of hotel management are provided with stipend and also incentive to the institutions. In addition educated unemployed youths have been provided with subsidy for purchase of tourist vehicles under the Scheme.

#### **EFFORTS TO UNVEIL ASSAM TO NATIONAL AND FOREIGN TOURIST**

At present, infrastructure development and destination management has been emphasised for sustained growth of tourism sector of Assam. Priority has also been given to establish an impeccable brand identity in the domestic and international market through publicity both in domestic and overseas countries. To achieve positive response from the national and global market, the Assam Tourism Department participated in different tourism fairs to showcase the tourism product in the national and international market so as to attract domestic and foreign tourists to the region. Accordingly, the Assam Tourism Department participated in the national level tourism fairs like Rath Yatra Festival at Puri, TTF Kolkata, Travel India, Kolkata, Surajkund Craft Mela, Buddhist Conclave, IITF New Delhi etc. In addition, the Assam Tourism Department too participated in several international tourism fairs as a part of publicity campaign and to draw tourists. The electronic and print media are also been extensively utilized for publicity and marketing campaign. The Assam Tourism Department has also started intensive media campaign through Domestic and National Level electronic media. Efforts have been made to establish linkages with the neighbouring North-eastern States and South East Asian countries as a regional tourism hub.

The Assam Tourism Department has prioritized infrastructure development of Rural Tourism for women to showcase the rural tourism products, rural lifestyle, culture, handicrafts etc., for unique visitor community as well as income and employment generation of rural women.

In addition, special attention has been given to upgrade existing facilities in wildlife parks, sanctuaries to accommodate more tourists.

## APPENDIX – 11.1

## TOTAL NUMBER OF REGISTERED MICRO, SMALL, MEDIUM ENTERPRISES [MSME] UNITS AND TOTAL NUMBER OF WORKERS IN ASSAM

Sl. No.	District	Unit Registration During the year			Total Workers		
		2011-12	2012-13	2013-14	2011-12	2012-13	2013-14
1.	Kokrajhar	10	13	5	72	106	25
2.	Dhubri	35	56	83	251	314	414
3.	Goalpara	34	26	89	198	139	494
4.	Bongaigaon	53	48	36	396	258	222
5.	Barpeta	33	54	59	240	555	371
6.	Kamrup (M+R)	318	297	283	4274	3051	2381
7.	Nalbari	70	89	78	399	439	375
8.	Darrang	57	43	107	253	310	452
9..	Morigaon	25	37	22	143	189	171
10.	Nagaon	74	123	180	603	718	1286
11.	Sonitpur	89	54	89	608	319	532
12.	Lakhimpur	18	23	53	87	141	475
13.	Dhemaji	41	27	39	209	104	156
14.	Tinsukia	47	81	98	336	473	649
15.	Dibrugarh	58	118	154	625	470	1705
16.	Sivasagar	35	81	100	2646	760	632
17.	Jorhat	69	82	86	985	565	471
18.	Golghat	62	42	63	390	245	609
19.	Karbi Anglong	6	6	15	69	76	154
20.	Dima-Hasao	2	3	2	21	36	16
21.	Cachar	62	50	72	524	1802	494
22.	Karimganj	23	25	24	132	133	184
23.	Hailakandi	23	37	47	100	155	263
24.	Chirang	22	11	41	208	80	246
25.	Baska	7	11	32	44	134	166
26.	Udalguri	11	14	3	73	99	28
	<b>Total</b>	<b>1287</b>	<b>1451</b>	<b>1860</b>	<b>13886</b>	<b>11671</b>	<b>12971</b>

Source: Commissionerate of Industries and Commerce, Assam.

## APPENDIX – 11.2

**DISTRICTWISE NUMBER OF MICRO, SMALL, MEDIUM ENTERPRISES [MSME] REGISTERED IN ASSAM DURING THE YEAR 2013-14**

Sl. No.	District	Unit Registration			
		Micro	Small	Medium	Total
1.	Kokrajhar	5	0	0	5
2.	Dhubri	82	1	0	83
3.	Goalpara	85	4	0	89
4.	Barpeta	56	3	0	59
5.	Morigaon	20	2	0	22
6.	Nagaon	172	8	0	180
7.	Sonitpur	83	5	1	89
8.	Lakhimpur	50	3	0	53
9.	Dhemaji	39	0	0	39
10.	Tinsukia	88	10	0	98
11.	Dibrugarh	145	6	3	154
12.	Sivasagar	89	9	2	100
13.	Jorhat	77	8	1	86
14.	Golaghat	51	12	0	63
15.	Karbi-Anglong	11	3	1	15
16.	Dima-Hasao	2	0	0	2
17.	Cachar	56	15	1	72
18.	Karimganj	22	2	0	24
19.	Hailakandi	47	0	0	47
20.	Bongaigaon	34	2	0	36
21.	Chirang	37	3	1	41
22.	Kamrup	210	71	2	0
23.	Kamrup (M)				283
24.	Nalbari	77	1	0	78
25.	Baksa	31	1	0	32
26.	Darrang	106	1	0	107
27.	Udalguri	2	1	0	3
	<b>ASSAM</b>	<b>1677</b>	<b>171</b>	<b>12</b>	<b>1860</b>

Source: Commissionerate of Industries and Commerce, Assam.

**APPENDIX – 11.3**  
**INDEX NUMBER OF INDUSTRIAL PRODUCTION OF ASSAM**  
 (Base : 2004-2005 = 100)

Sl. No.	NIC – 2004	Industry Division	Index Number			
			2010-11	2011-12	2012-13	2013-14(P)
1.	15	Manufacturing of food products and beverages	115.47	117.47	136.70	146.37
2.	16	Manufacture of tobacco products	155.81	176.66	193.53	204.25
3.	17	Manufacturing of Textiles	152.17	158.59	178.21	195.52
4.	21	Manufacturing of paper & paper products	115.56	117.84	135.63	154.99
5.	22	Publishing, Printing & reproduction of recorded media	216.25	221.94	254.69	289.20
6.	23	Manufacturing of Coke, refined petroleum products & nuclear fuel	149.01	166.56	161.95	163.29
7.	24	Manufacturing of Chemical & Chemical Products	174.94	178.52	217.53	236.44
8.	25	Manufacturing of rubber & Plastic Products	187.38	188.65	211.37	226.86
9.	26	Manufacturing of other non-metallic mineral products	140.54	146.30	175.88	187.43
10.	27	Manufacturing of basic metals	146.00	148.99	196.32	190.80
11.	28	Manufacturing of fabricated metal products, except machinery & equipments	155.97	171.01	208.45	252.67
12.	29	Manufacturing of machinery & equipments n.e.c.	191.23	202.03	258.55	291.36
13.	31	Manufacturing of electrical machinery and apparatus n.e.c.	215.41	236.24	256.36	274.55
14.	32	Manufacture of Radio, television and communication equipment and apparatus	121.18	126.48	134.61	142.25
15.	33	Manufacture of medical, precision and optical instruments, watches and clocks	134.83	143.22	164.86	195.06
16.	34	Manufacturing of motor vehicles, trailers and Semi trailers.	129.68	133.55	223.66	225.81
17.	36	Manufacturing of furniture, Manufacturing n.e.c.	129.93	134.58	156.95	179.55
18.	<b>15-36</b>	<b>Total Manufacturing</b>	<b>148.17</b>	<b>159.67</b>	<b>170.48</b>	<b>178.13</b>
19.	10-14	Mining and Quarrying	103.08	108.35	105.15	102.48
20.	15-36	Manufacturing	148.17	159.67	170.48	178.13
21.	40	Electricity	126.83	133.42	123.09	130.79
<b>Total in General</b>			<b>124.58</b>	<b>132.68</b>	<b>135.06</b>	<b>137.69</b>

n.e.c.-Not elsewhere classified.

Source : Directorate of Economics & Statistics, Assam.

**APPENDIX- 11.4**  
**DISTRICTWISE DISTRIBUTION OF**  
**REGISTERED FACTORIES AND WORKERS IN ASSAM -2013**

Sl. No.	District	Factories	Workers
1.	Dhubri	93	4144
2.	Kokrajhar	38	1381
3.	Bongaigaon	64	5331
4.	Goalpara	16	536
5.	Barpeta	49	487
6.	Nalbari	20	380
7.	Kamrup	1343	42770
8.	Darrang	71	1433
9.	Sonitpur	440	18397
10.	Lakhimpur	94	2040
11.	Dhemaji	5	81
12.	Morigaon	60	2765
13.	Nagaon	340	16463
14.	Golaghat	299	7694
15.	Jorhat	318	8193
16.	Sivasagar	323	12320
17.	Tinsukia	605	23899
18.	Dibrugarh	472	22319
19.	Karbi-Anglong	37	1189
20.	N.C. Hills	26	617
21.	Cachar	310	8565
22.	Karimganj	115	3650
23.	Hailakandi	39	2957
24.	Baksa	9	491
25.	Chirang	20	1220
26.	Udalguri	65	3221
	<b>ASSAM</b>	<b>5271</b>	<b>192543</b>

Source: Chief Inspector of Factories, Assam

## APPENDIX-11.5

SELECTED INDICATORS OF DIFFERENT STATES / UNION TERRITORIES OF INDIA  
(Annual Survey of Industries, 2010-11)

Sl. No.	State/ Union Territory	No. of Factories	No. of factories in Operation	Total No. of Workers
1	Andaman & Nicobar Islands	17	13	282
2	Andhra Pradesh	26286	22043	1040473
3	Arunachal Pradesh	NA	NA	NA
4	<b>Assam</b>	<b>2795</b>	<b>2646</b>	<b>141274</b>
5	Bihar	2805	2545	90985
6	Chandigarh	308	280	8321
7	Chattisgarh	2358	2065	134813
8	Dadra & Nagar Haveli	1457	1231	87003
9	Daman & Diu	1940	1513	84585
10	Delhi	3920	2878	79036
11	Goa	583	520	36076
12	Gujrat	21282	16931	992050
13	Haryana	5967	4678	427346
14	Himachal Pradesh	2210	1915	119818
15	Jammu & Kashmir	795	705	43997
16	Jharkhand	2504	2189	128410
17	Karnataka	10722	8857	609005
18	Kerala	6917	6195	327645
19	Lakshadweep	NA	NA	NA
20	Madhya Pradesh	4212	3744	232158
21	Maharashtra	27892	21865	1203023
22	Manipur	96	88	3894
23	Meghalaya	94	94	6105
24	Mizoram	NA	NA	NA
25	Nagaland	84	84	1900
26	Orissa	2536	2482	229404
27	Pondicherry	827	711	48708
28	Punjab	12770	10523	485029
29	Rajasthan	8172	7516	337868
30	Sikkim	64	53	5235
31	Tamil Nadu	36848	26296	1592571
32	Tripura	472	448	30458
33	Uttar Pradesh	13756	11312	626446
34	Uttaranchal	2739	2424	234079
35	West Bengal	8232	7334	513975
	<b>ALL INDIA</b>	<b>211660</b>	<b>172177</b>	<b>9901970</b>

NA : Not available.

Source: Central Statistical Organisation (Industrial Statistical Wing), Govt. of India

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## CHAPTER – XII

## POWER

The rapid urbanisation, infrastructure and industrial development in India resulting to growth of electricity demand in the country. Among the total electricity consumption, domestic and commercial categories form sizeable part. Therefore, the availability of the trend growth of electricity consumption is a vital input for fixing the priorities. The Central Electricity Authority data shows that the Northeast of India has hydro power potential of 63,257 MW or 43 percent of the total assessed hydro power of the Country. Among the north-eastern states, Assam has a capacity to produce 680 MW hydro power.

As a part of the Assam Power Sector Development Programme and in pursuance of the Indian Electricity Act 2003, the Government of Assam has set in motion the process of unbundling the Assam State Electric Board in 2004 into following government companies:

- The Assam Power Generation Corporation Limited (APGCL),
- The Assam Electricity Grid Corporation Limited (AEGCL), and
- The Assam Power Distribution Company Limited (APDCL).

These initiatives are in the interest of all the stakeholders in the electricity sector in the State, i.e. consumers, shareholders, suppliers, creditors, infrastructure builders and the Government of Assam. The schemes like externally aided project, rural electrification, accelerated power development and reform programme (APDRP) which are yet being executed under Assam State Electricity Board (ASEB).

The Assam Power Generation Corporation Ltd. (APGCL) was constituted to look after power generation in the State Sector. The final Transfer Scheme was implemented in August, 2005. The company is mainly responsible for development of Thermal & Hydel Power Projects to generate electricity to meet the energy demand in the State to the extent feasible.

The present installed capacity of APGCL is 376.7 MW of which

- LTPS = 157.2 MW,
- NTPS = 119.5 MW &
- KLHEP = 100 MW.

The 18th Electric Power Survey of India conducted by Central Electricity Authority (CEA) have made year wise forecast for electric Energy Requirement and Electric Load and Power Station Bus Bars (Utilities only) for the Twelfth Five Plan (2012-13 to 2016-17) for all States/Union Territories of India. The Survey report reveals that by the end of 12<sup>th</sup> Plan the projected energy requirement for Assam is 8947 MU and Peak Electric Load is 1817 MW. (Source: Press Information Bureau, Govt. of India, published in connection with the information given by MoS(I/C) Power, Shri Jyotiraditya M. Scindia in the Lok Sabha on 2-5-2013.)

<b>LONG TERM FORECAST OF ELECTRICAL ENERGY REQUIREMENT AT POWER STATIONS BUS BAR</b>			
MW (Utilities Only)			
State	2011-12	2016-17	2021-22
Assam	1257	1817	2534
India	124995	199540	283470
Source: 18th Electric Power Survey Report			

To meet the projected peak demand of 1817 MW by the end of 12<sup>th</sup> Five Year Plan, the Assam State Electricity Board has given emphasis on development of power projects based on coal and natural gas. In addition steps have been taken up for;

- Development of new hydro projects;
- A distributed growth of small hydro projects;
- R&M of ageing power stations;
- Upgradation of distribution infrastructure to reduce transmission and distribution losses. It is expected a capacity addition of 1452 MVA;
- Introduction of sub-station automation and reliable communication system to reduce the system down time;
- Identification and construction of new Transmission and Transformation net work; etc.

## INSTALLED CAPACITY AND GENERATION OF POWER

The installed capacity of generating plants at present in the State is 376.7 MW which include Coal, Hydel and Gas plants of the State. The installed capacity for generating power has come down due to de-commissioning of Bongaigaon Thermal Power Station (BTPS) and Mobile Generating Sets and de-rating of age-old units of Namrup (NTPS).

The status of power generation in the state is not satisfactory from the point of power requirement of consumers is concerned. There has been always a shortage of power supply in the state due to generation of less amount of power in comparison to its demand. However, the ASEB has been trying to meet the power shortage by importing power from the Central Govt. and private foreign sources. However, gross power generation in the State during the year 2013-14 has shown some improvement by generating 1845.3 MU or 4.5 percent more compared to gross power generated in the previous year i.e., 2012-13[1765.30 MU].

The installed capacity of various generating plants and the generation of power in the State during the last four years is shown in the table 12.1.

**TABLE – 12.1**

### INSTALLED CAPACITY AND GENERATION OF ELECTRICITY IN ASSAM

Installed Capacity of Generation Plant (MW)		2010-11	2011-12	2012-13	2013-14
Hydel	KLHEP	100	100	100	100
	LTPS	120	120	120	120
Gas	NTPS	97	97	97	97
	LTPS WHRU	-	37.2	37.2	37.2
Waste Heat Recovery	NTPS WHRU	22.5	22.5	22.5	22.5
	<b>Total</b>	<b>339.5</b>	<b>376.7</b>	<b>376.7</b>	<b>376.7</b>
<b>Gross Unit Generated (MU)</b>					
Hydal	KLHEP	409.5	454.9	344.0	422.5
	LTPS	767.8	751.7	888.1	896.2
Gas	NTPS	530.5	565.7	533.2	526.6
	<b>Total</b>	<b>1707.7</b>	<b>1772.3</b>	<b>1765.3</b>	<b>1845.3</b>
<b>AUX Consumption(MU)</b>					
Hydal	KLHEP	2.1	2.3	1.7	2.1
	LTPS	66.9	71.9	101.9	78.7
Gas	NTPS	23.8	26.1	30.0	31.6
	<b>Total</b>	<b>92.8</b>	<b>100.3</b>	<b>133.6</b>	<b>112.4</b>
<b>Net Unit Generated (MU)</b>					
Hydal	KLHEP	407.4	452.7	342.3	420.4
	LTPS	700.9	679.7	786.2	817.5
Gas	NTPS	506.7	539.6	503.2	495.0
	<b>Total</b>	<b>1615</b>	<b>1672</b>	<b>1631.7</b>	<b>1732.8</b>

Source: Assam Power Generation Corporation Ltd.

## POWER SUPPLY POSITION

The energy requirement in the State has been worked out at 7434 Million Units (MU) during the year 2013-14 against 6392 Million Unit (MU) in the previous year but the availability of energy during the periods was 6965 MU and 5895MU respectively. However, the power generation was 1845 MU and 1765 MU during the years 2013-14 and 2012-13 respectively. The peak electricity demand in the State while recorded increase by 146.0 percent during the period 2010-2014. The shortage was minimized from 218 MW in 2012-13 to 144 MW in 2013-14 by increasing generation of electricity by 4.5 percent (Gross generation) and by purchasing power from other public and private sources.

**TABLE – 12.2**  
**PER CAPITA AVAILABILITY STATUS**

Year	Electrical Energy (million unit)		*Population	Per capita Requirement (Kwh)	Per Capita Availability (Kwh)
	Requirement	Availability			
2001-02	3415	3302	**26655528	128	124
2005-06	4216	3536	28506000	150	124
2006-07	4585	3826	28896000	159	132
2007-08	4621	4018	29282000	158	138
2008-09	5039	4270	29660000	170	144
2009-10	5049	4590	30037000	168	153
2010-11	5403	5031	30413000	180	165
2011-12	5877	5700	**31205576	188	183
2012-13	6392	5895	31167000	205	190
2013-14	7434	6965	31540000	236	221

\* Projected population as per 2001 Census

\*\* Population as per Census 2001 and 2011

Source: Commercial Wing of ASEB.

**TABLE – 12.3**  
**REQUIREMENT AND SHORTAGE OF ELECTRICITY IN ASSAM**

Item	2001-02	2010-11	2011-12	2012-13	2013-14
Peak Demand(MW)	553	1065	1135	1286	1362
Peak Demand Met (MW)	519	947	1060	1068	1218
Shortage(MW)	34	118	75	218	144
Shortage (in %)	6.15	11.08	6.61	16.95	11.0

### TRANSMISSION AND DISTRIBUTION LOSSES

Power, which is supplied to various categories of consumers passes through various stages -from transformation to higher voltage level to final distribution in the premises of the consumers, involves energy losses is known as Transmission and Distribution losses. The table 12.4 reveals that aggregate transmission and commercial losses in the State is gradually came down from 30.48 percent in 2011-12 to 28.60 percent during 2013-14, which includes commercial losses as well. The situation has been gradually improving. The power loss through transmission is however an area of concern for the power deficit State like Assam. In order to bring down the T&D losses and AT&C losses to 19.49 percent and 21.34 percent levels respectively at the end of Twelfth Five Year Plan following measures are taken to reduce T&D loss as follows-

1. Energy accounting and electrically live ring fencing under R-APDRP.
2. R&M and Re- conducting of 33 KV, 11 KV & LT lines.
3. Changing of E&M and Stopped Meter with Electronic Meter.
4. Establishment of Police station in different circle for theft detection.
5. Energy Bill Payment through Net Banking.

The transmission and distribution losses in Assam during the last four years may be evident from the Table 12.4.

**TABLE – 12.4**  
**TRANSMISSION & DISTRIBUTION (T&D) LOSSES AND**  
**TRANSMISSION & COMMERCIAL (AT&C) LOSSES**

Item	2010-11	2011-12	2012-13	2013-14
Energy Input (MU)	4972	5684	5871	6462
Energy Billed (MU)	3535	3969	4205	4763
T&D Losses (MU)	1437	1715	1666	1699
T&D Losses (%)	28.90	30.17	23.38	26.29
Amount Billed (Rupees in lakh)	158457	201265	227501	273980
Amount realized (Rupees in lakh)	148942	190666	218035	265405
Collection Efficiency (%)	94.00	94.73	95.84	96.87
Overall Efficiency (Percentage)	70.09	69.52	71.06	71.40
AT&C Losses (Percentage)	29.91	30.48	28.94	28.60

T&D losses: Transmission and Distribution losses;

AT&C losses: Aggregate Transmission and Commercial Losses.

Source-Assam Power Distribution Company Ltd.

### NUMBER OF ELECTRICITY CONSUMERS

The population census of India, 2011 report reveal that 37.0 percent households of Assam are using electricity as a source of lighting compared to 67.0 percent households of all India. The rural-urban differential of use of electricity as a source is very high in Assam. Only 28.0 percent rural households compared to 84.1 percent urban households in Assam are using electricity as source of lighting.

**TABLE – 12.5**  
**HOUSEHOLDS USING ELECTRICITY AS SOURCE OF LIGHTING**

Item	Assam			India		
	Rural	Urban	Total	Rural	Urban	Total
Total	53,74,553	9,92,742	63,67,295	16,78,26,730	7,88,65,937	24,66,92,667
Electricity	15,24,221	8,34,679	23,58,900	9,28,08,038	7,30,89,256	16,58,97,294
Households using electricity (%)	28.0	84.1	37.0	55.0	93.0	67.0

Source: Annual Report- 2013-14, (Power & Energy Division), Planning Commission of India.

According to the Assam Power Distribution Company Limited, the number of consumers in the State has increased by 37.0 percent during the period 2010-14. The growth of domestic consumers during the same period was 41.0 percent. On the other hand the growth of commercial consumer during the period was erratic. However, the growth of commercial consumer in 2013-14 was 7.5 percent over the previous year. The number of electricity consumers in Assam during the last four years may be evident from the table below.

**TABLE – 12.6**  
**TOTAL NUMBER OF CONSUMERS**

Year	Domestic	Commercial	Total
2010-11	1655207	166399	1821606
2011-12	1811129	172310	2036429
2012-13	2130992	181781	2312773
2013-14	2330093	168167	2498260

Source: Assam Power Distribution Company Ltd.

To meet the shortage of electricity generation of its own sources and to meet the growing demand of the consumers in the State power distribution company has been purchasing electricity from different sources/ agencies. Electricity purchased from different Agencies/Sources may be evident from the table below:

**TABLE- 12.7**  
**ELECTRICITY PURCHASED BY ASSAM FROM DIFFERENT SOURCES/AGENCIES**

(Unit-MU)

Year	Agencies/Sources									
	Central Sector	APGCL	OTPC Pallatana	DLF(IPP)	Meghalaya Electricity Corpn. Ltd	Non-Conv. & Ors	IOCL(AOD)	UI/Deviation Mech.	Trading Purchase	Total
2011-12	3530.21	1690.03	0	58.49	19.1	6.79	15.33	72.88	572.38	5965.21
2012-13	3464.87	1631.6	0	28.84	19.07	8.34	23.45	0	864.02	6040.19
2013-14	3633.87	1728.31	202.63	0	20.22	37.08	25.04	239.42	1078.46	6965.03

Source: Assam Power Distribution Company Ltd.

### RURAL ELECTRIFICATION

**Rajiv Gandhi Grameen Vaidutikaran Yojana (RGGVY)**, a scheme for attaching the goal of provide access to electricity to 8406 numbers of un-electrified (UE) villages and to provide BPL connection to around 10 lakh consumers in 13081 numbers of Already Electrified (AE) villages in the State. In Assam, implementation of the RGGVY was started in April 2007. The status of village electrification in Assam before implementation of RGGVY as on 31.03.2007 was as under.

Total no. villages as per 2001 Census	25124
No. of electrified villages	18567
Percentage of Villages electrified	74
No. of un-electrified villages	8406
No. of remote villages	2202

Progress of RGGVY as on 31-1-2014 may be evident from the table below:

**TABLE - 12.8**  
**PROGRESS OF IMPLEMENTATION OF RGGVY**  
(as on 31-1-2014)

Implementing Agency	Target			Achievement		
	UE	AE	BPL	UE	AE	BPL
APDCL	6867	9483	1051774	6633	9216	880399
PGCIL	1549	3548	182373	1486	3397	185763
Total	8416	13031	1234147	8119	12613	1066162

Source: Draft Annual Plan, 2014-15, Planning and Development Department.

As per information received from ASEB, out of the total 26395 number of villages as per Census,2011, in the State, the number of villages electrified was 22587 (86%) till 2013-14.

**TABLE- 12.9**  
**DISTRICE WISE ELECTRIFICATION OF NUMBER OF VILLAGES IN ASSAM**

District	No. of Villages Electrified (Cumulative)			
	2010-11	2011-12	2012-13	2013-14
Dhubri	1122	1226	1226	1226
Kokrajhar	515	754	806	829
Bongaigaon	793	836	838	844
Goalpara	741	741	741	741
Barpeta	934	998	998	998
Nalbari	727	739	798	798
Kamrup	1130	1292	1293	1304
Darrang	1275	1305	1305	1305
Sonitpur	1484	1542	1542	1542
Lakhimpur	963	1082	1087	1093
Dhemaji	740	1023	1027	1027
Morigaon	447	468	474	484
Nagaon	1216	1317	1327	1327
Golaghat	1027	1032	1032	1032
Jorhat	769	769	769	769
Sivasagar	452	452	452	452
Dibrugarh	912	1035	1035	1035
Tinsukia	1075	1075	1075	1075
Karbi-Anglong	1903	2211	2252	2256
N. C. Hills	366	445	482	496
Karimganj	675	749	758	759
Hailakandi	309	313	313	313
Cachar	890	890	890	890
Baksa*				
Chirang**				
Udalguri***				
Kamrup(M)****				
<b>Assam</b>	<b>20465</b>	<b>22294</b>	<b>22520</b>	<b>22587</b>

N. B.: \* Baksa is included in Nalbari District

\*\* Chirang is included in Bongaigaon District

\*\*\* Udalguri is included in Darrang District

\*\*\*\* Kamrup(M) is included in Kamrup District

### CHIEF MINISTER'S POWER SUPPLY ASSURANCE MISSION

The distribution network of APDCL requires improvement of the existing system for providing quality and reliable power supply to the consumers. In large number of areas the capacities of transformers are inadequate to handle the required quantum of load. Due to non availability of ready transformers the risk of existing transformers failing to cope with the over load. To ease out the situation with a view to maintain quality power supply at consumer's end with minimum interruption the Hon'ble Chief Minister of Assam has laid emphasis on the improvement of power supply at the consumer's door step with an amount of ₹2000.00 lakh.

## CONSULTANCY FOR PPP POWER DISTRIBUTION

The State Govt. has decided to undertake the development and modernization of the distribution system of the upper Assam Region through Public Private Partnership (the "PPP") on Design, Build, Finance, Operate and Transfer (the "DBFOT") basis. Accordingly the Authority has decided to conduct a feasibility study to determine the technical feasibility and financial viability of the Project. The initiative is supported by the Planning Commission of India. On ascertaining the feasibility PPP partner would be selected through a transaction advisor. The budget provision of ₹400.00 lakh as cost of the study has been made in the year 2013-14 to carry out the project.

## CAPITAL OUTLAY ON POWER PROJECT

### (i) External Aided Project(EAP): ( APSEIP)

In 2009 Govt. of India approved ADB assistance of \$200 million USD on 90:10 basis with counterpart fund of 114.6 million USD in respect of Assam Power Sector Enhancement Investment Programme (APSEIP) to partly finance Govt. of Assam's investment programme. ADB assistance is being given in 3 trenches. Loan agreement of all the 3 trenches has been signed and all counterpart packages have been awarded.

### (ii) World Bank assistance Project as EAP for North Eastern Region Power System Investment Plan(NERPSIP)

The road map for development of power sector of NER and Sikkim specifying the needs for strengthening of overall transmission and sub-transmission system was brought out in "Pasighat Proclamation on Power" during the first sectoral meet in Pasighat of Arunachal Pradesh in January 2007. The Power Grid Corporation of India Limited [POWERGRID] has been appointed by Ministry of Power, Govt. of India as Project Management Consultant for proposed World Bank assisted NERPSIP and agreement was signed by both AEGCL and APDCL with POWERGRID in June, 2013. Accordingly steps for finalization of Project Implementation Plan (PIP), finalization of number of packages, preparation of bid document etc have been taken up as per direction of the Ministry of Power, Govt. of India and in consultation with POWERGRID. DPR for 1<sup>ST</sup> Trench of Transmission Works comprising of construction of 11 nos. of grid sub-station and associated transmission line with augmentation works at 3 grid sub-station, Distribution works comprising of construction of 16 nos. of 33/11 KV sub-station with associated 33 KV lines is submitted by PGCIL for an estimated amount of ₹1435.55 crore (Transmission system: ₹1095.19 crore and Distribution system: ₹340.36 crore.

The funding pattern proposed for implementation of the Plan is 50 percent from World Bank and 50 percent as grant from the Ministry of Development of North Eastern Region, Govt. of India and the project will be a Central Sector Project with POWERGRID as implementing agency. Cost of land acquisition, re-settlement & rehabilitation issues will have to be borne by the State authority which estimated at ₹138.15 crore.

### (iii) Solar Rural Electrification

Solar power, as an alternative to fossil fuels, is plentiful, renewable, widely distributed, clean, produces no green house gas emission during operation. 26 numbers of such solar energy projects have already been identified by APDCL all over the state. These solar generators will be located in inaccessible areas and will generate total 281400 Wp and will feed power to 360 villages/hamlets. Under this project, remote villages in Hill and backward districts, public buildings like hospitals and educational institutions etc., will be taken up as beneficiaries.

**PROJECT/SCHEMES FOR DEVELOPMENT OF POWER SECTOR**

The ASEB system has been undertaking various projects/schemes for development of the Power Sector. The performance and achievement both in physical and financial are as follows.

**Estimated Financial & Physical Performance of Annual Plan, 2012-13  
of Assam Power Generation Corporation Ltd.**

Sl. No.	Name of the Schemes	Financial Progress			Physical Progress		
		Approved Outlay (₹in Lakh)	Fund Released (₹in Lakh)	Actual Expenditure (₹in Lakh)	Physical Target	Achievement	% age
<b>General Area</b>							
<b>Normal Schemes</b>							
<b>1.0</b>	<b>Ongoing State Plan Schemes</b>						
<b>1.1</b>	<b>Schemes/Projects for Completion</b>						
1.1.1	100 MW Lakwa Replacement Power Project	500.00	58.00	58.00	Preliminary works for proposed Power Project to replace Ph.-I (4X15 MW) of LTPS with high efficiency gas engine/ gas turbine.	Part of proposed works completed	12%
1.1.2	500 MW Margherita Thermal Power Project	50.00	50.00	50.00	Outlay is proposed for acquisition and development of land including demarcation of boundary, development of approach road to site & appointment of consultant etc	-- Do --	100%
1.1.3	Lower Kopili HE Project (150 MW)	1500.00	0.00	0.00	Partial payment for land acquisition, various geological and topographical investigations, recasting of DPR etc.	Fund not received	0%
1.1.4	Survey & Investigation of HEP	20.00	20.00	20.00	The amount proposed for carrying out Survey and Investigation of Small Hydro Projects all over Assam.	Proposed works completed	100%
	<b>Sub-total (1.0)</b>	<b>2070.00</b>	<b>128.00</b>	<b>128.00</b>			6%
<b>2.0</b>	<b>New State Plan Schemes</b>						
2.1	R&M of Namrup TPS	500.00	400.00	400.00	Taking up of routine R&M works.	-- Do --	80%
2.2	R&M of Lakwa TPS	350.00	350.00	350.00	Taking up of routine R&M works.	-- Do --	100%
	<b>Sub-total (2.0)</b>	<b>850.00</b>	<b>750.00</b>	<b>750.00</b>			
<b>3.0</b>	<b>New State Plan Schemes</b>						
3.1	100 MW Distributed Generation System by Gas IC Engine	100.00	37.00	37.00	Preliminary works for construction of gas based Distributed IC Engine Power Projects have been proposed depending on availability of gas. However, gas linkage is still awaited for proposed Golaghat and Cachar Power Projects.	Project works on halt due to unavailability of gas	0%
3.2	Upper Borpani HEP (2X30MW)	50.00	50.00	50.00	The proposed amount to carry out preliminary project works	Proposed works completed	100%
3.3	Intermediate Borpani HEP (2X30MW)	30.00	30.00	30.00	The proposed amount to carry out preliminary project works	Proposed works completed	100%
	<b>Sub-total (3.0)</b>	<b>180.00</b>	<b>117.00</b>	<b>117.00</b>			
	<b>Total - State Plan</b>	<b>3100.00</b>	<b>1628.00</b>	<b>1628.00</b>			

**APPENDIX – 12.1**  
**SALE OF ELECTRICITY BY TYPE OF CONSUMPTION IN ASSAM**

CATEGORY	Energy Billed MU	
	2012-13	2013-14
<b>LT Group</b>		
Jeevan Dhara 0.5kW and 1kW/day	339	495.58
DOMESTIC A above 0.5kW to 5kW	1083	1255.76
Domestic-B above 5kW to 20kW	162	187.96
Commercial Load above 0.5kWto 20kW	417	449.98
General Purpose Supply	79	97.48
Public Lighting	17	13.13
Agriculture upto 7.5HP	6	6.71
Small Industries Rural upto 20kW	47	53.60
Small Industries Urban	26	27.49
Temporary Supply		5.64
<b>LT TOTAL</b>	<b>2176</b>	<b>2593.33</b>
<b>HT Group</b>		
HT Domestic 25 kVA and above	36	40.16
HT commercial 25 kVA and above	225	255.74
Public Water Works	63	72.49
Bulk Supply to Govt. Educational Institutes	57	64.62
Bulk Supply 25kVA	325	
Others		367.66
HT Small Industries upto 50kVA	23	23.62
HT Industries-I 50 kVA to 150kVA	55	68.81
HT Industries- II above 150kVA	771	769.95
Tea Coffee & Rubber	370	394.24
Oil & Coal	76	83.10
HT Irrigation Load above 7.5hp	29	29.48
<b>HT TOTAL</b>	<b>2029</b>	<b>2169.88</b>
<b>All Total</b>	<b>4205</b>	<b>4763.21</b>

Source: Assam Power Distribution Company Ltd.

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**TABLE - 13.2**  
**ROAD NETWORK IN ASSAM**

Item	(in Km.)					
	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
Surfaced Road*	13734	13163	18753	21200	22700	23747
Un-surfaced Road	23187	24338	21047	24300	22800	21753
National Highway	2755	2841	2841	2848	3069	3069
State Highway	3134	3134	3134	3134	3134	3134
Major District Road	4413	4413	4413	4413	4413	4413
Rural Road	27283	28753	30844	36544	36544	36544
Urban Road	1173	1202	1409	1409	1409	1409

\*Excluding National Highways

Source: Office of the Chief Engineer PWD (Roads), Assam.

The surfaced road kilometer [excluding NH Way] constitutes more than 52 percent of the total road length in the State as on March 2014. This indicates that compared to total road length availability [including NH Way and Project roads] of about 71 Km. per 100 Sq.Km. and about 178 Km. per lakh of population [2011 Census] as on March 2014 availability of surface road calculated at 30.1 Km. per 100 Sq.Km. of geographical area and about 76.1 Km. per lakh of population [2011 Census] in the State during the same period.

#### NATIONAL HIGHWAY DEVELOPMENT PROJECT

The National Highways are very important as even though these comprise about 2.0% of the road network but are carrying about 40% of the total road traffic. The Ministry of Road Transport & Highways is responsible for the development and maintenance of National Highways. The development and maintenance of National Highways are being implemented on agency basis. Out of the total length of 71,772 Km. of National Highways, 34,207 Km. is with the State Public Works Departments (State PWDs), 30,537 Km. with the National Highways Authority of India (NHAI) and 3,798 Km. with Border Roads Organization (BRO), balance length of 3,230 Km. is yet to be entrusted to the executing agencies.

Out of the total 71772 Km. length of NH in the country, Assam shares only 4.28 percent. Compared to 21.83 Km. NH length per thousand Sq. Km. geographical areas and 5.93 Km. NH length per lakh of population (2011 Census) of the country as a whole, Assam has 39.13 Km. per thousand Sq. Km. geographical area and 9.84 Km. NH per lakh of population in the State.

A length of 678 Km. [East West corridor, Assam portion] connecting Silchar to Srirampur via Lumding-Daboka-Nagaon-Guwahati, except for 31 Km. between Udarband and Harangajo [a portion of East-West corridor fall in Assam] has been entrusted to NHAI under NHDP Phase-II is in progress. For the 31 Km. stretch between Udarband and Harangajo, Detailed Project Report (DPR) for realignment is in progress and four lane works are in different stages of progress.

The Government of India has also proposed to construct/improve roads connecting Doboka (Assam) to Dimapur (Nagaland Border), Baihata-Chariali to Banardewara, Bandardewa (Assam) to Arunachal Border, Assam/Meghalaya Border to Assam Tripura Border and Silchar (Assam) to Mizoram Border under NHDP Phase-II.

The Government of India has approved implementation of 4 laning of NH-37 on Nagaon-Jorhat-Dibrugarh stretch from Numaligarh to Dibrugarh (201 Km.) along with construction of 4-lane Bridge over river Brahmaputra connecting Numaligarh and Gohpur (4-lane bridge along with 60 Km. connecting 4 lane roads) on NH-52 on Built Operated and Transfer [BOT (Annuity)] basis and two laning with paved shoulders of single lane stretches of NHs of 1179 Km. in the State of Assam under Phase 'A' SARDP-NE.

In addition, construction works of Dhola-Sadiya 2-lane Bridge (bridge length 9.3 Km.) connecting Dhola & Sadiya Ghats upto Islampur (NH 37 extension) at the cost of ₹876 crore is in progress.

Government of India has approved implementation of Arunachal Pradesh Package of Roads & Highways covering 2319 Km. of roads at an estimated cost of ₹11703 crore. Out of 2319 Km., 139 Km. falls in Assam.

Construction of proposed Lakhimpur bypass from 338/924 TO 349/213 of NH – 52, Strengthening and widening to two lane from Km. 244/000 TO 275/000 (DITCHERS - BALACHERRA) including construction of cross drainage of NH – 54 and improvement and widening of various parts of NH Ways within Assam are either in progress or in process.

The Govt. of India has also approved the following three major long-pending road infrastructure projects for Assam worth over ₹1,933 crore (excluding land acquisition and other pre-construction activities) with a view to expedite the improvement of infrastructure in Assam and reduce travel time and cost of travel for traffic, particularly heavy traffic, plying between Guwahati and Dibrugarh and beyond. These projects would also increase the employment potential for local labourers for project activities. The project covered the districts of Golaghat, Jorhat, Sivasagar, Dibrugarh and passes through the towns of Numaligarh, Dergaon, Jorhat, Jhanji, Gaurisagar, Sivasagar, Demow, Sepon, Moran and Dibrugarh.

- Four-laning of the Demow-Bogibil junction section of National Highway-37 under the Special Accelerated Road Development Programme in North Eastern Region (SARDP-NE) on Design, Build, Finance, Operate and Transfer (DBFOT) basis in Build-Operate-Transfer (BOT) (Annuity) mode of delivery. The cost is estimated to be ₹473.45 crore. The length of the road will be approximately 46 Km.
- The second project is four laning of the 'Jorhat-Demow' section of National Highway-37 under SARDP-NE Phase 'A' on Design, Build, Finance, Operate and Transfer (DBFOT) basis in Build-Operate-Transfer (BOT) (Annuity) mode of delivery. The cost is estimated to be ₹874.69 crore. The length of the road will be approximately 80 Km.
- The third project is of four-laning of the 'Numaligarh-Jorhat' section of National Highway-37 also under SARDP-NE Phase 'A' on Design, Build, Finance, Operate and Transfer (DBFOT) basis in Build-Operate-Transfer (BOT) (Annuity) mode of delivery. The cost is estimated to be ₹584.68 crore. The length of road will be approximately 51 Km.

#### IMPLEMENTATION OF FLAGSHIP PROGRAMME FOR DEVELOPMENT OF ROAD INFRASTRUCTURE

The PMGSY has been implemented with the objective of connecting rural habitations with all weather roads in order of priority. Till end of March 2014,8493 villages have been covered under rural connectivity programme. Out of the total 8493 villages,5502 villages having 1000 or more habitations,1725 villages with 500 or more habitations and 1266 villages having habitations from less than 250 habitations to below 500 habitations.

The status of implementation of PMGSY programme is as under:

##### Work sanctioned upto 2010

Amount sanctioned :	₹8801.81 crore
Road length :	15908 Km.
RCC Bridges :	2549 nos.

Habitation Covered :

1000 + :	6102 nos.
500 + :	2379 nos.
Upto 499 :	1793 nos.

##### Achievements up-to March 2012

Road work Completed :	14400 Km.
RCC bridges completed :	2092 nos.
Habitation connected :	
1000+ :	5443 nos.
500+ :	1752 nos.
Upto 499 :	1266 nos.
Balance Road length to be completed :	1508 Km.
Expenditure :	₹7732.16 crore
Fund released by Govt. of India :	₹7588.98 crore
Fund released by Govt. of Assam :	₹251.61 crore

During the period 2012-13 and 2012-13, 1184 Km. road length, 350 RCC bridges have been sanctioned and 747 total habitations covered. Out of the total habitations, 14 were 1000+ habitations, 598 were 500+ and 135 were upto 499 habitations.

## ROAD TRANSPORT

Road transport is considered to be vital to economic development and social integration of the country. Road transport is also one of the most cost effective and preferred mode of transport, both for freight and passengers, keeping in view its level of penetration into populated areas. Easy availability, adaptability to individual needs and the cost savings are some of the factors which go in favour of road transport. Road transport also acts as a feeder service to railway, shipping and air traffic.

## MOTOR VEHICLES

The rapid increase of the number of motor vehicles on road in Assam has been observed over the past few years. The on road vehicle population in the State has reached 1984880 as on March 2014 compared to 1725222 as on March 2013. An additional of 259658 or 15.1 percent on road motor vehicles was added during the year 2013-14 over 2012-13. Out of the total 1984880 motor vehicles during on road about 57.0 percent vehicles were two wheelers.

According to the Motor vehicle registering authority of the State as many as 249564 new motor vehicles were registered during the year 2013-14 in the State which is 9.8 percent more than that of the previous year. Out of the total registered motor vehicle more than 67.0 percent were two wheelers.

The total number of Motor vehicles on road in the State was recorded about 15.1 percent growth as on March 2014 compared to 13.0 percent growth as on March 2013(1725222). The of numbers of Motor vehicle on road in the State have recorded about 85.0 percent growth during the last seven years period 2007-08 to 2013-14. In respect of two wheelers on road during the same period was calculated at 56.0 percent.

The density of motor vehicles in Assam was 25.3 per Sq. Km. during the year 2013-14 as against 22.0 vehicles per Sq. Km. during the year 2012-13. During the year 2000-01, density of motor vehicles in Assam was only 6.8 per Sq. Km.

The increase in the number of Motor vehicles registered as well as Motor vehicles on road in the State over the years may be evident from the Table 13.3.

**TABLE - 13.3**  
**NUMBER OF MOTOR VEHICLE REGISTERED AND**  
**MOTOR VEHICLE ON-ROAD IN ASSAM**

Year	No. of Motor Vehicle Registered	No. of Registered Motor Vehicle per		No. of Motor Vehicle on road	No. of Motor Vehicle on road per	
		100 Sq.Km.	Lakh of Population		100 Sq. Km.	Lakh of Population
2000-01	52518	67	198	534885	682	2017
2004-05	88470	113	315	777328	991	2765
2006-07	106666	136	369	983488	1254	3404
2007-08	96796	123	331	1074763	1370	3670
2008-09	119126	152	402	1180177	1504	3979
2009-10	241247	308	803	1320867	1684	4397
2010-11	199076	253	655	1363625	1738	4484
2011-12	226010	288	725	1528269	1948	4903
2012-13	227367	290	729	1725222	2199	5528
2013-14	249564	318	799	1984880	2530	6360

Source: Office of the Commissioner of Transport, Assam and Directorate of Economics and Statistics, Assam.

With the increasing growth of motor vehicles the number of road accidents in the State is also increasing. During the year 2013-14, the number of road accidents reported in the State was 7271 which was calculated 10.8 percent more over the previous year. During the year 2012-13, number of road accidents reported 6562. The number of persons killed and injured as a result of road accidents during 2013-14 were 2407 and 6734 respectively compared to 2252 and 6472 number of persons killed and injured respectively during 2012-13.. The number of persons killed and injured in 2013-14 recorded 6.9 percent and 4.4 percent more compared to the number of persons killed and injured reported during the year 2012-13 .However, the number of persons killed per 100 accidents recorded 33.2 during 2013-14 compared to 34.3 during 2012-13.

The Road accidents severity in Assam may be evident from the Table below.

**TABLE - 13.4**  
**NUMBER OF ROAD ACCIDENTS AND PERSONS INVOLVED IN ASSAM**

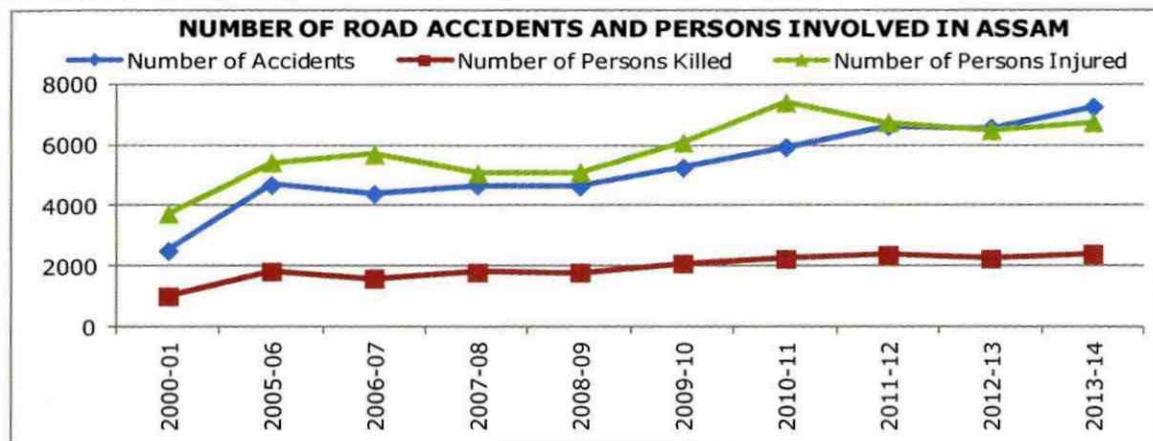
Year	Number of Accidents	Number of Persons		Accident Severity*
		Killed	Injured	
2000-01	2516	1021	3744	40.6
2005-06	4694	1841	5435	39.2
2006-07	4403	1604	5697	36.4
2007-08	4683	1807	5081	38.6
2008-09	4641	1803	5115	38.8
2009-10	5263	2099	6082	39.9
2010-11	5929	2250	7404	38.0
2011-12	6617	2375	6741	35.9
2012-13	6562	2252	6472	34.3
2013-14	7251	2407	6734	33.2

\*Accident Severity: Number of persons killed per 100 Accidents.

Source: Office of the Additional Director General of Police, Criminal Investigation Department, Assam.

The Commissionerate of Transport has laid special emphasis for promotion of Road safety through Education and Enforcement during the 12<sup>th</sup> Five Year plan period. The education component comprises to impress on spreading awareness on Road Safety and for enforcement. The Enforcement Staff will be trained on the legal front and will be provided with latest equipments and mobility to prevent traffic offences and accidents. The Commissionerate of Transport has also given stress to construct driving track and vehicle inspection ground in every district in a phased manner in order to have a sound Transport System to check road accidents throughout the State.

Apart from providing fast and comfortable services to the commuters as well as to create self-employment avenues among the unemployed youths, Trekkers services, post paid City Taxi services have been introduced in the State, which became not only very popular in the greater Guwahati and in adjoining areas but also in various parts of the State



The collection of transport revenue by the Department of Transport during the year 2012-13 was ₹344.38 crore as against ₹312.12 crore in 2011-12. The collection of transport revenue during the year 2010-11 was ₹281.00 crore. The collection of transport revenue during the year 2012-13 was 10.34 percent more than that of 2011-12.

### ASSAM STATE TRANSPORT CORPORATION

The public Road Transport is the most important means of communication for the movement of goods as well as passengers traffic in the State. In the road transport system of the State, both public and private sector operators are playing equally important role. Earlier, the Assam State Transport Corporation (ASTC), a State Government undertaking and one of the premier public enterprises of the State with its headquarter in Guwahati, is mainly concerned with the movement of passenger traffic on the nationalized routes of the State, while the private sector road transport operators are involved in the Intra-State movement of both goods and passenger traffic throughout the State. With the changing scenario, both the ASTC and private operators are providing transport services equally in the interest of passenger traffic. The ASTC has been providing efficient, safe, reliable, economic and dedicated services to the people especially in the rural and other backward areas since its inception and have earned the appreciation of the people of the State. ASTC has luxury and regular buses for normal bus routes and special mini buses for hill routes. ASTC operates Night Super deluxe, Executive class; air conditioned class and Volvo coach buses providing affordable fares and reliable road transport to passengers. Besides providing online ticket booking facility to passengers, ASTC also provides courier services, cargo services.

To sustain its services it is felt necessary to improve infrastructural facilities like well-developed station buildings and to have well equipped maintenance workshops. As a step towards improvement of passenger amenities the State Government has already constructed two Inter-State Bus Terminus (ISBT) one at Guwahati and the other at Silchar to facilitate Inter-State transportation of passengers. At present, both the Inter-State Bus Terminuses are fully functional. Inter-State Bus Terminuses have also been constructed at Jorhat, Dibrugarh and Sivasagar by the ASTC with all modern facilities for passengers and bus operators. For providing better passenger amenities, the ASTC has taken initiative to construct new Bus Terminuses at Guwahati City (City Service), Bongaigaon, Halflong, North Lakhimpur and Nalbari. The ASTC has also proposed to construct a modern Inter-State Bus Terminus at Adabari to cater to the demands of the increased number of buses and passengers and to reconstruct /improve the present status of 100 numbers of Station buildings, both major & minor, spread all over the State during 12<sup>TH</sup> Five Year Plan. The ASTC has also set up a multistoried car parking building at Guwahati City to ease out shortage of car parking space within the market locality at Paltan bazar.

To improve its performance and for better transport connectivity, as a part of the Public Transport Policy of the Govt. of India, the ASTC needs to purchase new Buses every year for replacing the old and over-aged ones as well as to augment its fleet position to provide its services to every nook and corner of the State as well as to mobilize its earnings. During the 11<sup>TH</sup> Five Year Plan (2007-2012) period, ASTC acquired as many as 448 new vehicles and planned to procure additional 140 buses under "Assam Bikash Yojana". The performance of ASTC during the period 2009-14 may be evident from the table 13.5.

**TABLE – 13.5**  
**PERFORMANE OF ASSAM STATE TRANSPORT CORPORATION (ASTC)**

Year	Average No. of own vehicle held	Average No. of own Vehicle on road	Fleet utilisation (%)	Total km operated during the year (in lakh)	Monthly Av. Net income from own buses (₹ In lakh)	Staff-Bus ratio	No of Private Buses operated under ASTC	Monthly Average Income from Privately operated buses (₹ in lakh)
2009-10	312	271	87	148.92	70.42	8:01	1317	103.92
2010-11	357	299	84	159.45	85.30	6:01	1189	95.12
2011-12	538	441	82	222.36	123.61	5:01	1170	92.25
2012-13	665	540	81	248.48	136.64	4:01	1344	76.31
2013-14	751	559	74	279.30	138.32	4:01	1300	72.52

Source: Assam State Transport Corporation.

The Rural Connectivity Scheme has become very popular with the masses and there is huge demand for economically viable transportation system. As the private bus operators are reluctant to operate in the rural and interior areas of the State, ASTC with its social service oriented motive planned to provide more bus services in these areas so that the rural masses may have easy transport accessibility in reaching nearest towns or District/Sub-Division Head Quarters. To attain the objective, the ASTC has proposed acquire new buses and to build up infrastructure facilities like station buildings with proper amenities for bus passengers and commuters and maintenance centres in 16 new locations.

To cater the transportation needs of the ever increasing population in both the urban and rural areas of the State, the ASTC has planned to acquire 1550 buses [@ 330 buses per year] by the end of the Twelfth Five Year Plan. In addition, the organisation has planned to procure 150 buses during the year 2013-14 to enhance bus services for rural connectivity. With the augmentation of fleet, the procurement of bus chassis will increase which will assist the small scale industries engaged in fabrication of bus bodies and ancillary business to boost their business as well as help in employment generation. Moreover, the ASTC is having a substantial area of un-utilised land within its Station Complexes spread all over the State and these properties can be utilised for commercial purposes, such as, construction of market complexes, parking yard for small segment vehicles etc., which can be let-out to educated un-employed youth of the State, thereby, generating employment opportunity as well garnering additional revenue for the Corporation. For creating the necessary infrastructure the ASTC has planned to invest ₹100.00 lakh during the 12<sup>TH</sup> Five Year Plan period.

The ASTC is implementing **Dharmajyoti Scheme** under which 50 percent bus fare is charged from the pilgrims visiting religious places within and outside the State of Assam. The Scheme has become very popular and more than 2(two) lakh pilgrims have availed the facility.

## RAILWAYS

As per information available from the N.F. Railway, Headquarters, Maligaon, Guwahati, Assam has total railway route length 2458.93 Km. at present. This 2458.93 Km. comprising of 1470.06 Km. under Broad Gauge and 988.87 Km. Meter Gauge. The proportion of Board Gauge railway route length in the State, although, is 59.78 percent, it shares only 2.63 percent of the country's total broad gauge railway route length. Taking into account of total railway route length 65000 Kms. for the country, Assam shares only 3.8 percent of the total railway route length of the country till the end of March 2014.

The Ministry of Railways has undertaken various developmental activities in the Railway Sector in the State including extension of railways line to link the other States of North-Eastern States Meghalaya, Arunachal Pradesh, and Mizoram through Assam. Among the ongoing railway projects, Bogibeel rail cum Road Bridge and gauge conversion of Lumding – Silchar – Jiribam – Badarpur & Badarpur to Baraigram –Kumarghat, Rangia – Murkongselek, Bhairabi – Sairang projects are declared as national projects and the works are on progress. The survey work of proposed construction of new line connecting Azara – Tetelia – Byrnihat, also a National Project has been completed and land acquisition proposal has been submitted to the Govt. of Assam for the portion fall within Assam. The construction of 19.75 Km. railway stretch connecting Dudhnoi (Assam) – Mendipathar (Meghalaya) is under progress. Construction of new Broad Gauge lines connecting Harmuti (Assam) and Naharlagun (Arunachal Pradesh) – 20 Km, New Mainaguri to Jogighopa (257 Km.), New Jalpaiguri – Siliguri – New Bongaigaon (433 Km.) are under progress.

In addition, the survey work for construction of new lines connecting Jogighopa – Guwahati via Barpeta–Sarthebari – Hajo – Sualkuchi, North Lakhimpur – Along – Silapathar, Misamari – Tawang, Pasighat –Tezu – Rupai, Murkeongselek – Pasighat are under various stages of progress.

The Bogibeel rail-cum-road bridge, India's longest bridge coming up across the mighty Brahmaputra and the fourth bridge across the Brahmaputra River is expected to be not only the lifeline for the Northeast but will also strengthen the country's security. The project of 4.94 Km. rail cum road bridge is implemented by the North East Frontier Railway is scheduled to be completed in 2016 which will connect two existing railway networks running at north bank and south bank of the river and will provide connectivity to around five million people residing in upper Assam and Arunachal Pradesh. It starts from Chaulkhowa station and Moranhat Station at south bank and joins between Sisibargaon and Siripani station of Rangia – Murkongselek section in north bank. It is expected that the final cost of the project at the time of completion will be around ₹4000.00 crore although the project costs was estimated at ₹3230.00 crore at the time of initiation.

During the last couple of years a good number of new passenger trains [during the year 2011-12, 12 new trains were introduced and 5 existing trains were extended] were introduced to connect different places within the State viz., inter-city trains linking Guwahati and Dibrugarh, Dimapur, Jorhat, Sivasagar, Nagaon, Bongaigaon and Fakiragram, apart from daily trains between Lumding and Badarpur. The Railways run a number of inter-State trains linking Guwahati and Dibrugarh with other important places of the country, such as Delhi, Kolkata, Mumbai, Chennai, Tiruvantapuram, Bangalore, Cochin, and Jammu etc. The Northeast Frontier Railway authority has also started plying direct train service between Lumding (Assam) and Agartala (Tripura).

The ministry of Railways expected that the following new lines connecting Dudhnoi-Mendipathar New Line; Lumding-Badarpur-Silchar Gauge Conversion; Harmuti-Murkongselek and Balipara-Bhalukpong sections will soon get commissioned.

## AIR TRANSPORT

Assam is well connected with the rest of the country through Air Transport. The State has the highest numbers of operational civil airports and these are located at Guwahati, Tezpur, Jorhat, Dibrugarh, North Lakhimpur and Silchar. In addition, one more civil airport located at Dhubri (Rupshi) district of Assam is lying closed and non-functional for long time. The State Govt. has demanded to reopen the airport for passenger traffic for the benefit of the State which will further benefit the people of Meghalaya. All major airlines including private commercial airlines viz., Indian Airlines, JetLite, Go-air etc. are operating their flights to and from Guwahati and intra-state air services regularly. In addition to these civil airports, small private airstrips in the interior areas are present in large numbers. Some small and remote airstrips are being operated under private operators like tea gardens and PSUs.

In the Guwahati sector movement of air traffic as well as passenger traffic [both domestic and international] has been increasing rapidly since 2004-05. However, as per available records, air traffic movement and passenger traffic (only for LGBI Airport, Guwahati and Mohanbari Airport, Dibrugarh published by the DGCA) has come down by 12.3 percent and 15.1 percent respectively during 2013-14 compared to the previous year. Similarly average number of flights handled by these two airports per day also came down to 81 in 2013-14 from 92 in 2012-13. In respect of handling of freights, the growth was calculated at 22.2 percent in 2013-14 over the previous year.

**TABLE - 13.6**  
**AIR TRANSPORT STATISTICS OF ASSAM**

Year	Air Traffic Movement (No.)	Passenger Handled (No.)	Freight loaded /Unloaded (Tonne)	Mail loaded/unloaded (Tonne)	Average number of flight per day	Average number of passenger handled per day	Average Cargo Handled per day (Tonne)
2004-05	20334	828640	5199	1320	57	2270	18
2008-09	34855	1693319	2404	453	196	4639	9
2009-10	35270	1997506	5829	469	97	5473	17
2010-11*	34649	2326142	9322	NA	95	6373	26
2011-12*	35022	2685871	8601	NA	96	7359	24
2012-13*	33535	2526434	6668	NA	92	6922	18
2013-14*	29426	2442613	8124	NA	81	6692	22

\* Figures excluding Lakhimpur, Tezpur and Jorhat Airport.

Source: Directorate General of Civil Aviation Statistical Division, New Delhi.

The Lokpriya Gopinath Bordoloi International Airport, Guwahati is the only International Airport in the North-East India. The number of aircraft movements to and from this International airport has increased manifold during 2011-12 and 2013-14. During the year 2011-12 and 2013-14, the number of air traffic movements recorded 452, 416 and 494 respectively. Accordingly, movements of passenger has also been increased and calculated at 19.0 percent growth during 2013-14 over the previous year.

The number of aircraft movement, passengers as well as freight handled in the LGB International airport during the period from 2004-05 to 2013-14 is detailed in the Table 13.7.

TABLE – 13.7

## AIR TRANSPORT STATISTICS OF L.G.B. INTERNATIONAL AIRPORT, GUWAHATI

Year	Aircraft Movement	Passenger handle (No)		Freight loaded/unloaded (Tonne)
		Embark/Disembark	Transit	
2007-08	98	2044	1393	6
2008-09	100	7282	0	2
2009-10	46	5421	0	0
2010-11	226	14523	NA	0
2011-12	452	26864	NA	0
2012-13	416	21810	NA	94
2013-14	494	24633	NA	36

Source: Directorate General of Civil Aviation Statistical Division, New Delhi.

## INLAND WATER TRANSPORT

Inland water transport is generally accepted as the most efficient mode of transportation from the point of energy consumption. It is also considered as the cheapest mode of transportation as well as labour intensive and environment friendly in nature. Assam is a riverine State. As much as 32 percent of the water resource of the country flow down through the river Brahmaputra, Barak and their myriad tributaries weave a vast network of waterways in the State. The Brahmaputra has 891 Km. navigable length of water ways from Sadiya to Dhubri while the Barak has 121 Km. length of navigable waterways. The Sadiya – Dhubri stretch (891 Km.) of the Brahmaputra River has been declared as the 2<sup>ND</sup> National waterways of the country in the year 1988 and afterwards the proposals to activate the Commercial Service have been moved for overall economic development of the North-eastern Region. The - Bhanga stretch of 121 Km. of the Barak River is also declared by the Union Govt. as the 6th National Waterway in January 2013 for unified development of the waterways for shipping and navigation and transportation of cargo to the North Eastern Region particularly in the states of Assam, Nagaland, Mizoram, Manipur, Tripura and Arunachal Pradesh.

For effective exploitation of the waterways, being the cheapest mode of transport and in order to cater to the growing need for goods and passenger movement, two Government owned organisations of Assam viz, Central Inland Waterways Corporation and Directorate of Inland Water Transport (IWT), are operating the water transport services on the river Brahmaputra and Barak on commercial basis and have been trying to improve the water transport system in the region. The Brahmaputra has several small river ports. In addition, there are more than thirty pairs of ferry ghats on the Brahmaputra transporting both passengers and cargo. But due to scarcity of serviceable vessels under the department most of the ferry services often suffer problems in their smooth operation. However, there is need to augment the IWT fleet by suitable type of vessels to ensure adequate cargo support.

At present the Directorate of Inland Water Transport is operating 96(ninety six) ferry services under 3(three) IWT Divisions on the river Barak, Brahmaputra and its tributaries for the purpose of public utility. The IWT Department has introduced 61 nos. of cargo cum passenger service also in Assam for transportation of commuters throughout the nook and corner of the State where no road communications are available. At present the IWT department has possessed 211 vessels of different capacity and proposed to add a good number of vessels during the 12<sup>th</sup> Five Year plan period. Besides these Government owned organisations, large number of private owners conducted ferry services [including commonly known *Bhoot-bhooty* services] to transport goods and passengers to the remotest hinterlands under un-organised sector.

To exploit the potential, there is a need to augment the IWT by adding suitable type of fleet of vessels to increase passenger services as well as to provide adequate cargo support. Therefore, the IWT Directorate planned to procure 20 numbers of higher speed 16.0 M long steel Shallow Draft Boat (SDB) for plying as Water Taxi on the river Brahmaputra and Barak, 8 numbers of 22.0 M long steel RPL and 4 numbers of 22.0 M long steel Marboat for plying on the river Brahmaputra for Majuli and Dhubri, 6 numbers of 18.0 M long steel single boat for plying on the river Barak etc., during the Twelfth Five Year Plan period. In addition, the IWT Assam proposed to construct 12 nos of 19 .0 Metre long wooden boats fitted with marine engine for operation in the Govt. Notified/newly established ferry services.

The IWT department has proposed for construction of 2(two) 20.0M long steel Mar-boat on the River Brahmaputra for Majuli and Dhubri to augment the IWT fleet position in order to provide a better ,safe and speedy ferry service.

The department also taking steps for modification and renovation of existing old and out dated vessels to make them river worthy and put them for ferry and commercial services as well as to meet the shortage of vessels.

### **OTHER ACTIVITIES**

The IWT department has introduced Air-conditioned long distance river cruise service for the development for river tourism. The department has leased out a vessel M.K.Charaidew to private entrepreneur on hire basis. The department has also introduced two luxurious A/C cruise vessels on the river Brahmaputra and they are being operated by the department itself at Guwahati. The IWT department has also proposed to construct a 28.0 m long Double Decker steel pontoon to be utilised as Luxurious Floating Restaurant on the River Brahmaputra at Guwahati (as per DRSC proposal).

The IWT department has also constructed a RCC jetty on the 11 nos. of floating restaurants (A/C & Non A/C) on board of IWT vessels and three river cruise services on the river Brahmaputra. The department has also constructed 7 nos. of 25m long single Decker floating terminal at north bank and 2 nos. of 28m long double Decker floating terminal at the south bank of the Brahmaputra at Guwahati under centrally Sponsored scheme.

### **COMMUNICATION:**

#### **POSTAL COMMUNICATION**

The Assam Postal Circle has a network of 4014 Post Offices [as on March 2014] out of which 3726 post offices are located in rural areas. On an average, each Post Office serves a population of 7774 persons and covers 19.54 Sq.Km. areas. There are 3 Night Post Offices also functioning in the State located at Guwahati GPO, Dibrugarh HO and Silchar HO for convenience of the people. In addition, there are 353 modernised post offices and 634 computerised post offices in the State. Apart from the above, there are 4 National Speed Post Centre and 16 Speed Post Centre in the State and Postal Mail Conveyance covers 4428 railway kilo metre.

The Assam Postal Circle has taken initiative to start Core Banking Solution (CBS) in 12 selected post offices of Assam under Pilot Project to bring the postal customers under postal banking coverage so that the customers can access their savings bank accounts from any of the above selected post office. Assam is among the six states across India selected for the Pilot. After successful implementation of CBS in these pilot offices, other post offices will be brought under coverage of CBS in a phased manner. In addition; Assam State has also been selected for the Rural-ICT project for computerisation and networking of rural post offices (also called Branch Post Offices). A total of 375 Branch Post Offices of Sivasagar Postal Division comprising of three districts –Sivasagar, Jorhat and Golaghat are the pilot offices covered under Rural-ICT project for Assam Circle.

The Circle is utilising services of Indian Airlines & Jet Airways for transmitting outward airmails from all the Air Centres of the region. From Guwahati, outward airmails are transmitted in direct flight for Kolkata by Indian Airlines and for Delhi Sector by Jet Airways. For mail transmission in the North East Region freighter air craft service has been used which is running in the Kolkata-Guwahati-Imphal- Agartala Sector. The service of ASTC and Private Night Super Buses are also utilised for transmission of local mails to all District Headquarters except Morigaon and Dhemaji.

#### **TELECOMMUNICATION**

Assam Telecom Circle of Bharat Sanchar Nigam Limited (BSNL) is the largest telecom operator in Assam which was formed in 1987, providing comprehensive range of telecom services in the State. BSNL, Assam Circle is the only service provider, making focused efforts and planned initiative to bridge the rural-urban Digital Divider ICT sector. BSNL is reaching the nook and corner of Assam with focused development thrust. At present 584 telephone exchanges are functioning in the State (as on March 2014).

It is evident from the status of telecom facilities in Assam shown in the Table 13.8 that the overall tele-density (Telephone per 100 of population) of the State as on March 2014 was 48.74 as against the national average 75.23. During the year 2012-13, the overall tele-density of Assam was 46.51 as against the national average of 73.32. While the urban tele-density of Assam stood at 126.27 as on March 2014 compared to 130.92 as on March 2013, the rural tele-density was only 34.36 as on

March 2014 and seems to be slightly higher over the previous year (31.13). However, in respect of overall tele-density as well as urban tele density the position of Assam stood far below the national average [overall 75.23 and urban 145.46 as on March 2014. In respect of rural segments also tele-density of Assam was considerably below the national average (rural-44.01) during the same period.

**TABLE - 13.8**  
**TELECOM FACILITIES IN ASSAM**

Item	2009-10	2010-11	2011-12	2012-13	2013-14
Direct Exchange Lines	1449647	1739591	1492608	1430077	1463773
Rural Telephone Connections	481092	594291	491881	445399	459014
Village Public Telephones (VPTs)	23992	24196	24415	24688	24692
Total Telephones	9064392	11928394	14437929	14582059	15462192
A)Wire line Phones=Fixed DELs	308339	257683	229854	194395	183984
Ai)PSU Operators	307725	255584	227229	193915	182904
Aii)Private Operators	614	2099	2625	480	1080
B)Wireless Phones (GSM+CDMA)	8756053	11670711	14208075	14387664	15278208
Bi) PSUs Operators	1141922	1484007	1265379	1236162	1280869
Bii)Private Operators	7614131	10186704	12942696	13151502	13997339
Tele-density [%] (Phones Per 100 of Persons)	29.99 Urban-96.54 Rural-18.49	38.98 Urban-124.45 Rural-23.93	46.61 Urban-148.54 Rural-28.35	46.51 Urban-130.92 Rural-31.13	48.74 Urban-126.27 Rural-34.36
Public Call Offices [Local+STD+Highway]	33862	27380	19307	11929	11207

Source: Annual Reports- 2009-10, 2010-11, 2011-12, 2012-13 and 2013-14 of Department of Telecommunication, Govt. of India.

The subscriber base basic services provided by the BSNL in the State were 1463773 as on March 2014 as against the total capacity of 2152273 which included WLL subscribers and wireless subscribers. The total number of telephone connections as on March 2014 was 6.0 percent more than that of March 2013. Private operators also provided 1080 wire-line phones to its subscribers till March 2014 in Assam.

In respect of wireless phone [mobile segment] connections, there were 1.53 crore mobile subscribers in Assam as on March 2014. BSNL alone provides around 8.4 percent of the total mobile connections in the State till March 2014. The private mobile service operators, on the other hand, provided about 1.40 crore mobile connections as on March 2014. Thus, the share of mobile connections provided by the private operators has been increased from 91.4 percent as on March 2013 to 91.6 percent as on March 2014. Bharati Televentures (Airtel), Disnet Wireless (Aircel), Reliance and Vodafone are the main private mobile service provider companies operating in Assam.

According to the Annual Report 2013-14 of the Department of Telecommunications, Govt. of India, there were 15462192 telephones in Assam out of which 59.48 percent were rural. Moreover, the total telephones in Assam as on March 2014 share only 1.66 percent total telephones in the Country. BSNL also provided Village Public Telephones (VPTs) to 24692 inhabited villages of Assam till March 2014.

**TABLE - 13.9**  
**MAJOR GROUP-WISE WIRELESS SUBSCRIBER IN ASSAM**  
**(As on January 2014)**

Circle	Wireless Subscriber Group						Total
	Bharati	Reliance	Vodaphone	Idea	Aircel	BSNL	
Assam	4394850	2579770	2728862	547494	3706030	1253553	15210559
India	200839755	117648911	162188298	130217704	68444071	94716915	893314473

Source: Telecom Regulator Authority of India Press Release dated 12-3-2014.

## APPENDIX- 13.1

## COLLECTION OF REVENUE OF THE DEPARTMENT OF TRANSPORT, ASSAM

(Rupees in crore)

SL. No.	Name of D.T.O & Check Gate	2010-11	2011-12	2012-13	2013-14
1.	Kamrup (R & L)	73.97	94.19	102.08	104.78
2.	Kamrup (R.T.A)	1.17	0.99	0.70	0.59
3.	Kamrup(Enforcement)	1.61	2.04	1.82	1.70
4.	Kamrup (Rural)		2.41	5.88	6.45
4.	Barpeta	4.97	7.09	7.37	8.12
5.	Nalbari	3.27	3.81	4.52	4.97
6.	Goalpara	4.48	5.98	6.62	6.72
7.	Dhubri	4.72	6.32	6.95	7.34
8.	Sonitpur	8.74	12.32	14.00	14.97
9.	Mangaldoi	3.07	3.82	4.10	4.72
10.	Lakhimpur	5.26	7.62	8.54	9.64
11.	Dibrugarh	13.77	18.74	18.74	19.68
12.	Tinsukia	12.60	15.72	17.17	18.57
13.	Dhemaji	2.79	3.43	3.08	3.69
14.	Sivasagar	10.02	14.10	16.78	18.48
15.	Jorhat	12.16	14.73	16.96	18.10
16.	Golaghat	4.43	5.83	6.63	8.41
17.	Nagaon	10.10	14.80	15.97	17.82
18.	Morigaon	3.06	3.72	4.67	4.69
19.	Dima Hasao	0.35	0.85	0.87	0.72
20.	Karbi-Anglong	3.54	4.40	4.74	4.94
21.	Karimganj	2.09	3.30	3.98	4.05
22.	Hailakandi	2.72	3.06	3.22	3.30
23.	Silchar	9.03	13.47	15.35	16.54
24.	Srirampur M.V. Check gate	2.83	1.85	3.15	3.31
25.	Boxirhat M.V. Check gate	8.95	4.05	3.57	3.36
26.	Kokrajhar	4.14	5.80	5.89	6.09
27.	Bongaigaon	5.11	7.82	9.09	10.01
28.	S.T.A.	24.36	22.38	24.23	22.13
29.	Digharkhal M.V. Check gate	1.22	1.08	1.00	1.01
30.	Udalguri	1.36	2.26	2.28	2.61
31.	Chirang	1.74	2.37	2.55	2.45
32.	Baksa	1.15	1.77	1.88	1.58
	<b>A SSAM</b>	<b>248.78</b>	<b>312.12</b>	<b>344.38</b>	<b>361.54</b>

Source: Office of the Commissioner of Transport, Assam.

## APPENDIX- 13.2

## DISTRICT-WISE NUMBER OF MOTOR VEHICLE REGISTERED IN ASSAM

Sl. No	District	Total Number of Vehicles Registered					
		2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
1.	Dhubri	1681	3428	4884	5803	5575	5895
2.	Kokrajhar	1857	2599	4242	4953	4040	4589
3.	Bongaigaon	21755	21879	6430	6863	8060	7749
4.	Goalpara	1306	2238	3478	4729	9527	4417
5.	Barpeta	4096	5490	8410	10087	8128	9869
6.	Nalbari	1852	2230	2864	2930	4323	5275
7.	Kamrup (M)	29291	43457	57509	64815	58638	66941
8.	Darrang	2139	31430	4472	4840	5095	5546
9.	Sonitpur	5889	55514	10041	11681	10742	12974
10.	Lakhimpur	3157	4808	7250	8524	7265	9808
11.	Dhemaji	2915	1958	3664	3784	4084	2990
12.	Morigaon	1286	1470	2980	3193	3375	3129
13.	Nagaon	5552	7948	12156	13966	13687	15961
14.	Golaghat	2144	4603	4342	4693	4697	6419
15.	Jorhat	6909	8568	14576	14279	13166	15146
16.	Sivasagar	4806	13080	8654	9327	11439	12955
17.	Dibrugarh	7780	9945	11434	14866	12782	13358
18.	Tinsukia	5428	5925	10375	10882	11046	12571
19.	Karbi-Anglong	1788	2342	4154	4211	4461	4918
20.	Dima-Hasao	505	136	229	411	349	483
21.	Karimganj	1048	1332	1814	1954	2650	2753
22.	Hailakandi	1363	1555	2018	2209	2098	2262
23.	Cachar	3214	5952	6599	9314	9164	10103
24.	Baksa	324	362	2095	2468	1827	1436
25.	Chirang	1041	1373	2442	2631	2214	2307
26.	Udalguri	1625	1625	1964	2597	2400	2677
27.	Kamrup (Rural)					6535	7033
<b>ASSAM</b>		<b>119126</b>	<b>241247</b>	<b>199076</b>	<b>226010</b>	<b>227367</b>	<b>249564</b>

Source: Office of the Commissioner of Transport, Assam.

**APPENDIX – 13.3**  
**DISTRICT-WISE NUMBERS OF MOTOR VEHICLE ON ROAD IN ASSAM**

Sl. No.	District	Total No. of Vehicles on Road					
		2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
1.	Dhubri	12233	22437	18443	23329	24011	29906
2.	Kokrajhar	8917	9573	5520	6739	10556	15611
3.	Bongaigaon	19338	40816	32573	37511	44711	53593
4.	Goalpara	14729	17606	19992	24692	36439	34494
5.	Barpeta	30289	30669	36263	44562	54651	62766
6.	Nalbari	22079	23664	23609	28611	32934	49304
7.	Kamrup (M)	421332	423943	532933 (p)	584217	645131	709103
8.	Darrang	29951	35393	34489	34191	34549	37076
9.	Sonitpur	65505	121019	18736	21693	22387	35361
10.	Lakhimpur	37409	42360	43868	49597	63583	73028
11.	Dhemaji	3920	4403	5036 (p)	16947	17615	29117
12.	Morigaon	11055	2304	16023	16733	20597	23731
13.	Nagaon	63391	64538	80044	85063	98406	115395
14.	Golaghat	12359	16842	10167	6872	19769	26188
15.	Jorhat	104252	116677	131467	145667	158874	174077
16.	Sivasagar	118554	120348	89084	98127	97800	110735
17.	Dibrugarh	70526	80952	91770	107057	108419	126458
18.	Tinsukia	53514	55034	66314	71526	77753	86508
19.	Karbi-Anglong	14371	15716	18787	21703	21963	26964
20.	Dima-Hasao	5434	5165	5079	5405	5416	5899
21.	Karimganj	12725	14006	12725	13248	16611	19338
22.	Hailakandi	9496	9880	9006	10905	15477	17815
23.	Cachar	35299	40905	47121	53960	62657	70202
24.	Baksa	978	1059	3255 (p)	3483	6412	7812
25.	Chirang	2521	3882	6284	8808	9096	14688
26.	Udalguri	1676	1676	5037	7623	10046	12744
27.	Kamrup (R)	-	-	-	-	9359	16967
<b>A S S A M</b>		<b>1180177</b>	<b>1320867</b>	<b>1363625</b>	<b>1528269</b>	<b>1725222</b>	<b>1984880</b>

Source: Office of the Commissioner of Transport, Assam.

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## CHAPTER – XIV

## INSTITUTIONAL FINANCE

## BANKING

The financial system is an important growth fundamental for the economy of a country or a state. A well structured and efficient network of financial institutions helps to boost economic growth. Banks are playing an important role in sustaining economic development by mobilizing deposits and credits. With the objective to bring more and more people within the institutional finance coverage, the banking network has been increased by opening new branches in the State. As a result, the number of reporting Bank Offices of all Scheduled Commercial Banks in Assam has been increased to 1861 as on March 2014 from 1262 as on March 2007. With the increase in the bank networking, the dependence per bank offices in Assam has been considerably decreased over the years and reduced from 62.15 Sq.km as on March 2007 to 42.14 Sq.km as on March 2014. However, average population covered per bank branch office in Assam was calculated at 16.8 thousand (based on Population Census 2011) as on March, 2014 compared to All India average of 10.5 thousand during the same period. The table 14.2 shows the number of Scheduled Commercial Bank Offices in Assam as well as in India and the trend of deposits and credit over the period of past ten years.

The contribution of Banking and Insurance sector towards State Gross Domestic Product is expected to reach 5.0 percent in 2013-14 from 3.0 percent in 2004-05. However, YOY growth of this sector is not very encouraging during the period 2012-13 (Provisional estimates) and 2013-14(Quick estimates) when compared with the figures of previous years.

**TABLE – 14.1**  
**PERCENTAGE GROWTH AND CONTRIBUTION OF BANKING AND INSURANCE**  
**SECTOR TOWARDS STATE GROSS DOMESTIC PRODUCT**  
**[AT CONSTANT (2004-05) PRICES]**

Item	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13(P)	2013-14(Q)
Annual Growth	-	11.8	21.8	14.3	11.6	12.5	20.1	13.8	1.35	1.34
Contribution to GSDP	3.0	3.3	3.8	4.2	4.4	4.5	5.2	5.6	5.4	5.0
Contribution to Service Sector	6.5	6.7	7.5	8.0	8.3	8.5	9.5	10.2	9.7	9.0

Source: Directorate of Economics and Statistics, Assam.

Banking sector comprises of Scheduled and non-scheduled banks. Scheduled banks are of two types viz. Scheduled Commercial Banks and Scheduled Cooperative Banks. Scheduled Commercial banks are classified into five types –State bank of India & its associates, Nationalized Banks, Private sector Banks, Regional Rural Banks and Others (Foreign Banks). As at the end of March, 2014, there were 1861 bank offices, of which, 48.0 percent bank offices were located in rural, 28.0 percent were in semi-urban and 23.0 percent urban areas. At the end of March 2014, growth of aggregate deposits in the State was 9.4 percent compared to 15.2 percent growth in the previous year. Growth of bank credit, on the other hand, was calculated at 11.0 percent during the year ending March 2014 compared to 20.0 percent growth of aggregate credit in the previous year. **In terms of national average of population to bank ratio, the State has a shortfall of about 650 bank branches. To bridge the gap, as a first step, it was decided to set up 200 new bank branches in the State during 2013-14.** [One of the important decisions that were taken in the Special State Level Banker's Meeting held on 06-02-2013 where the Governor, RBI and Hon'ble C.M. Assam were present. **Source: Budget Speech of Finance Minister, Assam, 2013-14]**

**TABLE – 14.2**  
**GROWTH OF SCHEDULED COMMERCIAL BANKS IN ASSAM AND INDIA**  
 (at the end of March)

Year	Number of Offices		Deposits (Rs. in Crore)		Credit (Rs. in Crore)	
	Assam	India	Assam	India	Assam	India
2004	1256	68645	14507	1511273	4612	880312
2005	1272	69969	17782	1746814	6271	1152468
2006	1234	68681	20872	2093042	8763	1517497
2007	1262	70711	25757	2598823	11154	1949567
2008	1317	74326	31666	3228817	13057	2394566
2009	1369	79058	39427	3937336	15115	168977
2010	1434	83997	49545	4601926	18311	3345619
2011	1504	89110	59101	5426510	21053	4076868
2012	1574	96059	67455	6174147	25171	4821527
2013	1682	104647	77730	7051332	28576	5506496
2014	1861	115822	85069	8028220	31713	6264290

\*Reporting Offices only.

Source: (1) 2004–2006, Basic Statistical Return of Scheduled Commercial Banks in India, Reserved Bank of India (Various issues).

(2) Quarterly Statistics on Deposits and Credit of Scheduled Commercial Banks, March 2007 to March 2014 of RBI.

The spread of Groups of Bank as noted above have a distinctive role to play in the economic scenario of the State. A comparative status of performance of the Bank Groups in Assam up to the second quarter of 2014-15 may be evident from the Table 14.3.

**TABLE -14.3**  
**BANK GROUP WISE SCHEDULED COMMERCIAL BANKS IN ASSAM**  
 (Upto September 2014)

Bank Group	No. of offices*	Deposits (Rs. in Crore)	Credit (Rs. in Crore)
State Bank of India and its Associates	325	33278	11578
Nationalized Banks	1033	39788	13241
Foreign Banks	2	201	113
Regional Rural Banks	421	6642	3869
Private Sector Banks	171	5603	3133
All Scheduled Commercial Banks	1952	85511	31935

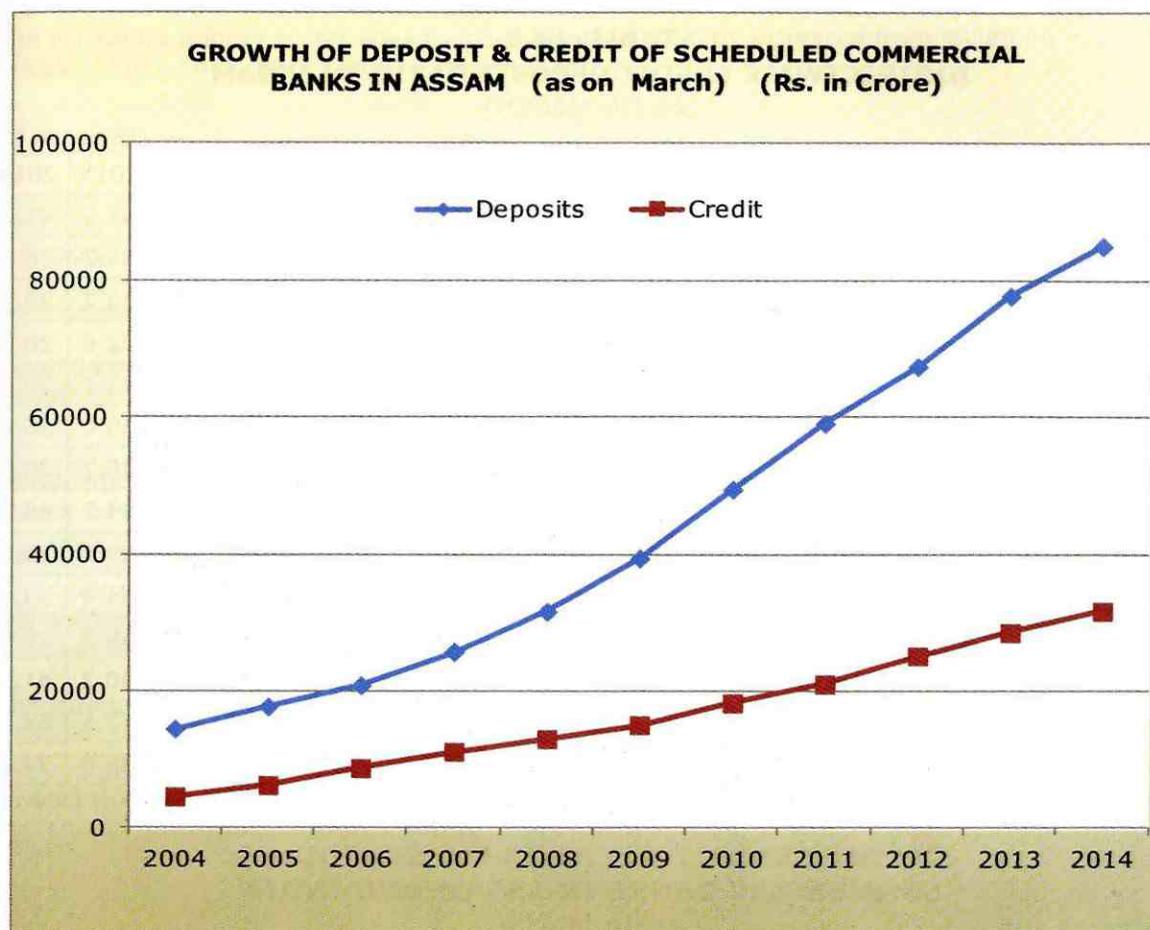
\*Reporting Offices only: Total may not be equal due to rounding off.

Source: Reserve Bank of India.

### GROWTH OF DEPOSITS AND CREDIT

The expansion of banking facilities in the State over the years augmented not only in respect of volume of deposits but also in respect of disbursement of credit. The aggregate deposit with Scheduled Commercial Banks in Assam, which was ₹77730 crore in March 2013, has increased to ₹85069 crore in March 2014. The volume of deposits has been increased by 9.0 percent in March 2014 over the previous year. The per capita deposit in the State has also been increased from ₹24913 in March 2013 to ₹27266 in March 2014. Thus, the per capita deposit in the State has recorded 9.4 percent increase over the previous year.

Like deposits, disbursement of credit by Scheduled Commercial Banks also recorded an impressive growth in Assam. The total volume of credit disbursed by the banks has been increased to ₹31713 crore in March 2014 from ₹28576 crore in March 2013 thereby recorded an impressive growth of 11.0 percent. However, the credit disbursement by the Scheduled Commercial banks in Assam shared only 0.51 percent of the total credit disbursed in the country as a whole during March 2014. The per capita credit has been increased to ₹10164 in March 2014 compared to ₹9159 in March, 2013.



### CREDIT - DEPOSIT RATIO

The Credit-Deposit ratio of all Scheduled Commercial Banks in Assam remained slightly high with 37.3 in 2013-14 (ending March 2014) compared to 36.8 percent during the year 2012-13. The credit-deposit ratio of all Scheduled Commercial banks was highest with 43.3 percent in 2006-07 (ending March 2007).

The Credit -Deposit Ratio of all Scheduled Commercial Banks in Assam, however, remained far below when compared with the All India ratio. During the year 2013-14 (ending March) the Credit-Deposit Ratio of all Scheduled Commercial Banks in India was 78.0 percent compared to 78.1 percent during 2012-13 (ending March).

Table 14.4 shows the Credit - Deposit ratio of all scheduled commercial banks in Assam and India from 2001 to 2014. Table 14.5 shows the status of Credit-Deposit ratio in the districts of Assam.

**TABLE - 14.4**  
**CREDIT DEPOSIT RATIO OF ALL SCHEDULES COMMERCIAL BANKS IN ASSAM AND INDIA**

	(As on March)													
Year	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Assam	32.0	31.7	29.3	31.8	35.2	41.9	43.3	41.2	38.3	37.0	35.6	37.3	36.8	37.3
India	56.7	58.4	59.2	58.2	65.9	72.5	75.0	74.2	72.6	72.7	75.1	77.5	78.1	78.0

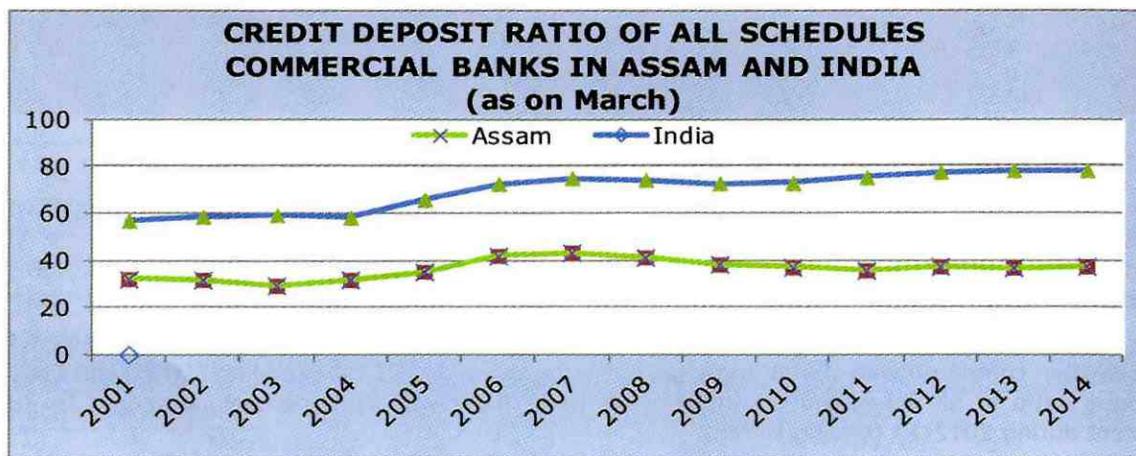
Source: (i) Basic Statistical Return of Scheduled Commercial Banks (2001-2006); and  
(ii) Quarterly Statistics on Deposits and Credit of Scheduled Commercial Banks, March 2007 to March 2014, Reserve Bank of India.

**TABLE-14.5**  
**DISTRICTWISE CREDIT DEPOSIT RATIO IN ASSAM**  
(AS ON MARCH)

(Figure in %)

DISTRICT	2010	2011	2012	2013	2014	DISTRICT	2010	2011	2012	2013	2014
Kamrup	91.8	86.3	49.9	44.8	42.0	Nagaon	45.0	43.1	43.8	41.5	41.7
Bongaigaon	30.1	26.8	32.5	34.7	37.5	Tinsukia	35.2	32.8	34.3	35.2	36.2
Goalpara	46.8	38.9	42.4	39.2	38.7	Karbi anglong	34.2	37.9	37.3	32.2	28.7
Hailakandi	41.9	34.6	34.0	35.4	34.3	Karimganj	35.6	33.6	32.9	32.5	30.0
Morigaon	57.2	55.7	56.3	56.5	60.0	Dima hasao	44.8	34.5	25.2	21.1	20.6
Sonitpur	47.6	45.2	47.6	47.5	48.1	Dhubri	43.3	39.2	41.2	39.0	36.8
Darrang	55.3	48.9	52.5	53.8	53.8	Kokrajhar	29.7	26.7	30.4	26.7	26.9
Nalbari	54.8	50.1	50.6	47.6	49.5	Barpeta	43.2	41.6	43.5	44.2	45.2
Dibrugarh	23.3	23.0	27.1	25.0	32.0	Cachar	36.7	33.4	33.8	33.2	35.0
Lakhimpur	56.1	55.3	61.6	62.1	61.7	Kamrup(M)	28.1	28.3	34.0	34.4	33.4
Jorhat	40.1	36.7	40.5	39.2	43.5	Chirang	38.5	32.0	35.4	39.5	29.6
Sivasagar	47.8	43.0	43.1	41.8	44.4	Baksa	50.8	45.3	49.0	50.2	41.0
Golaghat	51.7	43.7	49.4	46.2	47.0	Udalguri	61.2	56.1	64.8	67.5	64.6
Dhemaji	51.9	49.7	60.9	65.4	65.0	Assam	37.0	35.6	37.3	36.8	37.3

Source: Quarterly Statistics on Deposits and Credit of Scheduled Commercial Banks, Reserve Bank of India



### PRIORITY SECTOR ADVANCES

The outstanding priority-sector advances showed a growth of 15.45 percent at the end of March 2014 over the end of March 2013 according to the State Level Bankers' Committee reports. The agriculture and allied sector was disbursed ₹7497.58 crore in 2013-14 of which Scheduled Commercial Banks shared 67.9 percent, Regional Rural Banks 19.2 percent and Co-operative Banks 1.0 percent. Remaining 11.9 percent was disbursed under various schemes of NEDFi, NABARD (RIDF), MIDC and SIDBI. The Agriculture and allied sector credit during the period was disbursed to 12.63 lakh accounts. The percentage share of priority sector loans extended to agriculture & allied activities achieved all India bench mark of 18 percent during the year 2009-10 in the State and surpassed the benchmark in subsequent years. The disbursement of advances to agriculture & allied activities has steadily increased from ₹3868.37 crore [18.50%] in 2009-10 to ₹4557.40 crore [19.11%] in 2010-11. The percentage of disbursement of advances to agriculture & allied activities to total priority sector advance, on the other hand, slightly less [19.78 percent] during 2013-14 compared to 20.15 percent in 2012-13 according to the latest report of the State Level Bankers' committee. However, from 2004-05 to 2013-14, the priority sector advances have been above the bench-mark of 40 percent of aggregate bank credit.

The per capita priority sector advances has been significantly increased from ₹6226.00 in 2012-13 to ₹6938.00 in 2013-14 (11.44 percent increase).

**TABLE – 14.6**  
**ADVANCES OUTSTANDING UNDER PRIORITY SECTOR**

(Rupees in Crore)									
Sectors	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
Aggregate Advances	9811.15	12989.44	16081.43	17750.99	20910.97	23843.62	30363.22	32825.11	37902.92
Total Priority Sector Advance	4248.21 [43.30]	6148.70 [47.34]	8322.25 [51.75]	10705.50 [60.31]	11314.92 [54.11]	13242.59 [55.54]	16080.72 [55.83]	19429.10 [59.19]	21645.83 [57.11]
Agriculture & Allied Activities	1212.84 [12.36]	1596.74 [12.29]	2158.80 [13.42]	2345.86 [13.22]	3868.37 [18.50]	4557.40 [19.11]	5733.91 [19.91]	6614.39 [20.15]	7497.58 [19.78]
Industries	685.52 [6.99]	1018.13 [7.84]	1281.63 [7.97]	1460.25 [8.23]	2054.15 [9.82]	2490.30 [10.44]	2819.38 [9.79]	4326.50 [13.18]	5158.53 [13.61]
Per capita Priority Sector Advances [Figure in Rupees]	1594	2307	3122	4016	4245	4968	5153	6226	6938

\* Figure within bracket indicates percentage share to Aggregate Advances.

❖ Per Capita Priority Sector Advances calculation based on the Population Census 2001 and for 2011-12 to and 2013-14, Census-2011

Source: Various Reports of State Level Bankers Committee, Assam.

## REGIONAL RURAL BANKS

Regional Rural Banks [RRBs] were established under the Regional Rural Banks Act, 1976 with an objective to give a boost to rural economy by providing rural credit to farmers, agricultural labourers, artisans and small entrepreneurs etc.

At present, there are two **RRBs** in the State - Assam Gramin Vikash Bank [AGVB] and Langpi Dehangi Rural Bank [LDRB]. While the Assam Gramin Vikash Bank is operating both in the Brahmaputra Valley and Barak Valley covering 25 districts with 396 branches, the service area of the Langpi Dehangi Rural Bank is confined within the two hill districts of Assam with 57 bank branches as on March 2014.

Out of the total branch network of the Assam Gramin Vikash Bank, 299 branches located in rural areas, 81 branches in semi-urban areas and 16 branches in urban areas. In respect of Langpi Dehangi Rural Bank, 51 branches located in rural areas and 6 branches located in semi-urban areas.

The aggregate deposits of RRBs was ₹6961.07 crore at the end of March 2014 compared to ₹5879.37 crore at the end of March 2013. The aggregate deposits of RRBs was ₹5180.33 crore at the end of March 2012. The growth of aggregate deposits of RRBs was calculated at 18.4 at the end of March 2014 over March ending 2013. The aggregate volume of credit disbursed by these banks was also increased to ₹3890.14 crore at the end of March 2014 from ₹3309.18 crore as on March 2013 indicating an increase of 17.6 percent. Credit-Deposit ratio of these banks has reached 55.88 at the end of March, 2014 but remained slightly lower compared to 56.28 as on March 2013. The performance of Regional Rural Banks is presented in the Table 14.7.

### RECOGNITION TO ASSAM GRAMIN VIKASH BANK FOR FINANCIAL INCLUSION INITIATIVE

Amidst competitive pressures, the Banking sector across the country has been putting in consistent efforts towards financial inclusion. To recognize such efforts, Skoch Group recently awarded the best performers of Financial Inclusion and Financial Deepening for the year 2013-14, in a function held in New Delhi.

Assam Gramin Vikash Bank has also been playing a major role in the field of financial inclusion. To bring every household of Assam under the ambit of banking, the bank opened 3, 53,781 no. of Basic Saving Bank accounts through its Ultra Small branches and BC outlets. The Bank has also been regularly conducting Financial Literacy Camps in FI villages. During the year 2013-14, all the branches of the Bank conducted 7163 no. of Financial Literacy Camps in the allotted FI villages.

To mark this performance of the Bank in the field of Financial Inclusion, the Bank has been conferred with the prestigious "Skoch Award (Gold)" by Skoch Group. The coveted Award was received by Shri Shio Shankar Singh, Chairman of the Bank in a sparkling function held at India Habitat Centre, New Delhi on 21st June, 2014.

It is mention worthy that the organizers invited nominations from eligible banks and financial institutions working in the field of Financial Inclusion and Financial Deepening for the "Skoch Awards-2014", in response to which Assam Gramin Vikash Bank sent its entry furnishing the data of Bank's contribution for Financial Inclusion and Financial Literacy in the area of its operation.

The Jury of the event was impressed to select the nomination of Assam Gramin Vikash Bank for the "Skoch Award-2014 (Gold)" under Financial Inclusion category and accordingly gave away the Award comprising a Trophy and two Merit Certificates to Shri Shio Shankar Singh, Chairman, AGVB. While Smt Minakshi Lekhi, Hon'ble Member of Parliament presented the Trophy, Shri Vinod Rai, Ex-Comptroller and Auditor General, Govt. of India handed over the Certificates to Shri Singh for qualifying among India's best Financial Inclusion and Financial Deepening Projects -2014. The other recipients of "Skoch Award-2014" under various other categories include Canara Bank, Union Bank of India, Bank of India, Yes Bank, Axis Bank, Bank of Maharashtra, Kashi Gomti Samyukt Gramin Bank, Uttakhand Gramin Bank, etc.

Source: AGVB Barta, Quarterly Journal- April-June, 2014

**TABLE - 14.7**  
**ACHIEVEMENTS OF REGIONAL RURAL BANKS IN ASSAM**

Period (as on)	Achievements under Annual Credit Plan			Credit - Deposit Ratio (%)	
	Annual Target for All Banks	Achievement of All Banks	Achievement of RRBs	All Banks	RRBs
31.3.2008	175518.40	155511.33	32211.73 (20.71)	50.48*	52.64
31.3.2009	221924.24	150226.67	37082.91 (24.68)	45.85*	49.62
31.3.2010	257892.21	250725.49	52181.55 (20.81)	42.05*	47.50
31.3.2011	354847.18	289468.82	70261.61 (24.27)	39.71*	47.94
31.3.2012	449985.62	458541.64	76721.43 (16.73)	44.64*	53.75
31.3.2013	642041.89	463765.9	61755.56 (13.32)	43.56*	56.28
31.3.2014	1067096.67	647419.05	78707.27(12.16)	43.48*	55.88

Figure in bracket shows the percentage share of achievements of RRBs to All Banks.

\*Lending by NEDFI and under RIDF by NABARD has been incorporated as priority sector advances. Hence C.D ratio figure is different from the figure shown in the Table-14.4.

Source: State Level Bankers Committee reports of various years.

## FINANCIAL INCLUSION OF VILLAGES

Financial inclusion is an important priority of the Govt. of India. The objective of financial inclusion is to extend financial services to the large un-served population of the country to unlock its growth potential. To extend the reach of banking to those outside the formal banking system, various initiatives are undertaken by the Govt. of India and RBI from time to time. As per direction of Govt. of India regarding opening of at least one bank account for each family in FI villages latest by 30<sup>th</sup> June 2012, all villages with population of over 2000 have been covered as on 31-3-2012. Out of the total villages in Assam 5244 villages with population more than 1000 but below and 2000 have been identified as not having access to banking services. Of these, 3233 villages have been allocated to Commercial Banks and 1991 villages to RRBs for providing banking services by 31-3-2013. [Source: SLBC Report for the quarter ending March 2012 and State Focus Paper for the XII FY Plan 2012-17 (with detailed suggestion for 2013-14-NABARD Assam Regional Office)].

## PRIME MINISTER'S JAN DHAN YOJANA

The scheme has been started with a target to provide 'universal access to banking facilities' starting with "Basic Banking Accounts" with overdraft facility of ₹5000 after six months and RuPay Debit card with inbuilt accident insurance cover of ₹1 lakh and RuPay Kisan Card.

Under the scheme:

1. Account holders will be provided zero-balance bank account with RuPay debit card, in addition to accidental insurance cover of ₹1 lakh(to be given by 'HDFC Ergo').
2. Those who open accounts by January 26, 2015 over and above the ₹1 lakh accident, they will be given life insurance cover of ₹30,000(to be given by LIC).
3. After Six months of opening of the bank account, holders can avail ₹5,000 overdrafts from the bank.
4. With the introduction of new technology introduced by National Payments Corporation of India (NPCI), a person can transfer funds, check balance through a normal phone which was earlier limited only to smart phones so far.
5. Mobile banking for the poor would be available through National Unified USSD Platform (NUUP) for which all banks and mobile companies have come together.

In Assam 298819 households have been covered under the Scheme till December 2014.

## AGRICULTURAL CREDIT

Credit is an essential requirement for revitalizing agriculture sector. Within the priority sector, the share of agriculture advances in the State was more or less at the same level [34.6 percent] during the year 2013-14 with that of 2012-13 [34.04 percent] but remained lower compared to 2011-12[35.66 percent]. On the other hand, the agricultural credit constitutes 19.78 percent to the total bank credit as on March 2014 [according to the figures published by the State Level Bankers' Committee, Assam]. The agricultural credit, thus, remain above the All India Bench Mark level of 18.0 percent for five consecutive years since 2009-10 to 2013-14 in Assam. According to the State Level Bankers' Committee Report, banks operating in the State could disburse agricultural credit of ₹ 2756.66 crore during the year 2013-14 as against the annual commitment of ₹4564.00 crore or 60.0 percent of the target amount. During the year 2012-13, total agricultural credit disbursed in the State was ₹1851.01 crore against the annual commitment of ₹3765.89 crore or 49.0 percent of the annual target for the said year.

**TABLE - 14.8**  
**TREND OF CREDIT FLOW TO AGRICULTURE AND ALLIED**  
**ACTIVITIES UNDER ANNUAL CREDIT PLAN**

Year	Advance to Agriculture & Allied Activities (Rs. in crore)	Crop Loans (Rs. in crore)	% Share of crop Loan to Total Agricultural Advances	Per Capita Crop Loan (Rupees)	Crop Loan per farmer family# (Rupees)
2003-04	100.81	43.82	43	16.44	161
2004-05	243.76	79.46	33	29.81	293
2005-06	331.89	84.31	25	31.63	311
2006-07	468.91	79.44	17	29.80	293
2007-08	566.71	121.61	21	45.62	448
2008-09	523.38	203.12	39	76.20	749
2009-10	814.69	359.39	44	134.82	*1307
2010-11	876.76	373.63	43	139.94	*1359
2011-12	2002.47	1082.03	54	346.80	*3935
2012-13	1851.01	908.28	49	291.11	*3303
2013-14	2756.66	1460.02	53	468.00	\$5368
(%) Growth 2013-14 over 2012-13	48.9	60.7	-	60.8	62.5

# Total Farmer Family=27.12 lakh as per Agriculture Census 2000-01.

\* Total Farmer Family =27.50 lakh as per Agriculture Census 2005-06.

\$Total Farmer Family = 27.20 lakh as per Agriculture Census 2010-11.

Source: Reports of State Level Bankers Committee, Assam.

However, the annual growth of advances to agriculture & allied activities during the year 2012-13 was 48.9 percent more over 2012-13. The growth of crop loans also recorded 60.7 percent during the same period.

#### FINANCING UNDER KISHAN CREDIT CARD SCHEME

Like other states of the Country, the banks operating in Assam have been extending timely, cost effective and hassle free credit support to the farmers of the State through Kishan Credit Card [KCC] Scheme which was introduced in 1998-99. Kishan Credit Card scheme has facilitated in augmenting credit flow for agricultural activities. The scope of the KCC has been broad-based to include term credit and consumption needs. During the year 2013-14, 3.08 lakh KCC were issued to the farmers of the State and sanctioned ₹1505.67 crore compared to 2.66 lakh KCC issued and sanctioned ₹932.20 crore in 2012-13.

Cumulatively about 15.87 lakh KCCs have been issued in the State up to March 2014 since introduction of the scheme. The Scheme, thus, covered around 58.34 percent of the total farmer family (there are 27.20 lakh farmer families as per Agriculture Census 2010-11) of the State at the end of March 2014.

**TABLE - 14.9**  
**ADVANCES UNDER KISHAN CREDIT CARD SCHEME**

(Rupees in lakh)

Year	Annual Achievement		Cumulative Achievement	
	Card Issued (No.)	Amount	Card Issued (No.)	Amount
2003-04	94377	9728.64	-	-
2004-05	86822	9382.86	172965	22202.28
2005-06	70238	9677.79	339750	38839.94
2006-07	50067	7862.03	359395	40580.52
2007-08	62132	16365.83	329932	67908.97
2008-09	103361	37589.23	480393	104682.06
2009-10	149822	43055.94	630070	158372.04
2010-11	163063	50495.87	793801	209071.23
2011-12	371474	130329.35	967220	307834.01
2012-13	265797	93219.58	1329203	393538.41
2013-14	308306	150567.42	1586687	1551091.21

Source: Reports of State Level Bankers Committee, Assam.

## MICRO-FINANCE

The Micro Finance Scheme is an effective instrument for financial inclusion which was launched to meet the financial demands of small entrepreneurs as well as regarded as an effective programme for poverty reduction as well empowerment of the poor. The micro-finance programme of NABARD, which began in 1992 with formation of 500 Self Help Groups (SHGs), has emerged as the largest micro-finance programme in the world. The Self-Help Group – Bank linkage programme, the main micro-finance model and institutional finance mechanism to provide financial credit support to the micro-entrepreneurs (including farmers) in the country as a whole, has been proved to be the most cost effective credit delivery system in India. The programme has also helped in providing banking services to the uncovered rural poor.

The focus of SHG-Bank linkage programme is seen to be picking up its importance lately in the State of Assam. However, the programme has gathered momentum from the year 2001-02 onwards. Till the end of March 2014 all total 589268 SHGs have been bank linked in the State out of which 269851 SHGs were credit linked.

Cumulative position of bank linked SHGs presented in the Table -14.10.

**TABLE - 14.10**  
**SELF-HELP GROUPS FINANCED BY BANKS**

(Rupees in lakh)

Year	Total bank linked SHGs		Deposit linked		Credit Linked	
	Number	Amount	Number	Amount	Number	Amount
2004-05	122304	20975.75	79592	3409.05	42712	17566.70
2005-06	269917	48239.13	175565	9846.77	94352	38392.36
2006-07	230902	58040.52	121474	5261.61	109428	52778.91
2007-08	257863	57417.70	142147	6044.72	115716	51372.98
2008-09	305132	77365.49	166740	7485.51	138392	69879.98
2009-10	374745	92724.79	210890	9123.46	163855	83601.33
2010-11	433954	118051.17	240032	11195.29	193922	106855.88
2011-12	499183	139741.00	272822	10928.00	226361	128813.00
2012-13	540566	164138.86	281018	12228.9	259548	151909.96
2013-14	589268	175686.05	319417	15092.27	269851	160593.78

Source: Reports of State Level Bankers Committee, Assam.

## SHG-BANK LINKAGE UNDER SGSY

Swarnajayanti Gram Swarojgar Yojana is the mother programme of all poverty alleviation programmes. The objective of the programme is to uplift economic status of the rural people living below the poverty line by providing sustainable economic activities with bank loan and Government subsidy.

Up to the end of March 2014, about 2.70 lakh SHGs have been covered under the ambit of bank credit in the State out of which 1.39 lakh SHGs have been covered SGSY programme. Cumulative progress of SHG-Bank linkage programme under SGSY shown in the Table -14.11.

**TABLE - 14.11**  
**SHG-BANK LINKAGE UNDER SGSY**

(Rupees in lakh)

Year	Total Credit Linked SHGs		Credit linked SHGs under SGSY	
	Number	Amount	Number	Amount
2004-05	42712	17566.70	20388	11273.74
2005-06	94352	38392.36	48235	25024.66
2006-07	109428	52778.91	54735	36549.70
2007-08	115716	51372.98	54790	31006.57
2008-09	138392	69879.98	69144	45898.88
2009-10	163855	83601.33	84678	55161.36
2010-11	193922	106855.88	102166	74784.79
2011-12	226361	128813.00	123473	94423.5
2012-13	259548	151909.96	134107	106687.46
2013-14	269851	160593.78	139340	105503.75

Source: Reports of State Level Bankers Committee, Assam.

**NATIONAL BANK FOR AGRICULTURE AND RURAL DEVELOPMENT (NABARD)**

During 2013-14, the NABARD disbursed refinance to banks in the State to the tune of ₹108.33 crore compared to ₹122.82 crore in 2012-13. During the year 2011-12 refinance disbursed by NABARD was ₹168.37 crore. Agency wise, purpose wise and activity wise refinance disbursed by the NABARD are shown in the Table 14.12.

**TABLE – 14.12**  
**AGENCY WISE, PURPOSE WISE AND ACTIVITY WISE**  
**REFINANCE DISBURSED BY NABARD**

(Rupees in lakh)

Purpose	2012-13			2013-14		
	Commercial Banks	RRBs	Total	Commercial Banks	RRBs	Total
Minor Irrigation	0.000	0.750	0.750	92.569	0.770	93.339
Land Development	0.000	17.750	17.750	2.493	0.000	2.493
Farm Mechanization	0.000	705.890	705.890	421.150	167.100	588.250
Plantation & Horticulture	0.000	0.000	0.000	2124.115	40.340	2164.455
Animal Husbandry (Dairy, Poultry, Sheep, Goat & Piggery)	34.173	0.000	34.173	1140.734	918.738	2059.472
Fisheries	0.000	0.000	0.000	41.715	40.922	82.637
Market Yard & Godown	243.667	0.000	243.667	0.000	0.000	0.000
Forestry	0.000	0.000	0.000	5.983	0.000	5.983
RNFS (i/c Rural Housing)	10742.499	19.892	10762.391	0.000	0.000	0.000
Agro processing	0.000	517.370	517.370	290.328	0.000	290.328
Others (SHG, SRTO-Truck etc)	0.000	0.000	0.000	5545.714	0.000	5545.714
<b>Total</b>	<b>11020.339</b>	<b>1261.652</b>	<b>12281.991</b>	<b>9664.801</b>	<b>1167.870</b>	<b>10832.671</b>

Source: National Bank for Agriculture and Rural Development.

**INFRASTRUCTURE SUPPORT UNDER RURAL**  
**INFRASTRUCTURE DEVELOPMENT FUND (RIDF)**

To meet the major infrastructure gaps, the Government of Assam has taken initiative for development of infrastructure in rural areas with the financial assistance from NABARD under RIDF. Till the end of December 2014, NABARD has sanctioned 2526 projects involving RIDF loan of ₹3279.72 crore, since inception. Out of the total loans sanctioned ₹2651.26 crore, ₹1934.87 crore has been disbursed to the State Government as on 31-12-2014. As against 2526 projects sanctioned 909 projects have been completed and remaining projects are under various stages of implementation.

The activity wise number of projects and amount sanctioned including amount released under RIDF are given below:

**TABLE – 14.13**  
**ACTIVITY WISE PROJECT WISE INFRASTRUCTURE DEVELOPMENT LOANS**  
**SANCTIONED AND DISBURSED BY NABARD UNDER RIDF**

Activity	No. of Projects	Loan sanctioned	(Rupees in crore)
			Loan disbursed (Cumulative upto 31-12-2014)
Rural Bridges	1373	1443.15	1069.03
Rural Roads	382	674.47	254.61
Irrigation	196	376.50	46.68
Flood Control	111	477.15	204.67
MA & AH Project	107	89.03	25.12
Small Hydel Project	2	46.14	46.14
Marketing Infrastructure	6	33.99	10.20
Beel Fisheries Projects	22	27.80	8.99
Pay & use toilets (50 units)	21	8.30	2.49
Meat Processing	1	3.92	3.91
Revitalisation of sericulture Farms	40	23.04	0.00
Rural Godowns	251	49.46	0.00
Cattle Feed Plant	1	4.73	0.00
Soil Conservation	12	11.21	1.57
Handloom Silk Dying	01	10.73	0.00
<b>Total</b>	<b>2526</b>	<b>3279.72</b>	<b>1934.87</b>

Source: NABARD Regional Office, Guwahati.

#### **NORTH EASTERN DEVELOPMENT FINANCE CORPORATION LTD [NEDFI]**

NEDFi, since its inception has been playing a crucial role in catalyzing the development of economy of the Northeast India. NEDFi has been instrumental for identifying, financing and nurturing eco-friendly and commercially viable industries, infrastructure and agro-horticultural projects in the region. NEDFi is also giving special emphasis to cover small enterprises and micro finance to the needy at the grassroots in the region.

During the year 2013-14, the Corporation sanctioned ₹457.51 crore and disbursed ₹364.69 crore in the Region. The sanction and disbursement in the State of Assam was ₹256.84 crore and ₹184.88 crore respectively.

#### **MICRO FINANCE SCHEME**

NEDFi's **Micro Finance Scheme** has proved to be an effective instrument for financial inclusion where credit is routed to SHGs/JLGs and individuals through established and good Non-Government Organizations (NGO)/Micro Finance Institutions (MFIs) to meet the needs of smaller entrepreneurs (preferably Self-Help Group or individual) of the region for taking up productive activities in the field of agriculture, micro industries and service sectors including transportation, etc. NEDFi has completed its fifteen years of intervention towards Micro Finance Service in the financial year 2013-14.

Till the end of March 2014, the Corporation has crossed ₹300.00 crore marks in both sanctions and disbursements of micro finance. NEDFi has sanctioned ₹318.57 crore and disbursed ₹306 .00 crore under the scheme and succeed to reach out to 4.5 lakh beneficiaries in the NE Region.

**TABLE – 14.14**  
**SUMMARY OF AMOUNT SANCTIONED AND AMOUNT DISBURSED**  
**UNDER MICRO FINANCE IN ASSAM (as on March, 2014)**

(Amount Rupees in Lakh)

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
Amount Sanctioned	119	154	243	93	150	501	1170	1344	1196	3031	4743	3691	5520
Amount Disbursed	82	145	204	140	140	499	515	1120	1490	3346	3908	3866	5570

Source: Annual Reports of NEDFi various years.

During the year 2013-14, NEDFi has launched another new scheme called "NEDFi Equity Fund Scheme" to provide Equity assistance to those NEDFi supported MFIs which are transforming to NBFC-MFI. Two MFIs viz., Nightingale Finvest Pvt. Ltd of Assam and YUV Financial services Pvt. Ltd of Manipur have been identified for the purpose and given equity support of ₹50.00 lakh each to strengthen their capital base and maintain minimum capital requirement as per RBI guidelines.

The Corporation also signed Memorandum of Agreement with National Scheduled Castes Finance and Development Corporation (NSCFDC) for availing line of credit so that NEDFi has able to assist marginalized people belonging to scheduled castes at subsidized rate of interest.

#### DISBURSEMENT OF CENTRAL SUBSIDIES

The Corporation is a nodal agency for disbursement of Central Subsidies under NEIP 1997 & NEIIPP 2007, which is administered by the Department of Industrial Policy and Promotion, Ministry of Commerce, Govt. of India. The Corporation is thus facilitating disbursement of Central subsidies to various industrial units in the region. The details of disbursement under various schemes during the financial year 2013-14 may be evident from the table below.

**TABLE – 14.15**  
**SCHEMewise DISBURSEMENT OF SUBSIDIES BY NEDFi**

(Rs. in Crore)

Scheme	2012-13	2013-14	Cumulative as on 31-3-2014
Central Transport Subsidy (CTS)	228.42	205.46	2453.84
Central Capital Investment Subsidy(CCIS)	128.40	132.73	463.17
Central Interest Subsidy(CIS)	24.99	18.10	165.26
Central Comprehensive Insurance Subsidy	0.94	0.43	11.53
<b>Total</b>	<b>382.75</b>	<b>356.72</b>	<b>3093.80</b>

#### NEDFi'S PERFORMANCE IN ASSAM AND NER

The slowdown in the national economy coupled with slowdown in the investment cycle, high inflation and volatile currency and interest rates the economy of the NE States got affected and therefore there was hardly any investment in the region. Against this unfavourable situation loans sanctioned and disbursed by NEDFi in the entire N.E. Region recorded a modest increase of 1.0 percent and 4.6 percent during the year 2013-14 respectively compared to the previous year. However, in respect of Assam, the loan sanctioned by NEDFi was not very encouraging and remained 1.4 percent less during the year 2013-14 compared to the previous year. Similar trend was also witnessed in respect of loans disbursement in Assam. Loans disbursement in Assam was 11.3 percent less during the year 2013-14 over the previous year. Loan sanctioned and disbursed by the NEDFi to the North-Eastern States including Assam may be evident from the table 14.16.

**TABLE – 14.16**  
**YEAR-WISE LOAN SANCTIONS AND DISBURSEMENTS BY NEDFi**  
(As on March 2014)

(Rupees in lakh)

Year	Sanctions		Disbursements	
	Total NER	Assam	Total NER	Assam
2005-06	13132	7053	10431	5342
2006-07	13872	8545	9424	6680
2007-08	27945	16588	11643	8872
2008-09	26689	21351	18409	13071
2009-10	33341	22370	20808	13512
2010-11	42138	33135	28138	19963
2011-12	43223	26544	33456	23854
2012-13	45349	26047	34873	20842
2013-14	45751	25684	36469	18488

Source: NEDFi

TABLE – 14.17

## YEAR-WISE NUMBER OF PROJECTS SANCTIONED (AS ON MARCH 2014)

States	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
Assam	110	98	66	73	72	72	95	145	109
NER	285	300	169	173	211	198	253	535	543

Source: NEDFi

## ASSAM FINANCIAL CORPORATION

The Assam Financial Corporation is considered to be the torch bearer of the industrial development of the region. The Corporation has been striving to boost up its performance and persistently working for it. On the sanction and disbursement front, in spite of various constraints, the Corporation is continuing its lending operations. At present the Corporation has 2 numbers of DGM level branches, 4 numbers of Manager level branches, 4 numbers of Assistant Manager level branches and 4 numbers Field Offices to provide need based customer service. It is worth mentioning that the Corporation obtained Quality Management Certificate confirming to the ISO 9001:2008 standards in service and delivery and has become an ISO certified organization w.e.f 10<sup>th</sup> April 2012 for a period of 3 years.

On the sanction and disbursement front, the Corporation has been continuing its lending in spite of various challenges. However, there has been a decline in its business during the financial year 2013-14 with total sanction of ₹1827.39 lakh and disbursement of ₹1798.39 lakh compared to ₹2214.45 lakh and ₹2069.31 lakh respectively in the financial year 2012-13.

The revenue earned from non-fund based activities has not been very encouraging during the financial year 2013-14 as revenue of ₹3.05 lakh has been generated in comparison to ₹4.75 lakh in the previous year. The Corporation has been able to achieve a highest ever recovery of ₹1563.54 lakh in the financial year 2013-14 compared to ₹1129.00 lakh in the previous year registering a growth of 38.49 percent. As a result the Gross NPA has been come down to 34.57 percent in comparison to 36.31 percent in the previous year. But, the net NPA has increased to 9.08 percent during the year from 3.38 percent in the previous year.

With infusion of fresh share capital of ₹1000.00 lakh from the State Government the financial health of the Corporation (Net Worth) has been improved to a great extent. The Net-Worth of the Corporation stands at ₹3370.47 lakh during 2013-14 compared to ₹2312.52 lakh in 2012-13.

The corporation continued to support Micro finance Institutions under Chief Minister's Micro Finance Scheme (CMMF) during the year 2013-14 also. The amount of loan sanctioned and disbursed during the financial year 2013-14 stands at ₹55.00 lakh and ₹25.00 lakh in comparison to ₹25.00 lakh and ₹350.00 lakh in the previous year. As against the micro finance fund of ₹1000.00 lakh provided by the Govt. of Assam, the cumulative sanction and disbursements stands at ₹1856.00 lakh and ₹1181.00 lakh respectively at the end of 31-3-2014. However, micro finance lending of the Corporation has substantially declined due to imposition of restriction on NGO-MFI from carrying out micro finance activities during the last two financial years.

The name of the 'Venture Capital Fund' of the Corporation which was launched to encourage the new and first generation entrepreneurs with innovative activities has been changed to "AXOM FUND" during the year 2013-14. During the year the Corporation disbursed ₹50.00 lakh to one unit. The Corporation has earmarked sanction and disbursement target of ₹200.00 lakh and ₹100.00 lakh respectively for the financial year 2014-15.

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## CHAPTER – XV

## CO-OPERATION

The Cooperative institutions have advantages in tackling the problems of poverty alleviation, food security and employment generation and considered as a potential instrument for delivery of goods and services. This delivery mechanism of goods and services to the people through cooperative window is considered to be the best as it associates with the target group in its process of implementation.

Since the Assam economy is predominantly rural in character, an extensive network of sound and viable co-operatives can help tremendously in giving right shape to the socio-economic structure of Rural Assam in particular and for achieving the much needed overall economic growth and social transformation of the State. But, the co-operative sector failed to achieve its desired objective due to and existence of good numbers of uneconomic and dormant cooperatives. Therefore, to strengthen the role of existing Cooperative Societies towards socio-economic development as well as their impact on poverty reduction, employment generation and social integration the Assam Cooperative Act, 2007 has been enacted to give renewed fillip to the effort of the State Government to promote voluntary formation, autonomous functioning, democratic control and professionalism to the cooperative societies.

However, setting up of the Assam Rajiv Gandhi University of Cooperative Management under academic guidance of Indian Institute of Management, Ahmadabad under the State Government initiative brings some hope to the Cooperative sector to achieve professionalism and quality performance of various societies in the State as envisaged.

**ACHIEVEMENT OF DAIRY COOPERATIVE**

The World Bank has provided ₹33 crore to West Assam Milk Producers' Cooperative Union Ltd (Wamul), a dairy cooperative of Assam, to implement the Assam dairy development plan. The allocation given is part of the bank-aided Assam Agricultural Competitiveness Project and focuses on supporting farmers' productivity enhancement and increasing organized market access. The implementation of the programme has been termed as satisfactory.

Wamul sells its products under the brand *Purabi*, which has become a household name and has made good progress in recent years after going through a bad phase since its inception.

The Bank help in financing the dairy development plan also help to establish a bovine breeding policy by adopting common protocols and standard operating procedures for implementing all breeding activities, rules for implementing the prevention and control of infectious diseases in animals with the objective of creating an enabling environment for sustainable development of the livestock and dairy sector in the State.

In the dairy sector, the bank has helped set up 311 dairy cooperative societies and 300 milk producer institutions. The role of the dairy cooperative societies consists of procuring milk from members and marketing the same through different marketing channels like nearby markets and government dairy plants.

The bank's intervention has resulted in more income to the farmers of the Jamuna valley dairy cooperative society which have motivated the producers to concentrate on cattle rearing. The society has 1,000 heads of cattle with a yield of 1,400 litres of milk daily at present. Prior to the formation of the Jamuna valley dairy cooperative society in Nagaon in 2007, the milk producers had to sell their produce to the vendors who buy milk according to their own requirement. The remuneration offered to milk producers was on the lower side and nor did the producers have any credit linkages. Subsequent to the formation of the Jamuna valley dairy cooperative society, the society arranges for milk collection twice a day and milk is now received only after testing its quality. At present, ₹37 per litre is being paid by the society to its members from the earlier ₹12. Credit has also been advanced to the producers from the profit of the society for emergency purposes only for treatment of cattle, purchase of feed and fodder and others.

The Cooperation Department of Assam has given special thrust in certain areas at present for revival of the cooperative structure in the State so as to attain the objective of upliftment of the economic conditions of the poor people of the society by providing low cost credit to the farmers and employment generation programmes. The Government of Assam proposed to strengthen the cooperative societies by giving logistic support in terms of better regulation, better facilitation and by closing the sick cooperatives and nurturing the good and economically viable cooperatives.

**TABLE - 15.1**  
**STATISTICS OF CO-OPERATIVE SOCIETIES IN ASSAM**

Year	Number of Societies	Membership (in '000 nos)	Share Capital (Rs. in Crore)	Working Capital (Rs. in Crore)
2005-06	10134	4499	106.84	1393.30
2006-07	10028	4473	120.90	1390.96
2007-08	10150	4482	123.91	1394.54
2009-10	7696	4608	112.56	2186.37
2010-11	7906	4612	107.36	2724.29
2011-12	8006	4600	98.35	2806.09
2012-13	8422	4592	102.07	2812.66

Source: Registrar Co-operative Societies, Assam.

At present there are 8422 nos. of different types of Cooperative Societies in the State including State Level Cooperative societies such as ASCARD Bank, APEX Bank, APOL, HOUSEFED, and FISHFED. Various types of Primary Cooperative Societies like Gaon Panchayat level Cooperatives(GPSS), women Cooperatives, Housing Cooperatives, Fishery & Pisciculture cooperatives, Farming Cooperatives, Consumer Cooperatives, Tourism Cooperatives, handloom Cooperatives, Dairy Cooperatives etc are also organized for specific purposes and performing various economic activities.

**PERFORMANCE OF PRIMARY CREDIT SOCIETIES**

The performance of Gaon Panchayat level Samabaya has been considerably improved after State Government intervention. The cooperation department has registered new GPSS co-terminus with the existing area of Gaon Panchayats in addition to the existing GPSS. Such newly registered Societies are required to carry on the PDS business in an effective manner and are being provided land for construction of Go-downs of their own. These Primary Credit Societies will also be provided with managerial support for smooth implementation of Food security Act 2013 in the State.

**TABLE - 15.2**  
**PERFORMANCE OF PRIMARY CREDIT SOCIETIES IN ASSAM**

Particulars	Gaon Panchayat Level Samabaya Samity (GPSS)			Large Area Multipurpose Cooperative Societies(LAMPS)		
	2010-11	2011-12	2012-13	2010-11	2011-12	2012-13
Number of Societies	714	714	880	65	65	65
Membership ('000)	3051	3049	3062	56	54	54
Paid up share capital (Rupees in lakh)	1629.14	1688.88	1741.77	171.80	171.80	171.80
Deposits (Rupees in lakh)	NA	1829.62	1927.92	NA	12.00	12.00
Working Capital (Rupees in lakh)	11777.56	12325.56	16379.33	1538.86	1547.85	3471.59
Gross Loans (Rupees in lakh)	301.92	335.69	528.12	Nil	Nil	Nil
Loans outstanding (Rupees in lakh)	2141.27	2051.14	2142.88	55.39	55.39	55.39
Sales Turnover (Rupees in lakh)	57895.84	52838.08	82313.13	1346.03	1346.03	714.65

Source: Registrar Cooperative Societies, Assam.

## PRIORITIZED ACTIVITY

The State Cooperation Department has given thrust in implementation of following activities to strengthen the cooperation sector in the State.

### REVAMPING OF PACS

The Primary Agricultural Credit Societies (PACS) are the backbone of the Cooperative movement to address socio-economic issues of farmers' vis-a-vis vehicle for development of Rural India. The Gaon Panchayat level Samabai Samitees (GPSS) in the State that deals in Agricultural produces, distribution of essential commodities etc. The main objectives of these cooperatives are (1) Production, (2) Procurement and (3) Distribution of essential commodities. It is felt that the PACS need to be re-oriented for dealing in fertilizer, pesticides, farm mechanization, agriculture credit through KCC, Supply of quality seeds and provide forward and backward linkages of Micro-Finance. It is proposed to facilitate creation of new PACS co-terminus with the existing Gaon Panchayats of the State by providing them adequate support of infrastructure development during the 12<sup>th</sup> Five Year Plan period.

### GRANT TO WOMEN MULTIPURPOSE COOPERATIVE SOCIETIES

There are more than 2700 women Cooperative Societies including 2486 numbers of Gaon Panchayat level Multipurpose Women Cooperatives in Assam with membership exclusively confined to women. These societies are organized with the objective of improving the socio-economic status of women by harnessing their talent and individual skill for achieving higher standard of living. The State government has decided to provide essential monetary Grant to 2486 numbers of Multifaceted Women Cooperative Societies and all GPSS. Accordingly, 50 Women Cooperative Societies and 62 GPSS were provided monetary grants during the year 2012-13 and 2013-14. It is proposed to provide monetary grants to another 120 numbers of Multipurpose Women Cooperative Societies during 2014-15.

### CONSTRUCTION OF RURAL GODOWN AT MAJULI

Majuli, the River Island sub-division is prone to annual flood which results in the destruction of both lives and property. More importantly, this sub-division remains cut-off from the rest of the state due to floods. As a result this region remained most backward and impoverished part of Assam. Therefore, the Cooperation Department has proposed to construct a godown with capacity of 2000 MT in a centrally located society which remains free from flood and erosion in the Sub-division. This will facilitate smooth operation of the PDS/TPDS in the river island and also ensure availability of food grains during the period of flood.

### CONSTRUCTION OF GODOWNS BY WHOLESALE CONSUMER COOPERATIVE SOCIETIES

The Wholesale Consumer Cooperative Societies (WCCS) are involved in procuring and selling of essential items and other products at subsidised rates. These procured essential items required scientific storage for their proper safekeeping for long periods. The cooperation Department has five different zones in the state of Assam. Therefore, the Department proposed to construct 5 numbers of godowns in 5 numbers of Whole Consumer Cooperative Societies for proper and scientific storage of food grains and other essential items.

### IMPLEMENTATION OF PROJECT BY WEST ASSAM MILK PRODUCERS COOPERATIVE UNION LTD (WAMUL)

The Government of Assam has received an Additional Financing (AF) from the World bank for implementation of the AACP. As per the credit agreement in between Government of Assam, Government of Assam and World Bank, implementation of the project have to be completed by March 2014. The State Cooperation Department proposed to utilise a part of the credit for AACP under AF for implementation of the Assam Dairy Development Plan(ADDP) through WAMUL.

### ASSAM COOPERATIVE APEX FISH MARKETING AND PROCESSING FEDERATION LTD (FISHFED)

There are 450 nos. Primary Fishery Cooperatives with one Apex Level Federation (FISHFED) functioning in the State organized to help the poor fishermen community for their socio-economic development. These Societies are rendering various services to the economically backward scheduled castes people in the State. The FISHFED has been undertaken five fishery projects across several districts of Assam and providing loans to the primary fishery cooperative societies by providing financial assistance to them.

## PRIMARY DAIRY COOPERATIVES

A good number of Primary Dairy Cooperative Societies have been registered in the State in the last couple of years. Among these there are several Dairy Cooperatives have been set up by youths in various districts and have been able to make remarkable achievements within a very short period by their own effort and without having any economic support from the Government. However, some of such Cooperatives are facing difficulties in procuring essential commodities like cattle fodder, utensils and appliances, maintenance of their live stock, medication and veterinary aids etc. To give remission to their financial hardship and in order to give a boost to their economic activities the Cooperation Department decided to provide financial support to them.

## ASSAM STATE COOPERATIVE AGRICULTURE AND RURAL DEVELOPMENT BANK (ASCARD)

The Assam State Cooperative Agriculture and Rural Development (ASCARD) Bank is the only pioneer Cooperative Long Term Credit Financial Institution for Agriculture and Rural development in Assam, However, the financial position of the Bank deteriorated from 1995-96 due to want of fund, stoppage of refinance by NABARD, poor recovery from its existing outstanding NPA loan etc. Considering need of the bank in the context of financing poor farmers of the State, the State Government asked the Bank to prepare road map for revival of the bank. Accordingly the Bank has submitted a revival plan prepared by the IIBM, Guwahati covering all features/areas of the bank to make it economically feasible and viable in the next five years. The state Government is considering the revival plan of the bank and proposed to provide financial assistance in the form of working capital as a first step towards implementation of revival plan.

## TWELFTH FIVE YEAR PLAN: THRUST AREAS

The State Cooperation Department has formulated 12<sup>th</sup> Five Year Plan with a view to ensure the functioning of the Cooperatives as autonomous, self-reliant, democratically and professionally managed institution which can make a significant contribution to the State economy. As the aim of the 12<sup>th</sup> Five Year Plan is inclusive growth having Agriculture & allied activities, Education, Health Care, social welfare and development of rural infrastructure as an thrust area with an object to employment generation and improve quality of life especially of the downtrodden strata of the society, the Department has given emphasis to attain the goal through special focus on the thrust areas like –

- 1) Micro Finance-Financial inclusion;
- 2) Implementation of ICDP under Central sector Scheme;
- 3) Revamping of GPSS and women Multipurpose Cooperative Societies;
- 4) Organization of a State Level consumer Marketing Federation;
- 5) Diversification of new areas and activities like Health Care, Education, Cold Storage, Food Processing;
- 6) Dairy and Fishery;
- 7) Rehabilitation of potentially viable weak cooperatives;
- 8) Administrative reforms etc.

## MICRO FINANCE

It is proposed to provide soft loan to the needy poor in cooperative fold by linking SHG-Cooperative credit Institutions during the 12<sup>th</sup> Five Year Plan Period under National Rural Livelihood Mission(NRLM) with a view to facilitate a platform to reach the poor people into formal banking system for their financial need. It will generate employment, women employment and will contribute towards State GDP in a modest way.

## ORGANIZATION OF A STATE LEVEL CONSUMER MARKETING FEDERATION

A state level consumers and Marketing Federation has been organized and registered in the month of November, 2011 with all PACS, Wholesale Consumers Cooperatives and Marketing Cooperatives as its member for undertaking wholesale of general merchandise to the PACS besides maintaining departmental stores in the strategic location of the district headquarter. This Federation will act as an instrument for price stabilization of essential commodities. It is proposed to provide budgetary support from State Govt. and promotional support under CSS during the 12<sup>th</sup> five Year Plan period.

## DIVERSIFICATION OF ACTIVITIES

It is proposed to diversify the business activities of the existing PACS, Women Multipurpose Cooperative Societies which have multipurpose objectives in the field of Health care, Education, Eco-tourism, Surface transport etc., with the support from State Government during the 12<sup>th</sup> Five Year Plan period.

## ANIMAL HUSBANDRY

It is proposed to set up District Dairy Federation in the districts where viable and also a state level Dairy Federation exists. The objective of setting up of dairy federation in the district federations is to create awareness and for propaganda of white revolution. Poultry and Piggery cooperatives, which are both directly and indirectly involved in employment generation, are proposed to be covered under financial support during the 12<sup>TH</sup> Five Year Plan.

## REVIVAL OF VARIOUS COOPERATIVE SOCIETIES

The Cooperation Department has taken various schematic programmes for revival of various sick cooperatives in the State.

## PROCESSING CO-OPERATIVES

A large number of processing units have been set up in the State under Co-operative Sector comprising of Rice and Oil Mill, Mustard Oil Mill, Spinning Mill, Jute Mill etc. These Cooperatives are helping local producers in procuring their raw materials and get profitable markets for their finished products. The Assam Polyester Cooperative Society Ltd. (APOL), one of such kind of cooperative societies as well as a downstream spinning industry, is one of the prestigious organizations under the Cooperative sector in the State. This organization remained non-functional for some time due to financial constraints. The State Government has decided to provide financial assistance to revive the organization.

## CONSUMER CO-OPERATIVES

There are 36 Urban Wholesale Consumer Stores with 474 affiliated Primary Consumer Stores and 640 Tea Garden Consumer Stores in the State. These Cooperative Societies extended yeoman service to the urban population and in maintaining price line. During the financial year 2008-09, an amount of ₹40.00 lakh was released @₹1.00 lakh each to 40 nos. of such Cooperative Consumers Societies. It was decided to provide financial assistance to six nos. of such Consumer Cooperative Societies during the year 2009-10. During the year 2011-12, an amount of ₹23.00 lakh was provided as financial assistance to these Societies. The State Govt. has proposed to provide ₹28.00 lakh to these societies during the year 2013-14.

## OTHER COOPERATIVES

In addition to the above mentioned Co-operative Societies, there is large number of functional Co-operative like Poultry, Piggery, Duckery, Pisciculture, Cane and Bamboo Industries, Brick Industries, Transport and Communication, Rickshaw puller, Bee-keeping, Blacksmith, Carpentry etc., and these are mostly confined to economically weaker section of the Society in the State. The financial assistance to these societies will go a long way in enabling economically weaker section of the society to achieve their economic upliftment. The State Govt. has proposed to provide financial assistance to these cooperative societies including Small Tea Growers Coop., Tourism Coop. and Health Coop. under new proposed scheme to be implemented by the Department.

## PERFORMANCE OF STATE LEVEL COOPERATIVE SOCIETIES

The performance of some of the State Level Credit and Non-Credit co-operative institutions is elaborated below:

### ASSAM STATE CO-OPERATIVE APEX BANK LIMITED

The Assam State Co-operative Apex Bank Limited is a pioneer Co-operative institution in channelizing credit for agricultural operation to boost up the development process of the rural economy as well as financing other urban business and industrial activities through co-operative channel in the State. The bank, registered in the year 1948, has 68 branches in the State at present. The bank has failed to provide desired service to the rural sector through its adopted PACS due to its ill health. The Government of Assam has decided to implement the Government of India's Scheme of revival of Short Term Co-operative Credit Structure [STCCS] including the Assam State Cooperative Apex Bank Limited. The State Government has taken steps accordingly by implementing the Revival Package for STCCS being administered by NABARD so that GPSS become eligible for fresh finance. A Memorandum of Understanding (MOU) was signed between the Government of Assam, NABARD and representative of Government of India.

As a part of the Government of India's package for revival of the Short term Cooperative Credit Structure, an amount of ₹19.96 crore has been provided by the State Government as State share. The Govt. of India has released ₹43.62 crore against 480 PACS out of the total 681 selected PACS under the revival package. Under the revival package, the Bank provided credit to agricultural sector in the tune of ₹3102.16 lakh and ₹2236.33 lakh during the years 2011-12 and 2012-13 respectively. The Bank could attain net profit of ₹19.85 crore during the year 2012-13 after wiping out previous accumulated losses.

Considering the good health of the Bank, the membership of the bank has increased from 72 thousand in 2008-09 to 93 thousand in 2013-14. The share capital has increased to ₹9.74 crore in 2013-14 from ₹7.20 crore in 2008-09. But the working capital has also increased to ₹2032.21 crore in 2012-13 from ₹846.78 crore in 2008-09.

The performance of the Assam State Co-operative Apex Bank during the last six years may be evident from the table below.

TABLE – 15.3

## THE PERFORMANCE OF ASSAM STATE CO-OPERATIVE APEX BANK LTD.

Particulars	Unit	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
Bank Branches	No	68	68	68	67	67	68
Members	'000 No	72	76	78	82	91	93
Paid up Share Capital	Rs. crore	7.20	7.80	8.13	8.84	9.13	9.74
Reserve	-do-	23.54	23.82	96.84	22.15	33.69	30.08
Deposits	-do-	823.57	118.88	1544.51	1559.47	1500.63	1950.92
Working Capital	-do-	846.78	1225.06	1775.03	1777.40	1687.60	2032.21
Borrowing Outstanding	-do-	2.13	Nil	Nil	7.0	6.45	7.37
Investments	-do-	230.85	781.12	1144.95	1019.56	987.10	1268.28
Loans Advances	-do-	186.21	150.23	215.50	419.58	125.29	358.77
Loan Outstanding	-do-	311.75	322.82	313.44	504.84	483.71	686.36
Loan Overdue	-do-	24.39	101.22	99.83	98.98	98.38	135.31

NB. Total may not be equal due to rounding off.

Source: Registrar of Cooperative Societies, Assam.

### ASSAM COOPERATIVE AGRICULTURAL AND RURAL DEVELOPMENT BANK LTD. (ASCARD)

The Assam Cooperative Agricultural and Rural Development Bank [ASCARD], which was formerly known as Assam Coop. Central Land Mortgage Bank Ltd was established in the year 1955. The functioning of the bank was hampered due to ill financial health for several years. The Govt. of Assam has decided to revive the bank by correcting all deficiencies and to implement the revival package rules formulated by the Govt. of India for revival of the Long Term Rural Cooperative Credit Structure based on Report of the Task force headed by Prof. A. Vaidyanathan. The State Government has also planned to work out strategy and roadmap for revival of the Long Term Cooperative credit Structure which will further help in revival of the ASCARD Bank Ltd.

As on 31<sup>st</sup> March 2014, the bank has 28 branches throughout Assam with more than 45 thousand members. The paid up share capital of the bank has decreased to ₹636.00 lakh in 2013-14 from ₹647.28 lakh in 2008-09. The working capital too decreased from ₹4913.83 lakh in 2008-09 to ₹1307.00 lakh in 2013-14. The deposit, on the other hand, has increased to ₹73.00 lakh in 2013-14 from ₹48.67 lakh in 2008-09. The bank was under suspension for issuance of loans & advances for two years [i.e., 2006-08]. During the year 2008-09, i.e., immediately after withdrawal of suspension, the bank issued loan of ₹11.53 lakh. However, the amount of loans & advances of the Bank has been increased to ₹18.57 lakh during the year 2012-13 after drastic fall of issue of loans to the level as low as ₹4.33 lakh in the year 2011-12. During 2013-14, the Bank has issued loans of ₹82.00 lakh which is about 342 per cent higher than the previous 2012-13 year. The loan outstanding with the Bank recorded continuous fall from ₹1028.44 lakh in 2008-09 to ₹865.00 lakh in 2013-14.

The data containing important indicators of bank performance are presented in the Table below.

**TABLE – 15.4**  
**PERFORMANCE OF A.S.C.A.R.D BANK**

Particulars	Unit	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
Bank branches	No	30	28	28	28	28	28
Membership	No	34390	37372	30056	39106	44332	45886
Paid up Share Capital	Rs. Lakh	647.28	641.67	636.95	633.75	633.50	636.00
Working Capital	-do-	4913.83	4993.18	1702.32	1641.63	1322.83	1307.00
Deposits	-do-	48.67	37.81	30.35	20.53	18.70	73.00
Loans and Advances	-do-	11.53	7.65	5.68	4.33	18.57	82.00
Loan Outstanding	-do-	1028.44	965.42	922.16	877.51	842.12	865.00

Source: Registrar of Cooperative Societies, Assam.

### URBAN COOPERATIVE BANKS

The State has a presence of 8 numbers of functioning Urban Cooperative Banks (UCBs) with 24 branches. Till recent past, multiplicity of command, absence of clear-cut demarcation between the functions of State Government and RBI, led to operational difficulties in implementing regulatory and supervisory measures pertaining to UCBs. To sort out the difficulty, an MOU between RBI and Government of Assam was signed in connection with regulatory control of RBI over UCBs during the year 2008 so that functioning of such banks can be improved and confidence of depositors can be restored.

As per available report, total membership of the functioning UCBs are 31 thousand in 2013-14 as against 29 thousand in 2012-13. The paid up share capital of UCBs has been increased to ₹6.89 crore in 2013-14 from ₹6.53 crore in 2012-13. The working capital of the banks has increased to ₹616.0 crore in 2013-14 from ₹348.24 crore in 2009-10. The loans and advances issued by banks has made improvement in 2013-14 and increased to ₹233.04 crore compared to ₹199.59 crore in 2012-13. Loan overdue has shown also some improvement during the last three years. Loan overdue came down to ₹13.89 crore in 2012-13 from ₹45.83 crore in 2009-10. During the year 2013-14, loan overdue remained higher with ₹18.07 crore compared to the previous year.

**TABLE – 15.5**  
**STATISTICS RELATED TO PERFORMANCE OF URBAN COOPERATIVE BANKS**

Particulars	Unit	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
Bank Branches	No	15	16	22	23	23	24
Membership	'000' No	23	15	28	29	29	31
Paid up Capital	Rs. in crore	6.72	5.06	4.89	5.65	6.53	6.89
Working Capital	-do-	253.83	348.24	513.98	574.16	595.15	616.0
Deposits	-do-	280.50	315.04	446.31	492.28	522.49	602.92
Loans/Advances	-do-	101.00	275.24	393.85	307.38	199.59	233.04
Loan Outstanding	-do-	98.50	163.27	179.85	223.98	239.45	239.10
Loan Overdue	-do-	7.25	45.83	10.43	16.80	13.89	18.07

NB. Total may not be equal due to rounding off.  
Source: Registrar of Cooperative Societies, Assam.

## STATE LEVEL NON-CREDIT CO-OPERATIVE SOCIETIES

There are a few State Level Non-Credit Co-operative Societies functioning in the State. The performance of these societies is presented in the Table below.

**TABLE - 15.6**  
**STATISTICS RELATED TO STATE LEVEL**  
**NON-CREDIT CO-OPERATIVE SOCIETIES IN ASSAM**

Name of Societies	Year	No. of Societies	No. of Members	[Rupees in Lakh]		
				Paid up Capital	Working Capital	Value of Sales
Assam Co-operative Jute Mill Ltd.	2009-10	1	8262	1309.27	1143.44	2660.29
	2010-11	1	8262	333.01	1151.83	3324.14
	2011-12	1	1816	333.02	1006.80	3169.18
	2012-13	1	1826	325.79	1119.86	3598.09
	2013-14	1	1825	325.79	1237.92	3811.42
FISHFED	2009-10	1	241	253.35	369.81	16.27
	2010-11	1	496	97.36	1423.14	1643.20
	2011-12	1	225	24.20	97163.00	20135.64
	2012-13	1	225	287.99	342.52	-
	2013-14	1	239	343.00	407.00	18.87
HOUSEFED	2009-10	1	418 Member Societies	1560.13	8167.00	237 Houses
	2010-11	1	418 Member Societies	1550.19	12572.99	330 Houses
	2011-12	1	418 Member Societies	1547.84	13152.31	85 Houses
	2012-13	1	418 Member Societies	1647.00	14882.00	-
	2013-14	1	418 Member Societies	1663.55	15294.24	-
Eastern Agro Processing & Tea Warehousing Co-op. Society Ltd.	2009-10	1	493	97.08	1455.21	1474.45
	2010-11	1	496	97.36	1423.14	1643.20
	2011-12	1	505	97.98	2187.02	2138.01
	2012-13	1	492	97.98	3071.45	2128.09
	2013-14	1	493	97.98	1889.00	1655.00
Assam Polyester Co-operative Society Ltd.	2008-09	1	12759	1608.07	1176.02	990.01
	2009-10	1	13129	1608.07	1152.32	1149.68
	2010-11	1	4591	1608.13	170.00	1748.07
	2011-12	1	-	1628.11	171.01	1710.10
	2012-13	1	4618	1628.05	248.36	1886.89

P: Provisional;

Source: Registrar of Cooperative Societies, Assam.

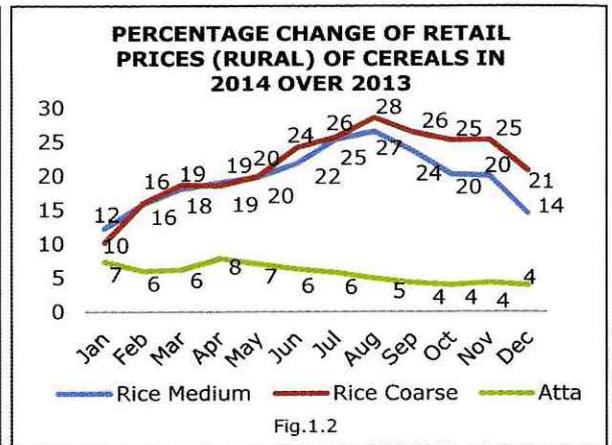
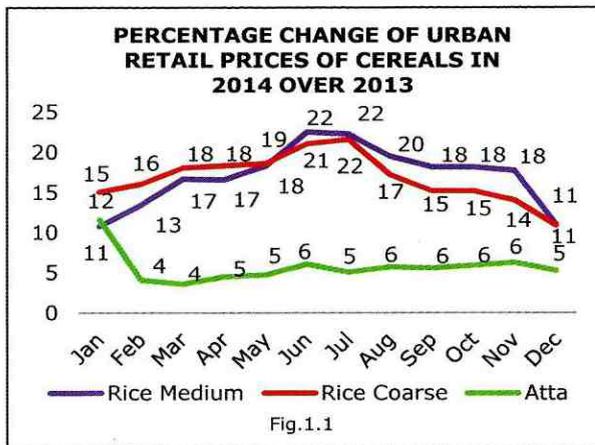
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CHAPTER – XVI

PRICES AND PUBLIC DISTRIBUTION SYSEM

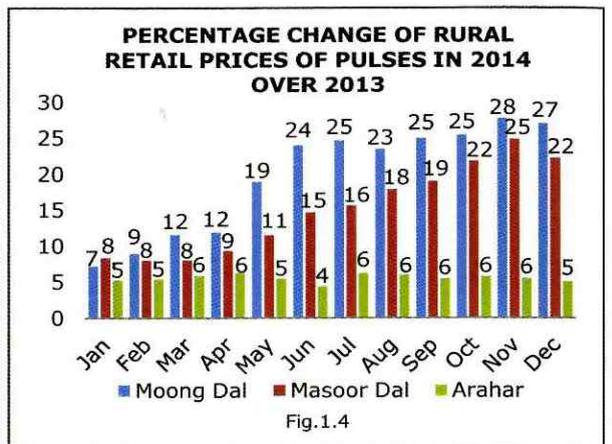
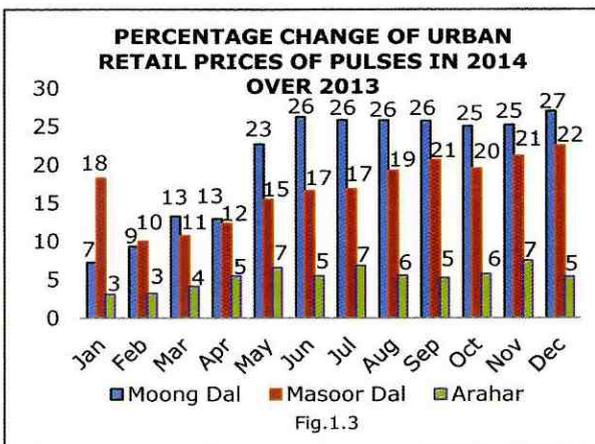
The economic activities as well as the purchasing power of the people of a country are greatly influenced by the changes in commodity prices. Rising prices leads to increase in income inequality and also affects the fixed income groups of a country. It is crucial to have a continuous watch on the price behavior to regulate economic policies. The State of Assam in particular and the Country as a whole is experiencing price rise in varying degree in the last few years. The country is going through high inflation, at times hovering around the double digit forcing the Government to take various controlling measures. Inflation is measured by taking into account of the Wholesale Price Index (WPI) based on the prices in wholesale markets and the Consumer Price Index (CPI) based on the prices the consumer purchases from the retail trade market.

PRICE SITUATION IN ASSAM



The fig.1.1 shows that the average retail prices of rice both medium and coarse in rural areas of the State shows an increasing trend during the first eight months of 2014 whereas is on a decreasing trend during the last four months of the year. Prices of Atta in rural areas increased between 5 and 8 percent during the first eight months of 2014 over the corresponding months of 2013 while during the last four months the retail price increased by 4 percent in each month over the corresponding month of 2013.

The average retail prices of rice both medium and coarse in the urban areas of the state started with an increasing trend reaching its maximum during July 2014 as depicted in the fig.1.2 and thereafter showed a declining trend and ended with an increase of 11 percent in December 2014 over the corresponding month of 2013. The retail price of Atta in the urban areas of the State started with an increase of 12 percent in the month of January and thereafter showing an increase between 4 and 6 percent during the subsequent months of 2014 over the corresponding months of 2013.



The fig.1.3 shows that the average retail price of moong in rural areas of the State is on an increasing trend between 7 percent and 28 percent during the period January to December 2014 over the corresponding period of 2013. The average retail price of masoor showed an increasing trend throughout the year 2014 over the corresponding period of 2013. The average retail prices of arahar fluctuated between 4 percent and 6 percent during 2014 over the corresponding months of 2013.

The average retail prices of pulses in the urban areas of the State were on an increasing trend during 2014. Price of moong started with an increase of 7 percent in January 2014 and thereafter increasing above 9 percent during the subsequent months ending with an increase of 27 percent during December 2014 over the corresponding period of 2013.

During the year 2014 prices of masoor dal showed an increasing trend between 10 percent and 22 percent over the prices of corresponding months of 2013. The fig.1.4 depicts an increase between 3 percent and 7 percent of the average prices of arahar dal during 2014 over 2013.

The following table shows the percentage change of average retail prices of potato, onion and mustard oil in rural and urban areas of the State during 2014 over 2013.

**TABLE - 16.1**

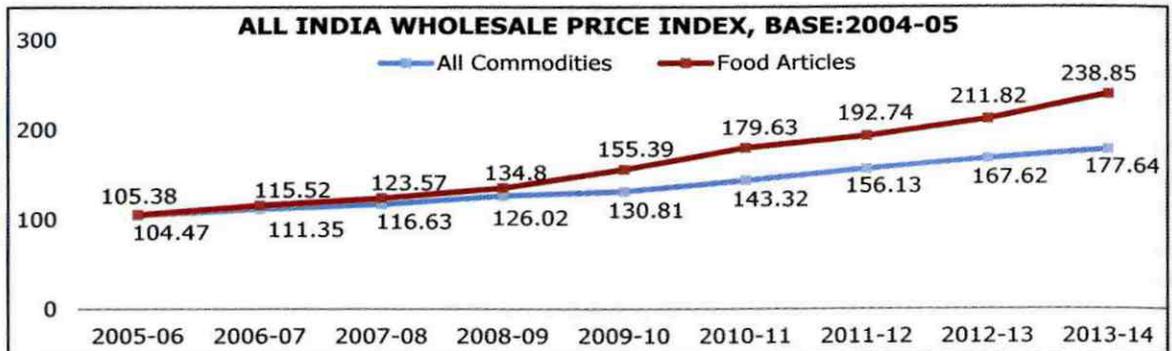
MONTH ON MONTH CHANGE OF AVERAGE RETAIL PRICES (IN %) DURING 2014 OVER 2013						
Month	Potato		Onion		Mustard Oil	
	Rural	Urban	Rural	Urban	Rural	Urban
January	-18	-9	23	19	3	2
February	14	12	-14	-22	3	2
March	26	38	-6	-7	2	-3
April	51	52	-6	-1	2	2
May	53	62	6	2	1	2
June	75	70	21	17	-1	-5
July	70	76	22	9	-2	-4
August	102	96	-9	-26	-4	-3
September	98	95	-42	-44	-5	-5
October	62	43	-51	-52	-5	-5
November	51	25	-46	-49	-6	-5
December	41	13	-9	-10	-7	-7

Source: Directorate of Economics and Statistics, Assam.

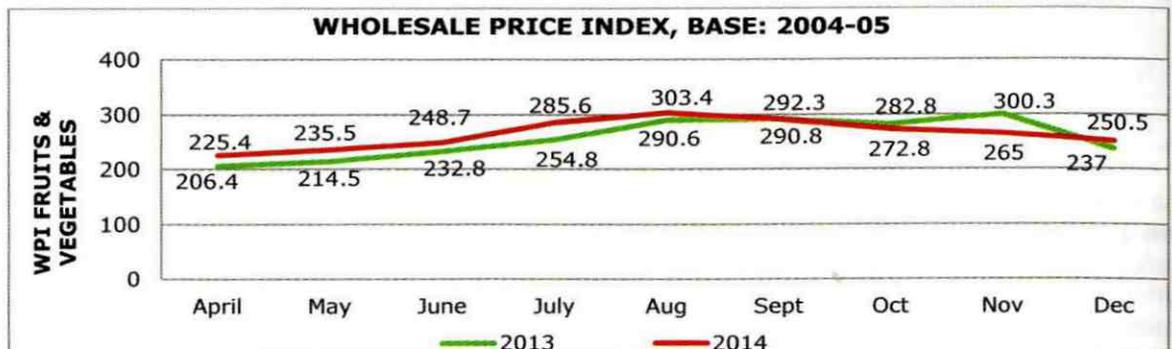
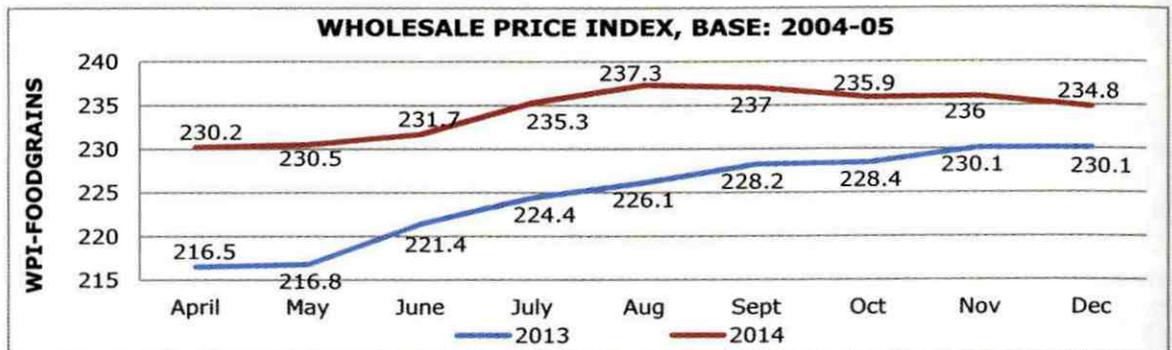
The above table shows that the prices of potato in both rural and urban areas of the State started with a decrease of 18 and 9 percent respectively over the corresponding month of 2013 and thereafter showed a steep increase of 102 percent in rural areas and 96 percent in urban areas during the month of August 2014 over the corresponding month of 2013. Prices of potato gradually declined during the last four months of 2014 ending with 41 percent and 13 percent increase of prices in rural and urban areas respectively during December 2014. The State experienced a sharp increase of prices of onion during 2013. The price of onion though showed a high increase during January 2014 in the subsequent months a sharp fall in both rural and urban areas of the State was noticed with an exception during the period May 2014 to July 2014 where the rural prices increased between 6 percent and 22 percent and the urban prices increased between 2 percent and 17 percent over the corresponding months of 2013. The prices of mustard oil fluctuated between 1 percent and (-) 7 percent in the rural and urban areas of the State during 2014 over 2013.

## WHOLESALE PRICE INDEX (WPI)

The All India WPI for all commodities (Base: 2004-05) during 2013-14 was 177.64 in 2013-14 as against 167.62 in 2012-13 showing an increase of 5.98 percent against an increase 7.36 percent in 2012-13 over 2011-12. The WPI for food articles was 238.85 percent in 2013-14, an increase of 12.76 percent over 211.82 in 2012-13 as against an increase of 9.90 percent in 2012-13 over the previous year.



WPI for cereals during 2013-14 was 225.53, an increase of 12.86 percent over 2012-13 as against an increase of 13.4 percent in 2012-13 over the previous year. During 2013-14 the WPI on pulses was 228.00, showing a decrease of 5.52 percent over 2012-13 against an increase of 19.57 percent during 2012-13 over the previous year. The Wholesale Price Index on vegetables depicted a sharp increase at all India level during 2013-14. The index increased by 40.16 percent over 2012-13 as against an increase of 17.19 percent during 2012-13 over the previous year. The following graphs depict the monthly Wholesale Price Index of food grains and fruits and vegetables during the period April to December of 2013 and 2014.



The Directorate of Economics and Statistics, Assam compiles the Wholesale Price Index of Agricultural Commodities with base 1993-94=100 in Assam. The WPI of agricultural commodities during 2013-14 was 336 as compared to 296 in 2012-13 showing an increase of 13.51 percent against an increase of 3.14 percent in 2012-13 over the previous year. The WPI during the financial year, 2014-15 up to the month of September shows an increase of 21.36 percent over the corresponding period of the previous year. The table 16.2 depicts the Index from 2005-06 to 2013-14 and the percentage change of prices over the previous year.

**TABLE - 16.2**  
INDEX NUMBER OF WHOLESALE PRICES OF  
AGRICULTURAL COMMODITIES IN ASSAM  
BASE: 1993-94=100

Year	Index	Price Change over the year (in percentage)
2005-06	176	3.53
2006-07	185	5.11
2007-08	204	10.27
2008-09	221	8.33
2009-10	249	12.67
2010-11	272	9.24
2011-12	287	5.51
2012-13	296	3.14
2013-14	336	13.51

Source: Directorate of Economics and Statistics, Assam.

### CONSUMER PRICE INDEX (CPI)

The analysis of different Consumer Price Indices is presented in the paragraphs given below.

#### CONSUMER PRICE INDEX NUMBER (GENERAL) FOR RURAL, URBAN AND COMBINED, BASE: 2010=100

The Central Statistics Office (CSO), Ministry of Statistics and Programme Implementation publish Consumer Price Indices (CPI) on base 2010=100 for all-India and States/UTs separately for rural, urban and combined with effect from January, 2011.

The annual average Consumer Price (General) Index for Rural, Urban and Combined in 2014 is calculated at 143.55, 140.53 and 142.98 against the National average of 143.50, 139.7 and 141.85 respectively. The increase in General Index for Rural, Urban and Combined in Assam during 2014 over 2013 is 8.28 percent, 8.95 percent and 8.42 percent respectively against an increase of 9.29 percent, 9.51 percent and 9.31 percent in 2013 respectively over the previous year. The table below shows the month wise Consumer Price Index (General) for rural, urban and combined in Assam.

**TABLE - 16.3**

#### CONSUMER PRICE INDEX (GENERAL) FOR RURAL, URBAN AND COMBINED IN ASSAM (Base 2010=100)

Month	Rural	Urban	Combined	Rural	Urban	Combined
	2013			2014		
January	126.1	123.6	125.6	140.8	134.8	139.7
February	126.5	124.0	126.0	140.4	135.0	139.4
March	127.1	124.9	126.7	140.4	136.9	139.7
April	126.6	125.1	126.3	139.8	137.9	139.4
May	127.7	125.6	127.3	139.8	139.0	139.6
June	130.5	127.2	129.9	142.5	140.2	142.1
July	131.9	128.7	131.3	144.7	141.6	144.1
August	134.3	130.5	133.6	146.2	143.2	145.6
September	136.9	132.7	136.1	147.8	144.4	147.2
October	140.0	134.4	138.9	148.1	145.1	147.5
November	142.5	135.7	141.2	147.3	144.7	146.8
December	140.7	135.4	139.7	144.8	143.5	144.6
<b>Annual average</b>	<b>132.6</b>	<b>129.0</b>	<b>131.9</b>	<b>143.6</b>	<b>140.5</b>	<b>143.0</b>

Source: Central Statistics Office, MOSPI, Govt. of India.

## CONSUMER PRICE INDEX FOR WORKING CLASS POPULATION

The Consumer Price index number with base 2001=100 for working class population for the State is compiled by the Directorate of Economics and Statistics, Assam taking into account the weighted average of the indices of the three centres viz. Guwahati, Silchar and Tinsukia. The annual average of Consumer price Index for Working Class Population (Base 2001=100) in Assam increased by 13.20 percent in 2014 over 2013 as compared to 4.79 percent in 2013 over 2012. During 2014, the Centre-wise increase is comparatively high in Silchar (16.83%) followed by Tinsukia (12.11%) and Guwahati (10.88%).

**TABLE - 16.4**

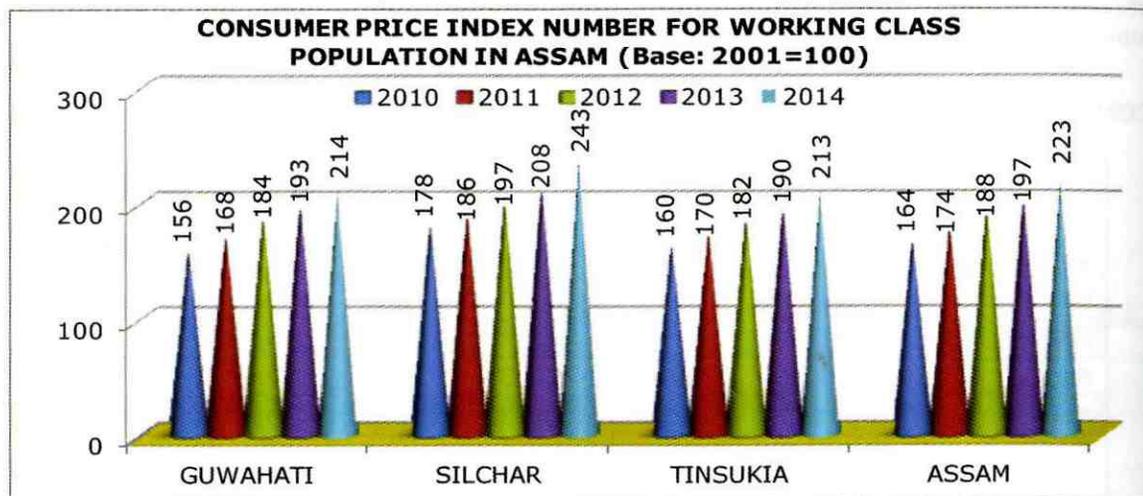
### CONSUMER PRICE INDEX NUMBER FOR WORKING CLASS POPULATION IN ASSAM

Base: 2001=100

Year	Guwahati	Silchar	Tinsukia	Assam
2007	120 (4.35)	130 (7.44)	125 (7.76)	125 (6.84)
2008	128 (6.67)	143 (10.00)	133 (6.40)	134 (7.20)
2009	143 (11.72)	155 (8.39)	147 (10.53)	148 (10.45)
2010	156 (9.09)	178 (14.84)	160 (8.84)	164 (10.81)
2011	168 (7.69)	186 (4.49)	170 (6.25)	174 (6.10)
2012	184 (9.52)	197 (5.91)	182 (7.06)	188 (8.05)
2013	193 (4.89)	208 (5.58)	190 (4.40)	197 (4.79)
2014	214 (10.88)	243 (16.83)	213 (12.11)	223 (13.20)

(Figures in bracket indicate the percentage change over the previous year)

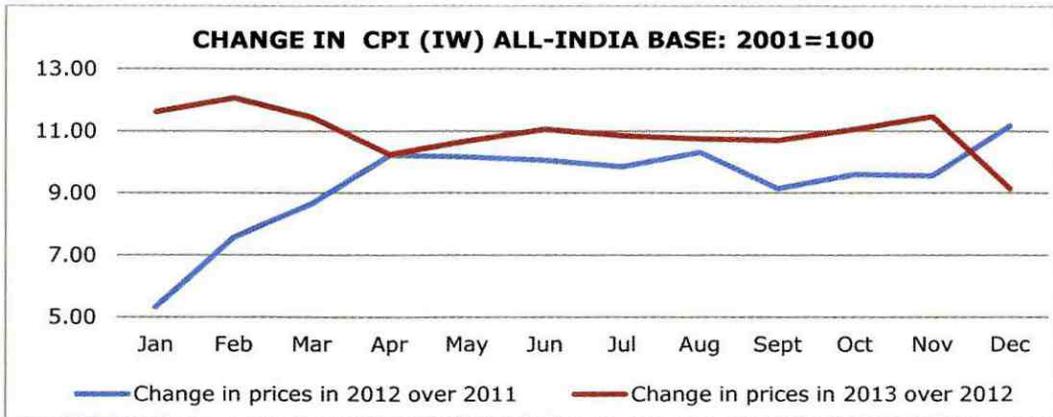
Source: Directorate of Economics and Statistics, Assam



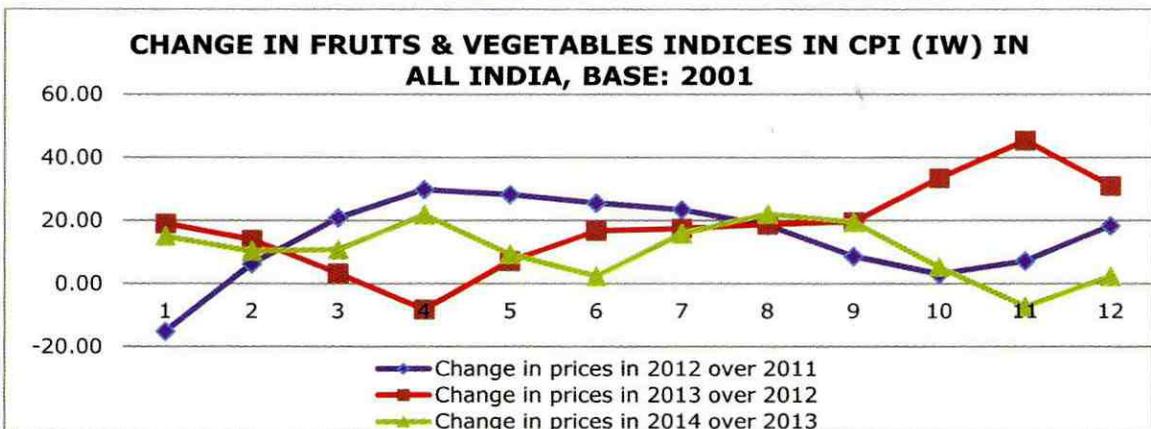
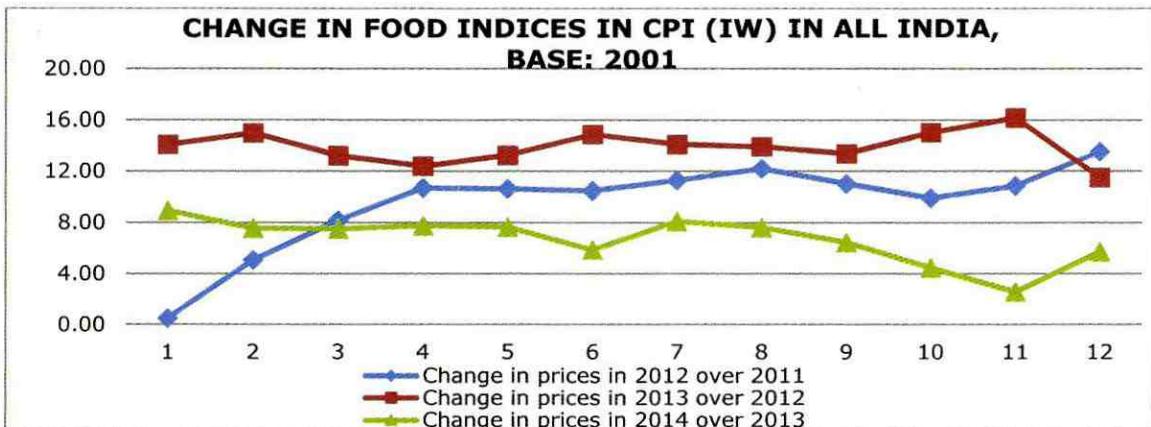
### CONSUMER PRICE INDEX FOR INDUSTRIAL WORKERS (CPI-IW)

CPI-IW is mainly used for the determination of Dearness Allowance (DA) and Variable Dearness Allowance (VDA) being paid to millions of public sector employees besides fixation and revision of minimum wages in scheduled private sector employees respectively. The CPI-IW is calculated based on the retail prices of essential commodities and services in industrially developed 78 selected centres in the country. In Assam, the Consumer Price Index for Industrial Workers with Base 2001=100 is constructed and compiled by taking weighted average of the indices for the five centres, namely Guwahati, Doomdooma (Tinsukia), Labac (Silchar), Morioni (Jorhat) and Rangapara (Tezpur).

The All-India Consumer Price Index (IW) with base: 2001 during 2014 is 254 compared to 247 in 2013 and 232 in 2012.



During 2014, the food index increased by 6.63 percent over 2013 compared to 13.90 percent increase during 2013 over the previous year. The vegetables and fruits index during 2014 showed an increase of 10.03 percent against an increase of 18.16 percent during 2013 over the previous year. The graphs below depict the month-wise change in Consumer Price (General) index (IW), changes in food group and vegetables and fruits during 2014, 2013 and 2012 over the previous year.



During the year 2014, the CPI for Industrial Workers in Assam increased by 11.11 percent as against 6.47 percent at all India level over 2013. The rate of increase of the Index in different centres in 2014 over the previous year was recorded highest in Rangapara by 14.52 percent, followed by Labac (12.50%), Mariani (11.28%), Doomdooma (8.67%) and Guwahati (8.08%).

The annual average Consumer Price Index for Industrial Workers from 2006 to 2014 is given in the table 16.5.

**TABLE - 16.5**  
**CONSUMER PRICE INDEX NUMBER FOR**  
**INDUSTRIAL WORKERS IN ASSAM AND INDIA**

(Base 2001=100)

Year	Guwahati	Morioni	Doomdooma	Labac	Rangapara	Assam	All India
2006	115	116	116	121	114	116	123
2007	120	127	125	130	126	125	131
2008	128	133	133	143	131	133	142
2009	143	147	147	155	144	147	157
2010	156	158	160	178	154	161	176
2011	168	171	170	186	163	174	192
2012	184	185	182	197	171	184	209
2013	198	195	196	216	186	198	232
2014	214	217	213	243	213	220	247

Source: Directorate of Economics and Statistics, Assam and Labour Bureau, Govt. of India.

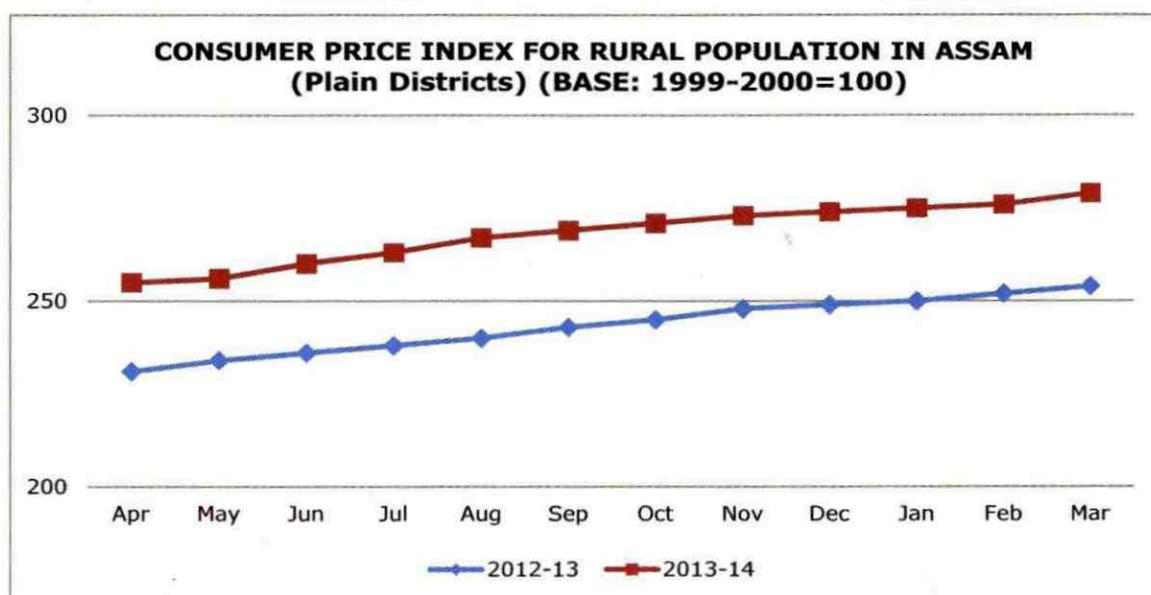
### CONSUMER PRICE INDEX FOR AGRICULTURAL LABOUR (CPI-AL) AND RURAL LABOUR (CPI-RL)

The Consumer Price Index number for Agricultural and Rural Labour with base 1986-87 is compiled by the Labour Bureau, Government of India. During 2013-14 (Agricultural year), the annual average CPI-AL in Assam was 740 as against 682 in 2012-13, showing an increase of 8.50 percent against 9.65 percent increase during 2012-13 over 2011-12 in the General category. The CPI-AL (Food) during 2013-14 was 736 with an increase of 7.92 percent over 682 in 2012-13.

The Consumer Price Index number (General) for Rural Labourers during the agricultural year, 2013-14 was 746 showing an increase of 8.75 percent over 686 in 2012-13 and CPI-RL (Food) during 2013-14 was 746 showing an increase of 8.75 percent over 686 in 2012-13..

### CONSUMER PRICE INDEX FOR RURAL POPULATION IN ASSAM

The Consumer Price Index number for Rural Population in Assam (Plain Districts) with base 1999-2000 during 2013-14 was calculated at 268 showing an increase of 10.29 percent over 243 in 2012-13 compared to 10.45 percent increase during 2012-13 over the previous year. The percentage change in CPI-Rural Population during the first five months of 2014-15 is 11.93 over the corresponding period of 2012-13. The point to point variation of Consumer Price Index for Rural Population in Assam during 2013-14 and 2012-13 are shown in the graph below.



## PUBLIC DISTRIBUTION SYSTEM

Public Distribution System is a major instrument of the Government's economic policy for ensuring availability of food grains at affordable prices as well as to provide food security to the poor. It is an important component for poverty eradication and is intended to serve the poor who are nutritionally at risk. Public Distribution System with a network of about 5.07 lakh fair price shop in the country is perhaps the largest distribution system of its type in the world.

Public Distribution System is operated under the joint responsibility of the Central and the State governments. The Central Government has taken the responsibility for procurement, storage, transportation and bulk allocation of food grains etc. The responsibility of distribution food articles to the consumers through the network of fair price shop rests with the State governments. In Assam, the Food and Civil Supplies Department looks after the allocation and distribution of food grains, identification of families below poverty line, issue of ration cards and supervision and monitoring of stock position and distribution of food articles etc. by the fair price shops. The department is also entrusted with the responsibility of procurement of paddy and rice under 'Minimum Support Price' scheme under the 'The Food Management Policy' of the Ministry of Food and Public Distribution of Govt. of India to ensure remunerative price to the producers for their agricultural produce and to provide the procured food grains to the consumers fairly at reasonable and affordable price.

## FAIR PRICE SHOPS

The fair price shops are opened taking into consideration of the convenience of the card holders and topography of the area. Number of fair price shops in the State as on 31<sup>st</sup> March 2014 was 36977, which increased by 72 numbers against 36905 number of fair price shops as on 31<sup>st</sup> March 2013. This 36977 fair price shops besides distributing food articles to APL card holders, presently giving service to 7,04,000 AAY and 12,02,000 BPL card holders also. The margin money paid to the Fair Price Shops dealers up to June 2014 is ₹54.00 per quintal and ₹41.00 per quintal for APL Rice and APL wheat respectively and ₹38.00 per quintal for BPL rice.

During the year 2010-11 the scheme with the brand name and logo of "Amar Dukan" and "Jagok Grahok Jagok" was introduced through selected Fair Price Shops. The scheme has facilitated distribution of 21 essential non PDS (MRP based) food items at subsidised rates through selected Fair Price Shops, throughout the State. 'At present, 2441 Fair price Shops are actively involved throughout the State in the sale of non-PDS items

The Food Corporation of India (FCI) is responsible for procurement of food grains and their allocation to the States for distribution through Public Distribution System.

## TARGETED PUBLIC DISTRIBUTION SYSTEM

The Targeted Public Distribution System (TPDS) is introduced to provide food grains to the poor families of the State under Minimum Common Need Programme of Govt. of India. Under TPDS the states are required to identify the poor families and to distribute food grains through the Fair Price Shops in a transparent and accountable manner. Govt. of India has been making allocation of subsidized food grains for the 6.52 Crore BPL families including about 2.43 Crore AAY families of the Country at the rate of 35 Kg per family per month. Allocation of subsidized food grains are also made to APL families based on the availability of food grains in the Central Pool and past off-take in the range between 15 Kg and 35 Kg per family per month.

To smoothen the functioning of TPDS in the State, the following measures are being implemented by the State Government in Assam:

- a. Adoption of Citizen's Charter.
- b. Deletion of bogus/ ineligible ration cards. (The Department with effect from July, 2006 up to 31<sup>st</sup> December, 2013 has deleted 2.38 lakh bogus/ ineligible ration cards in the State.)
- c. Number of Fair Price Shops allotted to various groups in the State. (Out of the total, 37 FPS under TPDS is run by Co-operatives in Assam.)
- d. Legal Action against defaulters who issued/ possessing bogus ration cards.
- e. Wheat flour distribution.
- f. Training programme taken up. (Training of members of FPS level Vegilance Committee).
- g. Public awareness campaign taken up.

**TABLE – 16.6**  
**ACTION TAKEN UNDER CLAUSES 8 & 9 OF THE PDS (CONTROL) ORDER,**  
**2001 FROM JANUARY, 2006 TO DECEMBER, 2013 IN ASSAM**

Year	Number of inspections	No. of raids conducted	No. of persons arrested/ prosecuted/ convicted	No. of FPS licences suspended/ cancelled/ show cause notices issued/ FIR lodged
2006	322	309	24	22
2007	2346	630	15	484
2008	9879	607	29	577
2009	6941	456	41	397
2010	2363	349	05	89
2011	3361	1454	200	129
2012	650	258	00	32
2013	501	162	00	14

Source Ministry of Consumer Affairs, Food and Public Distribution, Govt. of India.

Though all the above measures have been taken up, the State is still to take up monthly certification by village panchayat/ urban local bodies or Women's Self Help Groups on delivery on TPDS food grains of Fair Price Shops.

During the year 2013-14 up to March, 2013, total allocation of Wheat and Rice for APL, BPL, AAY families under all the schemes was 20.97 lakh tonnes for Assam of which 14.95 lakh tonnes were Rice and 6.02 lakh tonnes were Wheat. It is seen that during the year 2013-14 the total offtake of wheat has increased by 0.52 lakh tonnes and in case of rice it has decreased by 2.99 lakh tonnes in Assam as compared to the total offtake during 2012-13. The present monthly requirement, allocation and release of commodities for Public Distribution System for the State are shown in table-16.7.

**TABLE – 16.7**  
**QUANTITY AND RATES OF COMMODITIES DISTRIBUTED PER**  
**MONTH UNDER DIFFERENT SCHEMES IN ASSAM, 2014**

Commodities	Schemes	Monthly Requirement (In MT/KL)	Average Monthly Allocation (In MT/KL)
Rice	BPL	42,070	39,602
	AAY	24,641	24,641
	APL	1,02,850	34,248
Wheat (Atta)	APL	46,137	18,697
S.K. Oil	APL	56,104	27,344

\*Up to August, 2014.

Source: Directorate of Food & Civil Supplies, Assam.

Presently the following schemes are being implemented by the department for welfare of the masses.

#### **THE ABOVE POVERTY LINE (APL) SCHEMES**

At present 40.92 lakh APL families are provided with APL rice, S.K. Oil, L/Sugar and Iodized salt as per quantum of allocation in each month. The APL families are provided with 18 Kg of rice per family at the rate of ₹10.00 per Kg. and 7 Kg of wheat per family at the rate of ₹8.50 per Kg.

## THE BELOW POVERTY LINE (BPL) SCHEMES

The State has achieved the target of selecting 19.06 lakh beneficiaries from BPL families and provided distinct ration cards for issuance of PDS items at subsidized rates. Out of 19.06 lakh selected beneficiaries, 12.02 lakh of beneficiaries have FIC cards and take benefits as BPL families and the rest 7.04 lakh of beneficiaries are brought under AAY category families as per directions and guidelines of the Central Government. The BPL families are provided with 35 Kg of rice per family at the rate of ₹7.00 per Kg.

## THE ANTYODAYA ANNA YOJANA (AAY)

The Scheme is in implementation in the State since November 2001 as per guidelines of the Govt. of India. At present there are 7.04 lakh families under AAY category. Under this scheme, the selected beneficiaries are provided with 35 Kg. of Rice per family per month at a highly subsidized rate of ₹3.00 per Kg. The transportation charge @ ₹30.00 per quintal for carrying AAY Rice from the food storage depots of FCI to the various outlets for distributing of Rice amongst the selected beneficiaries is provided by the State Government under Non-plan.

## RANDHAN JYOTI SCHEME

The scheme is in implementation in the State since August 2003. The State has already implemented 1st, 2nd, 3rd, and 4th phase of the scheme by providing LPG connection at free of cost to 1,68,221 numbers of person selected from BPL families in order of preference of widow, women members of the Self-Help groups and any other female members of the BPL families of lower income groups. This scheme is sponsored by the State Government.

The fifth phase of the scheme is under implementation and the Department has received an amount of ₹200.00 lakh from the Government to give benefit to 11235 numbers of new beneficiary families.

## CONSUMER COURTS

Under the provisions of Consumer Protection Act 1986, the Food and Civil Supplies Department being the State Nodal Centre has one State level Consumer Redressal Forum at Guwahati and 23 District level Consumer Redressal Forums.

To create consumer awareness among the masses, the department has undertaken various activities such as advertisements through the print and electronic media, distribution of pamphlets, leaflets, organizing painting and essay competition among children and observance of National Consumers Day on 24<sup>th</sup> December and World Consumer Day on 15<sup>th</sup> March. Govt. of India has provided a sum of ₹28.75 lakh for undertaking consumer awareness programmes in the State.

## MUKHYA MANTRIR ANNA SURAKSHA YOJANA

Under the Targeted Public Distribution System (TPDS), a total of 19.06 lakh families are covered as per target fixed by the Planning Commission of Govt. of India based on the population as well as family status of 1993-94 and no extra target for inclusion of more deserved families is taken into consideration by the Central Govt. Hence, to bring the deserved poor families i.e. lowest strata of APL families under the ambit of food security, the Anna Suraksha Yojana has been launched.

At present twenty lakh families are being benefitted under the scheme. Such identified families are being provided 20 kgs of subsidized rice at BPL rate to each beneficiary upon production of distinctive Ration card issued by the concern department. In rural areas, the beneficiaries are selected by the selection committee comprising of Block Development Officer as Chairman and another five members including one PRI member and one social worker and in urban areas the committee is headed by the local Revenue Circle Officer and another five members to select the beneficiaries for the scheme.

## MUKHYA MANTRIR SAMABAY SABALIKARAN YOJANA 2010

This scheme has been launched to financially strengthen the weak GPSS/LAMPS set up under the Assam Co-operative Act 1949 so that they can accommodate the enhance allocation of PDS foodgrains and specially the Mukhya Mantrir Anna Suraksha Yojana.

**APPENDIX – 16.1**  
**CONSUMER PRICE INDEX NUMBER FOR**  
**WORKING CLASS POPULATION IN ASSAM**  
 (Base 1982 = 100)

Sl. No.	Period	Guwahati	Silchar	Tinsukia	Assam
1.	1991 Annual Average	208	193	195	200
2.	1992 Annual Average	235	217	216	224
3.	1993 Annual Average	252	233	233	241
4.	1994 Annual Average	280	251	255	264
5.	1995 Annual Average	312	274	281	291
6.	2000 Annual Average	460	370	389	412
7.	2001 Annual Average	471	372	384	415
8.	2002 Annual Average	480	374	398	424
9.	2003 Annual Average	496	383	416	439
10.	2004 Annual Average	516	411	430	459
11.	2005 Annual Average	531	415	450	473
12.	2006 Annual Average	551	442	470	495
13.	2007 Annual Average	575	476	504	525
14.	2008 Annual Average	615	521	536	554
15.	2009 Annual Average	684	565	592	621
16.	2010 Annual Average	748	648	644	686
17.	2011 Annual Average	808	678	687	732
18.	2012 Annual Average	883	719	735	789
19.	2013 Annual Average	952	789	791	854
20.	2014 January	1008	850	816	901
21.	2014 February	1003	861	812	901
22.	2014 March	979	861	812	891
23.	2014 April	989	872	816	899
24.	2014 May	1008	883	832	915
25.	2014 June	1027	891	848	930
26.	2014 July	1037	894	873	943
27.	2014 August	1042	898	889	952
28.	2014 September	1051	905	897	960
29.	2014 October	1061	913	905	969
30.	2014 November	1051	909	917	968
31.	2014 December	1042	894	909	958

Source : Directorate of Economics and Statistics, Assam.

**APPENDIX – 16.2**  
**CONSUMER PRICE INDEX NUMBER FOR**  
**WORKING CLASS POPULATION IN ASSAM**  
 (Base 2001 = 100)

Period	Guwahati	Silchar	Tinsukia	Assam
2008 Annual Average	128	143	133	134
2009 Annual Average	143	155	147	148
2010 Annual Average	156	178	160	164
2011 Annual Average	168	186	170	174
2012 Annual Average	184	197	182	188
2013 Annual Average	193	208	190	197
2014 January	210	233	202	215
2014 February	209	236	201	215
2014 March	204	236	201	213
2014 April	206	239	202	215
2014 May	210	242	206	219
2014 June	214	244	210	222
2014 July	216	245	216	225
2014 August	217	246	220	227
2014 September	219	248	222	229
2014 October	221	250	224	231
2014 November	219	249	227	231
2014 December	217	245	225	228

Source : Directorate of Economics and Statistics, Assam.

**APPENDIX – 16.3**  
**CONSUMER PRICE INDEX NUMBER FOR**  
**INDUSTRIAL WORKERS IN ASSAM AND INDIA**

Period	Base 1982 = 100						
	Guwahati	Doom-Dooma	Labac	Rangapara	Mariani	Assam	All India
1991 Annual Average	208	195	193	209	205	203	212
1995 Annual Average	312	281	274	295	296	293	306
2000 Annual Average	460	389	370	408	418	412	441
2005 Annual Average	531	450	415	439	449	461	536
2006 Annual Average	551	470	442	476	464	485	569
2007 Annual Average	575	504	476	526	509	522	605
2008 Annual Average	615	536	521	548	532	554	656
2009 Annual Average	684	592	565	600	591	611	727
2010, Annual Average	748	644	648	643	635	667	815
2011, Annual Average	808	687	678	678	685	732	887
2012, Annual Average	884	735	719	715	740	764	969
2013, Annual Average	950	789	786	774	781	822	1071
2014 January	1008	816	850	821	822	703	1097
2014 February	1003	812	861	830	822	706	1102
2014 March	979	812	861	855	830	707	1107
2014 April	989	816	872	876	838	717	1120
2014 May	1008	832	883	880	858	728	1130
2014 June	1027	848	891	876	866	734	1139
2014 July	1037	873	894	901	878	745	1167
2014 August	1042	889	898	913	898	753	1171
2014 September	1051	897	905	926	898	759	1171
2014 October	1061	905	913	938	910	950	1171
2014 November	1051	917	909	934	918	949	1171
2014 December	1042	909	894	926	910	943	1171

Source : Directorate of Economics and Statistics, Assam

**APPENDIX 16.4**  
**CONSUMER PRICE INDEX NUMBER FOR**  
**INDUSTRIAL WORKERS IN ASSAM AND INDIA**

Period	Base 2001 = 100						
	Guwahati	Doom-Dooma	Labac	Ranga-para	Mariani	Assam	All India
2006 Annual Average	115	116	121	114	116	116	123
2007 Annual Average	120	125	130	126	127	125	131
2008 Annual Average	128	133	143	131	133	133	142
2009 Annual Average	143	147	155	144	147	147	157
2010 Annual Average	156	160	178	154	158	161	176
2011 Annual Average	168	170	186	163	171	174	192
2012 Annual Average	184	182	197	171	185	184	209
2013 Annual Average	198	196	216	186	195	198	232
2014 January	210	202	233	197	205	210	237
2014 February	209	201	236	199	205	210	238
2014 March	204	201	236	205	207	210	239
2014 April	206	202	239	210	209	213	242
2014 May	210	206	242	211	214	216	244
2014 June	214	210	244	210	216	219	246
2014 July	216	216	245	216	219	222	252
2014 August	217	220	246	219	224	225	253
2014 September	219	222	248	222	224	227	253
2014 October	221	224	250	225	227	229	253
2014 November	219	227	249	224	229	229	253
2014 December	217	225	245	222	227	227	253

Source : Directorate of Economics and Statistics, Assam.

**APPENDIX - 16.5**  
**CONSUMER PRICE INDEX NUMBER FOR**  
**RURAL POPULATION IN ASSAM**  
 (Plain Districts)

Period	Consumer Price Index Number (Base 1944=100)
1991 Annual Average	1735
1992 Annual Average	1962
1993 Annual Average	2112
1994 Annual Average	2309
1995 Annual Average	2505
1996 Annual Average	2709
1997 Annual Average	2748
1998 Annual Average	3046
1999 Annual Average	3278

**APPENDIX – 16.5 [Contd.]  
CONSUMER PRICE INDEX NUMBER FOR  
RURAL POPULATION IN ASSAM**

(Plain Districts)

Period	Consumer Price Index Number (New Base 1999-2000=100)
2000-01 Annual Average	104
2001-02 Annual Average	108
2002-03 Annual Average	112
2003-04 Annual Average	109
2004-05 Annual Average	128
2005-06 Annual Average	130
2006-07 Annual Average	139
2007-08 Annual Average	158
2008-09 Annual Average	177
2009-10 Annual Average	194
2010-11 Annual Average	205
2011-12 Annual Average	220
2012-13 Annual Average	243
2013-14 Annual average	268
<b>2013-14</b>	
April	255
May	256
June	260
July	263
August	267
September	269
October	271
November	273
December	274
January	275
February	276
March	279

Source: Directorate of Economics and Statistics, Assam.

**APPENDIX -16.6  
CONSUMER PRICE INDEX NUMBER FOR AGRICULTURAL AND  
RURAL LABOURERS IN ASSAM**

MONTH / YEAR	AGRICULTURAL LABOURERS		RURAL LABOURERS	
	General	Food	General	Food
2011 Annual average	600	602	603	609
2012 Annual average	654	653	657	661
2013 Annual average	708	706	713	716
2014 Annual average	776	770	782	781
January 2014	744	739	750	750
February 2014	741	731	747	741
March 2014	746	735	753	746
April 2014	758	749	765	760
May 2014	762	754	767	763
June 2014	769	761	774	771
July 2014	783	780	788	790
August 2014	796	793	800	803
September 2014	801	799	806	809
October 2014	803	799	811	814
November 2014	805	801	812	814
December 2014	802	797	810	811

Source: Directorate of Economics and Statistics, Assam.

## APPENDIX-16.7

## WHOLESALE PRICE INDEX FOR AGRICULTURAL COMMODITIES IN ASSAM

Period	Wholesale Price Index Number for Agricultural Commodities in Assam (Base 1993-94= 100)
1993-1994	100
1994-1995	117
1995-1996	123
1996-1997	130
1997-1998	137
1998-1999	149
1999-2000	172
2000-2001	162
2001-2002	163
2002-2003	161
2003-2004	165
2004-2005	170
2005-2006	176
2006-2007	185
2007-2008	204
2008-2009	221
2009-2010	249
2010-2011	272
2011-2012	287
2012-2013	296
2013-2014	336
2013-14	
April	311
May	314
June	316
July	320
August	329
September	334
October	341
November	347
December	351
January	353
February	356
March	361

Source: Directorate of Economics and Statistics, Assam.

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## CHAPTER – XVII

## LABOUR, EMPLOYMENT AND WAGES

The objective of economic policy planning in India is to achieve high rates of growth of economy and sustained improvement in the standards of living of people. To achieve the objective, it is essential to absorb the growing labour force to generate productive and gainful employment, on a sufficient scale. The Country as a whole and the State in particular has experienced high rates of economic growth during the post reforms period. The State has witnessed an increase in employment in the construction sector and the service sector. Considering the present employment – unemployment scenario in the country, the Planning Commission of India has given emphasis on inclusive growth vis-a-vis rapid growth in employment opportunities along with improvement in the quality of employment. It recognizes the need to increase the share of regular employment in total employment and a corresponding reduction in casual employment.

The State Government besides implementing various national employment programmes has initiated various programmes to lessen the burden of unemployment by creating and utilizing the potential employment avenues available in the state. The population censuses, different quinquennial rounds of National sample Survey on employment data, Employment and Unemployment Surveys conducted by the Labour Bureau and Economic Census provides data on employment structure and workforce as well as involvement of human resources in economic activity, employment etc. On the other hand, the data available from the Employment Exchanges does not give a clear picture on unemployment as a large number of unemployed people either did not register their names with Employment Exchanges or those who secure employment through other channels do not delete their names from the records of Employment Exchanges.

## EMPLOYMENT SCENARIO

The Census of India defines all persons engaged in 'work' as participation in any economically productive activity with or without compensation, wages or profits are workers. The year preceding the date of enumeration is taken as the reference period for determining a person as worker or non-worker. The Census of India collects information on economic activity of an individual and classifies workers into two groups namely, Main workers who had worked for the major part of the reference period i.e. 6 months or more and Marginal workers who had worked less than six months. The table below shows the trend of Main workers, Marginal workers and Non-workers in Assam as per the last three censuses.

**TABLE 17.1**  
**DISTRIBUTION OF TOTAL WORKERS, MAIN WORKERS,**  
**MARGINAL WORKERS AND NON-WORKERS IN ASSAM**

Year	Population	Total Workers	Main Workers					Marginal Workers	Non-Workers
			Total	Cultivators	Agricultural Labours	Household Industry Workers	Other Workers		
1991	22414322	8088935	6992056	3559117	844964	61455	2526520	1096879	14325387
2001	26655528	9538591	7114097	2680092	636351	178082	3619572	2424494	17116937
2011	31205576	11969690	8687123	3138554	903294	242071	4403204	3282567	19235886

The Fig.I shows that proportion of main workers to total population in Assam has decreased from 31 percent in 1991 to 28 percent in 2011 although the figures in absolute number has increased by 24 percent between the period 1991 to 2011. On the other hand, the proportion of marginal workers shows an increasing trend both in percentage share and absolute number during the period. The proportion of non-workers to total population although remained more or less at the same level (about 64 percent) in 1991 and 2001, it showed a slight decline in 2011.

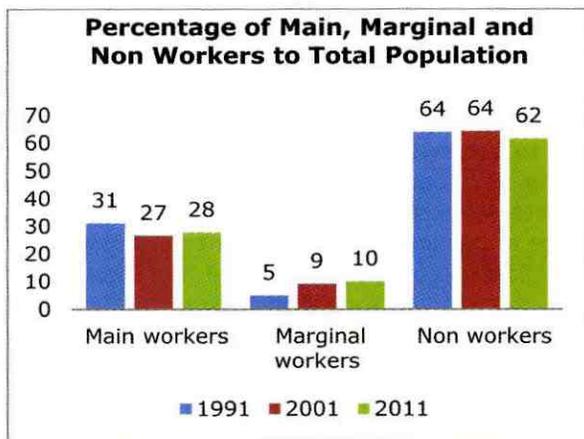


Fig. I

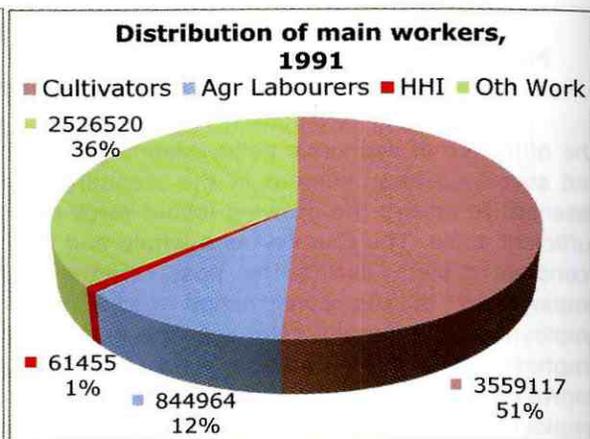


Fig. II

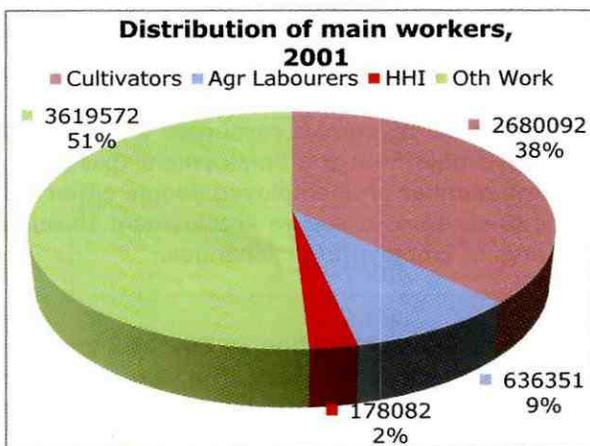


Fig.III

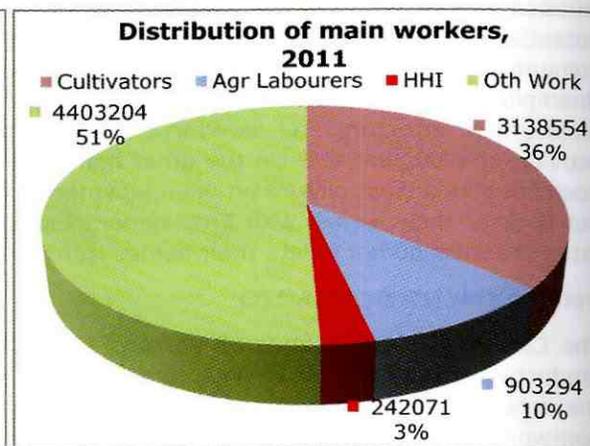
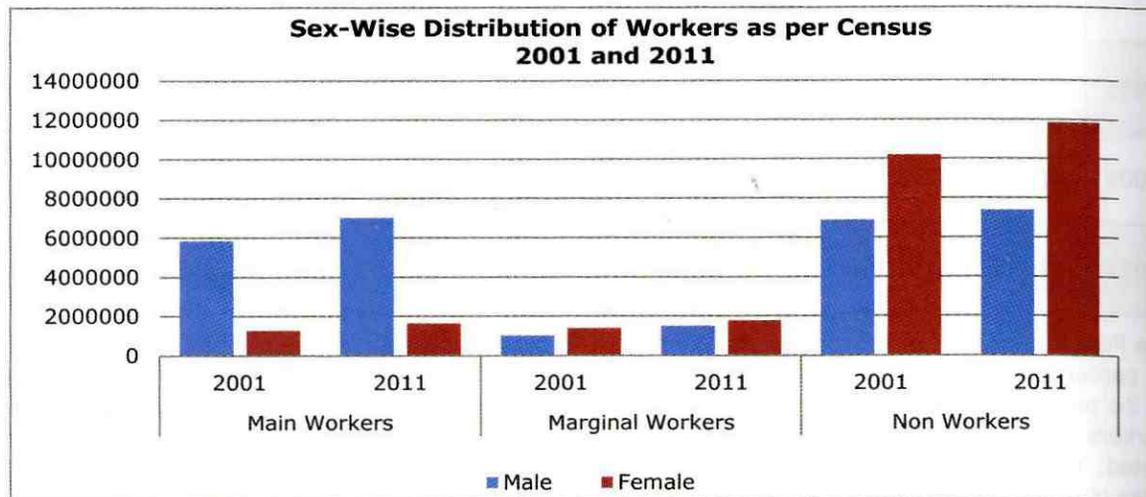


Fig. II

The Fig.II, Fig.III and Fig.IV, shows that there is a shift in the composition of total main workers from agricultural sector to non-agricultural sector. During 2001 and 2011, of the total main workers, proportion of workers in agricultural sector was 46 percent as against 62 percent in 1991. On the other hand, the proportion of other workers to total main workers depicts an increasing trend from 36 percent in 1991 to 51 percent in 2011 and proportion of workforce engaged in household industry increased from 1 percent in 1991 to 3 percent in 2011.

The sex-wise distribution of main workers, marginal workers and non-workers is depicted in the figures given below:



The percentage share of male and female main workers is 44 percent and 11 percent respectively as per Census 2011 shows a slight increase over the composition of male (42%) and female (10%) main workers as per Census 2001.

**EMPLOYMENT – UNEMPLOYMENT SURVEY**

The employment-unemployment surveys conducted by the National Sample Survey Organisation (NSSO) in various rounds gives a glimpse on various characteristics of employment and unemployment situation in the country as well as in the states. The result of the 68th round of the NSSO survey conducted during the year July 2011-June 2012 is presented in the table 17.1. The table below shows the Worker Population Ratio (WPR) i.e. number of persons/ person-days employed per 1000 in usual status [principal status (ps) and subsidiary status (ss)] in Assam and India.

**TABLE – 17.2  
WORKER POPULATION RATIO (PER 1000) IN USUAL STATUS (PS+SS)  
AS PER 68<sup>TH</sup> ROUND NSS (JULY 2011-JUNE 2012)**

	Rural			Urban			Rural+Urban		
	Male	Female	Person	Male	Female	Person	Male	Female	Person
Assam	540	122	343	542	90	329	540	119	341
India	543	248	399	546	147	355	544	219	386

Source: Employment and Unemployment Situation of India, 68<sup>th</sup> Round, NSSO, MOSPI, Govt. of India.

The Worker Population Ratio (WPR) according to usual status (PS+SS) in Assam was about 34 percent as against 39 percent at the all-India level. WPR in rural areas in Assam was 34 percent and in urban areas 33 percent as against 40 percent and 36 percent at the all-India level. The female ratio both in rural and urban areas showed significantly low than the WPR for males. In the rural areas, WPR for males and females in Assam was about 54 percent and 12 percent respectively as against an all-India percentage of about 54 and 25 respectively while in the urban areas, WPR for males and females in Assam was about 54 percent and 9 percent respectively as against 55 percent and 22 percent at the all-India level.

The Labour Force Participation Rate (number of persons in the labour force per 1000 persons/ person days) for persons of age 15 years and above according to usual status (both principal and subsidiary status) approach in Assam were 82 percent male, 17 percent female and 51 percent both for male and female and at the all-India level the males, females and both were 80 percent, 31 percent and 56 percent respectively.

**TABLE-17.3  
UNEMPLOYMENT RATE (PER 1000) ACCORDING TO  
USUAL STATUS (ADJUSTED) DURING 2011-12**

	Rural			Urban			Rural + Urban		
	Male	Female	Persons	Male	Female	Persons	Male	Female	Persons
Assam	43	57	45	54	70	56	44	56	47
All-India	17	17	17	30	52	34	22	22	23

Source: Employment and Unemployment Situation of India, 68<sup>th</sup> Round, NSSO, MOSPI, Govt. of India.

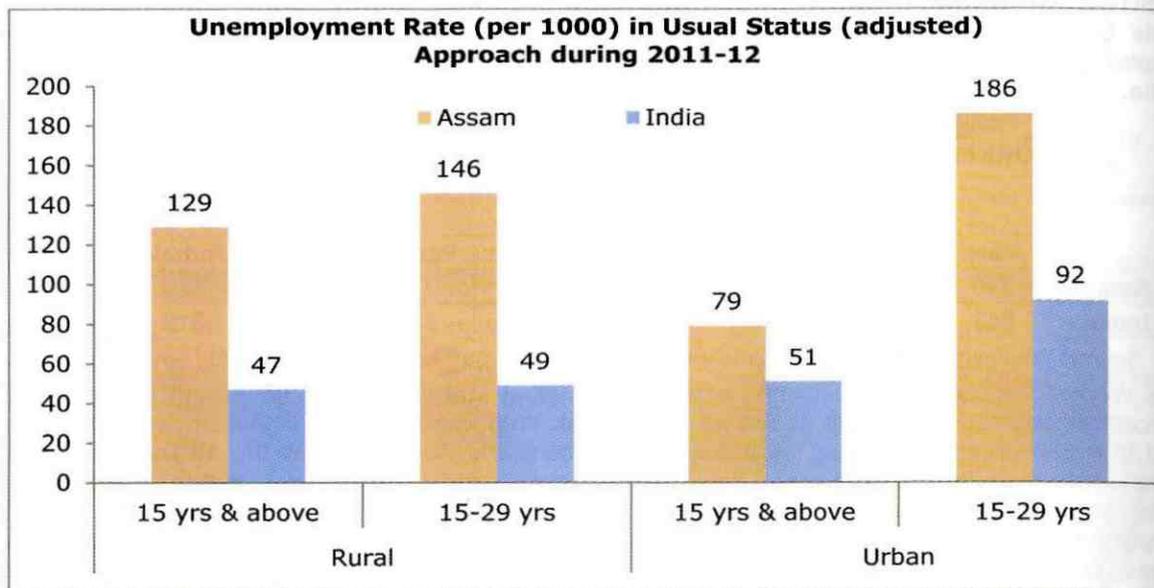
The study of the 68<sup>th</sup> round NSS reveals that the unemployment rate i.e. the number of persons unemployed per 1000 persons in the labour force (labour force includes both the employed and unemployed) according to the usual status (adjusted) approach for both rural and urban (combined) shows that as against all India figures of 22 males, 22 females and 23 males and females (combined) there is 44 males, 56 females and 47 combined (males and females) in Assam. The unemployment rate for rural and urban areas of Assam [both for male and female together] has been calculated at 45 and 56 per 1000 persons compared to 17 and 34 at all India level.

**TABLE-17.4  
UNEMPLOYMENT RATE AMONG THE YOUTH (15-29 YEARS)  
IN USUAL STATUS (ADJUSTED) DURING 2011-12**

	Rural			Urban		
	Male	Female	Persons	Male	Female	Persons
Assam	148	142	146	187	180	186
All-India	50	48	49	81	131	92

Source: Employment and Unemployment Situation of India, 68<sup>th</sup> Round, NSSO, MOSPI, Govt. of India.

The report on 68<sup>th</sup> round NSS reveals that almost 26 percent of the total population belongs to the age group 15-29 years in Assam. It also reveals that during 2011-12, the unemployment rate among the youths of Assam was much higher as compared to the overall workforce population of the State. Table-17.4 shows that the unemployment rates as per usual status (adjusted) approach in the age group 15-29 years for males and females in rural areas of Assam were 14.8 percent and 14.2 percent respectively compared to 5.0 percent and 4.8 percent at all India level. The table also shows that the unemployment rate for males and females in urban areas of the State were 18.7 percent and 18.0 percent as against 8.1 percent and 13.1 percent respectively at all India level.



Source: Employment and Unemployment Situation of India, 68<sup>th</sup> Round, NSSO, MOSPI, Govt. of India.

### RESULTS OF FOURTH ANNUAL EMPLOYMENT-UNEMPLOYMENT SURVEY, 2013-14

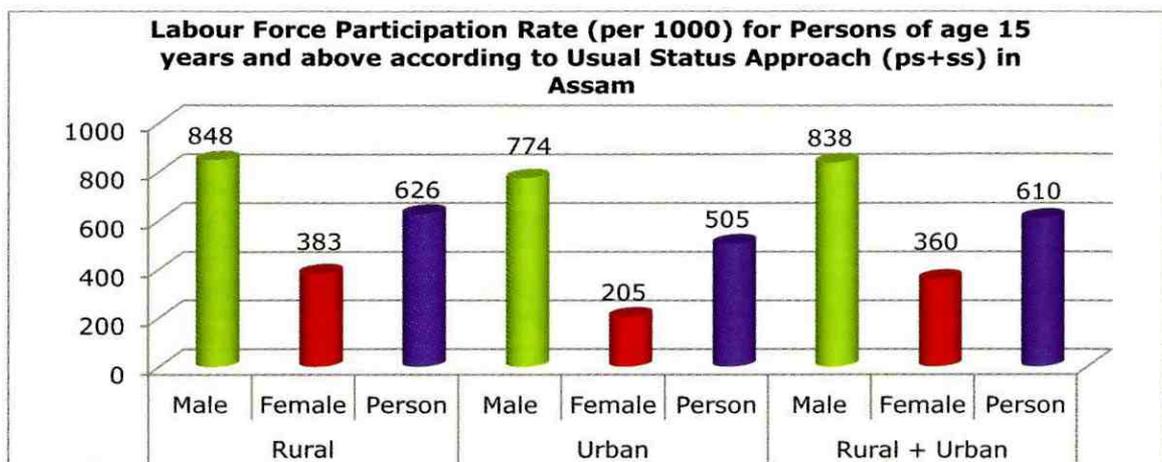
The Ministry of Labour and Employment, Govt. of India has entrusted the task of conducting Employment and Unemployment surveys on regular basis to the Labour Bureau, Govt. of India. The fourth annual Employment and Unemployment survey was conducted throughout the country during the period January 2013 to July 2014. A brief analysis on the estimates of some labour parameters in the context of Assam State is discussed in the paragraphs below.

The study reveals that as per Usual Principal and Subsidiary status approach (ps+ss) 61 percent of employed persons in the age group 15-17 years in the State are self employed against 53 percent at the All India level. The percentage of self employed in the age group 18-29 years and 30 years and above in the State is 56 percent and 62 percent respectively in the State as against 44 percent and 53 percent at all India level respectively. The distribution of wage/ salaried employees in the age group 15-17 years, 18-29 years and 30 years and above in the State is 7 percent, 17 percent and 21 percent respectively as against 5 percent, 17 percent and 15 percent respectively at all India level.

The report shows that in rural areas of the State there are 61 percent, 57 percent and 63 percent self employed persons in the age group 15-17 years, 18-29 years and 30 years and above as against 52 percent, 50 percent and 49 percent in the urban areas respectively. In the same age groups in rural areas there are 8 percent, 15 percent and 18 percent wage/ salaried persons in comparison to 3 percent, 33 percent and 42 percent in the urban areas of the State.

### LABOUR FORCE PARTICIPATION RATE

The result of the Fourth Annual Employment Unemployment Survey, 2013-14 conducted by the Labour Bureau reveals that the Labour Force Participation rate in respect of the age-group 15 years and above according to usual status approach for both principal status (ps) and subsidiary status (ss) in Assam is 63 percent in rural areas, 51 percent in urban areas and 61 percent taking urban and rural areas as a whole against the all India rate of 59 percent, 48 percent and 56 percent respectively. The figure given below shows the Labour Force Participation Rate (per 1000) for persons aged 15 years and above in the State.

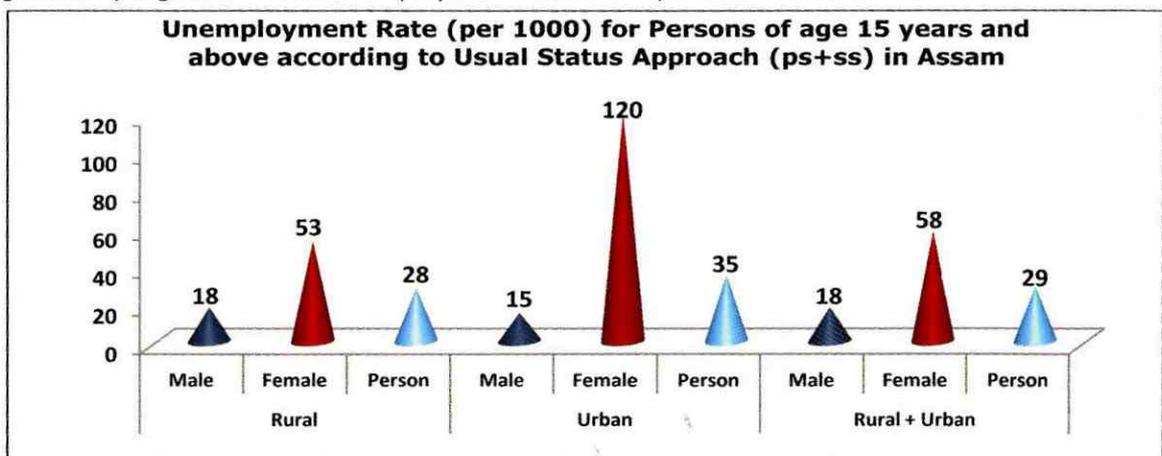


Source: 4<sup>th</sup> Employment Unemployment Report, 2013-14, Labour Bureau, Govt. of India.

### UNEMPLOYMENT RATE

The Unemployment Rate is estimated to be 2.9 percent in the State under the usual principal and subsidiary status or about 3 percent of the persons aged 15 years and above who were available for work could not get work during the reference period. In rural areas the unemployment rate is 2.8 percent whereas in urban areas the unemployment rate is 3.5 percent under the same approach. The unemployment rate at all India level under the same approach is 3.4 percent in both rural and urban, 2.9 percent in rural areas and 4.9 percent in urban areas. In the State, the female unemployment rate is 5.8 percent which is 4 percent higher than the male rate of 1.8 percent.

The study reveals that the female unemployment rate in urban areas of the State under the usual principal and subsidiary status approach during the reference period is 12 percent which is significantly higher than the unemployment rate of 5.3 percent in rural areas.



Source: 3<sup>rd</sup> Employment Unemployment Report, 2012-13, Labour Bureau, Govt. of India.

### EMPLOYMENT IN SHOPS AND COMMERCIAL ESTABLISHMENTS

The Labour Bureau, Ministry of Labour and Employment, Govt. of India publishes report on employment in shops and commercial establishments covered by the various Central and State Acts on the basis of returns or reports submitted by the States and Union Territories. The report on Shops and establishment in Assam is prepared on the areas covered under the Assam Shops and Establishment Act, 1971. The report published by the Labour Bureau shows that the total number of establishments in Assam covered under the Act and persons employed therein during 2011 were 71 thousand and 104 thousand respectively. Out of these 71 thousand establishment, 56 thousand (80 percent) were shops, 11 thousand (15 percent) were commercial establishments and 4 thousand (6 percent) were Cinemas, theatres, Hotels and Restaurants that employed 57 thousand (55 percent), 33 thousand (32 percent) and 14 thousand (13 percent) persons respectively. A comparison of number of shops and establishment in Assam during 2008, 2009, 2010 and 2011 is shown in Table 17.5.

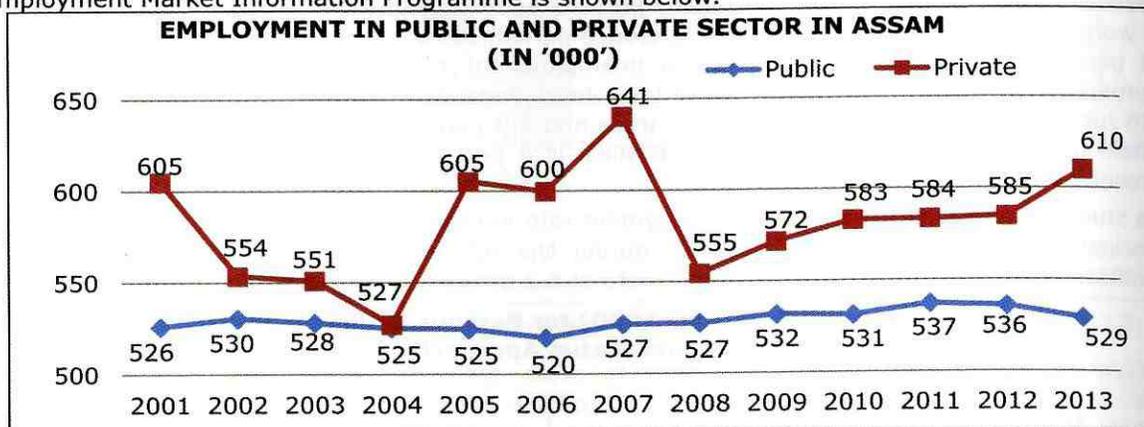
**TABLE - 17.5**  
**EMPLOYMENT IN SHOPS AND COMMERCIAL ESTABLISHMENTS IN ASSAM**  
(‘000 number)

Year	Shops		Commercial Establishment		Restaurants, Theatres etc.		All Establishment	
	Number	Workers	Number	Workers	Number	Workers	Number	Workers
2008	61	55	10	29	5	14	76	98
2009	57	53	10	30	4	13	71	96
2010	61	57	10	32	4	14	75	102
2011	56	57	11	33	4	14	71	104

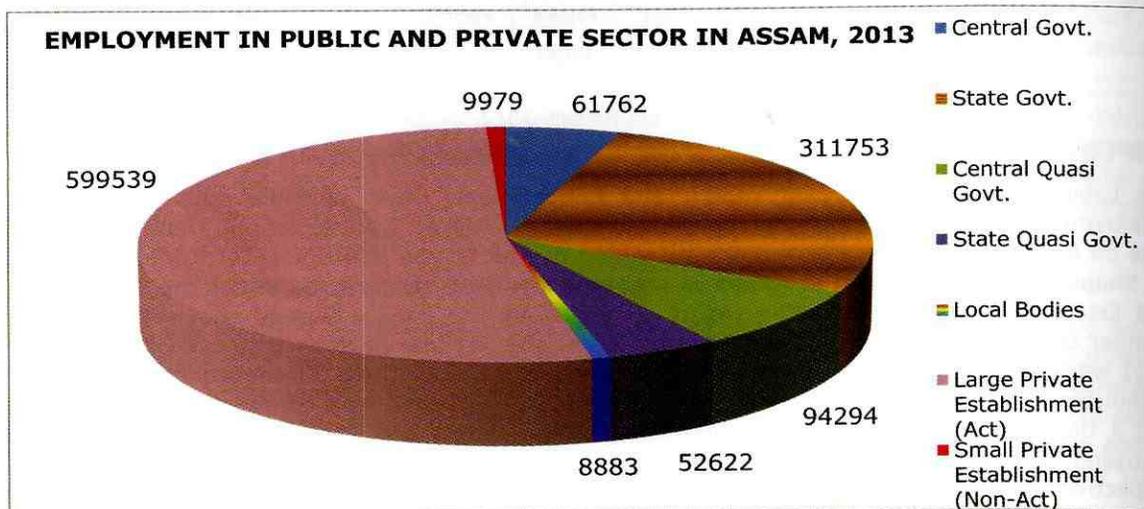
Source: Indian Labour Journal, Labour Bureau, Shimla, Ministry of Labour and Employment, Govt. of India.

**EMPLOYMENT MARKET INFORMATION (EMI) PROGRAMME**

The EMI programme gives information about the level of employment in the organised sector of the economy, which covers all establishments in the public sector and non-agricultural establishments employing 10 or more persons in the private sector. Collection of data under the EMI programme is reported through an ‘Establishment Reporting System’. The trend of employment in public and private sector from 2001 to 2013 as per data collected through Employment Market Information Programme is shown below.



The total employment in the public and private sector establishments under EMI programme in 2013 was 11.39 lakh (in public sector 5.29 lakh and in private sector 6.10 lakh) compared to 11.20 lakh (in public sector 5.36 lakh and in private sector 5.85 lakh) in 2012 and thus stands 1.70 percent more than in 2012. In these sectors, female employment was 34 percent of the total employment. Out of the total 5.29 lakh employment in public sector, share of local bodies was 1.68 percent and share of State Quasi Government was 10 percent during the year. The pie, given below shows the composition of public and private sector employment in Assam during 2013.



## WOMEN EMPLOYMENT IN ORGANISED SECTOR

The employment of women in organised sector of the State was 385 thousand during 2013 which is 33.8 percent of the total employment. During 2013, percentage share of women employees in public sector and private sector to the total employment was 7.9 percent and 25.9 percent respectively.

**TABLE - 17.6**  
**EMPLOYMENT OF WOMEN IN ORGANISED SECTOR**

Year	Public Sector		Private Sector		Public and Private Sector		Percentage Share of Women in Organised sector
	Women	Total	Women	Total	Women	Total	
2003	77.4	528.0	241.1	551.1	318.5	1079.2	30.0
2004	77.3	525.1	255.6	572.0	332.9	1097.2	30.0
2005	81.5	524.5	268.4	605.2	350.0	1140.0	30.7
2006	81.8	519.7	299.0	599.7	380.7	1119.4	34.0
2007	84.9	527.0	310.8	640.5	395.7	1167.5	33.9
2008	85.6	527.3	266.5	554.6	352.1	1081.9	32.5
2009	87.3	531.7	273.0	571.7	360.3	1103.4	32.7
2010	87.0	531.1	279.7	583.0	366.7	1114.1	32.9
2011	89.0	537.0	279.9	583.5	369.0	1120.6	32.9
2012	90.1	535.7	280.5	584.8	371.0	1120.5	33.1
2013	90.5	529.3	294.9	609.5	385.4	1138.8	33.8

Source: Directorate of Employment and Craftsmen Training, Assam.

## UN-EMPLOYMENT SCENARIO IN THE STATE

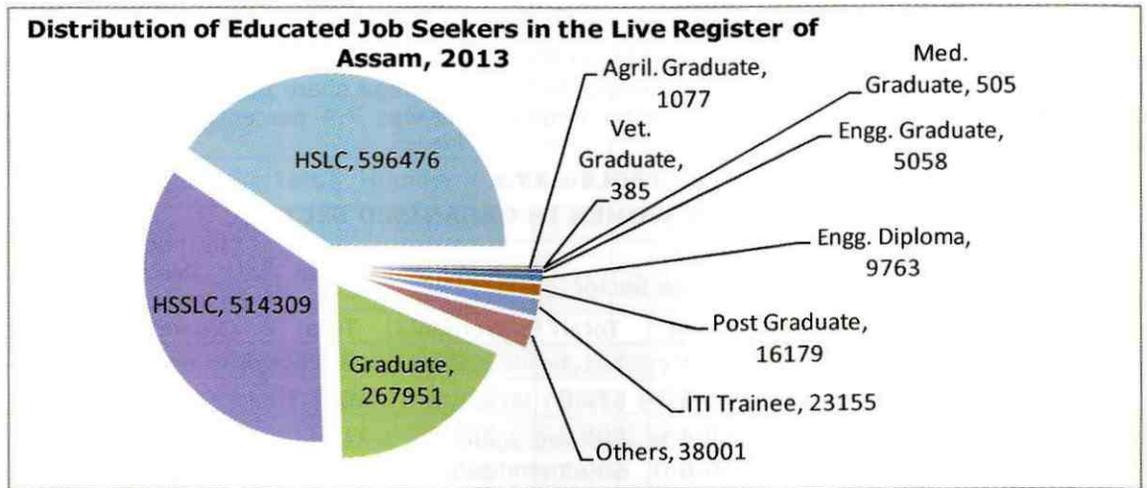
The State has 82 employment exchanges comprising of 49 general, 1(one) special, 3 Employment Information and Guidance Bureau and 29 Employment Information and Assistance Bureau. Two Districts of BTAD, Baksa and Chirang have no Employment exchange. The table below shows that the number of unemployed as per Live Register increased by 3.36 percent in 2013 over 2012. During 2013, total placement was 18 percent against the number of notified vacancies through Employment Exchanges.

**TABLE - 17.7**  
**EMPLOYMENT THROUGH EMPLOYMENT EXCHANGES**

YEAR	No. in Live Register	Percentage increase in Live register	No. of Vacancies Notified	No. of Placement Against Vacancies
2004	1631216	4.02	703	253
2005	1763430	8.01	2380	148
2006	1827149	3.61	3170	551
2007	1921563	5.17	2023	540
2008	2006389	4.41	2383	628
2009	2079558	3.65	2506	501
2010	1911431	(-)0.08	2606	455
2011	1729029	(-)9.54	1401	436
2012	1622729	(-)6.15	2632	394
2013	1677192	3.36	4204	745

Source: Directorate of Employment and Craftsmen training, Assam.

The size of the educated job seekers is considerably high, which is a challenge before the growing economy of the State. From the records of the live register of Employment Exchanges, the registered educated job seekers stood at 1472859 during 2013 and recorded an increase of 4.31 percent over 2012. The percentage of educated job seekers constitutes about 88 percent of the total job-seekers. The distribution of total educated job seekers in 2013 as per the live register of Assam is reflected in the pie-chart given below.



Source: Directorate of Employment and Craftsmen Training, Assam.

The overall registration of educated job seekers as per record of Employment Exchanges has decreased by 39 percent in 2013 over the previous year. During 2013, there is a decline in registration of Veterinary Graduates, Post Graduates, Graduates, HSSLC passed, HSLC passed, Diploma Holders (Engineering) and others over the previous year. One reason for decrease in registration of HSLC passed may be attributed to pursuing further studies. The year, 2013 depicts an increase in registration of Engineering Graduates (84%), Medical Graduates (209%), Agriculture Graduates (89%) and ITI Trainees(26%). The detail distributions of the educated job seekers are shown in the table below.

**TABLE - 17.8**  
**DISTRIBUTION OF EDUCATED JOB-SEEKERS**

Level of Education	Registration		Percentage Increase/ Decrease in Registration	Placement		Numbers in live register	
	2012	2013		2012	2013	2012	2013
Engineering Graduate	744	1372	84	18	66	3656	5058
Medical Graduate	201	622	209	1	0	546	505
Agriculture Graduate	18	34	89	0	1	897	1077
Veterinary Graduate	30	14	(-)53	0	3	301	385
Passed out Trainees (ITI)	1998	3260	63	3	9	16009	23155
Post Graduates	1615	1145	(-)29	22	148	14489	16179
Graduates	28274	18774	(-)34	85	47	272154	267951
H.S.S.L.C.	62077	39072	(-)37	90	63	492854	514309
H.S.L.C.	41557	22587	(-)46	58	18	545858	596476
Diploma Holders(Eng.)	3589	1000	(-)72	32	4	18174	9763
Others	10524	4049	(-)62	16	54	47011	38001
Total	150627	91929	(-)39	325	413	1411949	1472859

Source: Directorate of Employment and Craftsmen Training, Assam.

### ASSAM GOVT. EMPLOYEES CENSUS

The Assam Govt. Employees Census is conducted quinquennially by the Directorate of Economics and Statistics, Assam. The last census was conducted with reference year 2009 and the report has been published. The table below shows the trend of sex-wise distribution of Assam Govt. Employees as per the last four consecutive censuses.

TABLE-17.9

## SEX-WISE DISTRIBUTION OF ASSAM GOVT. EMPLOYEES

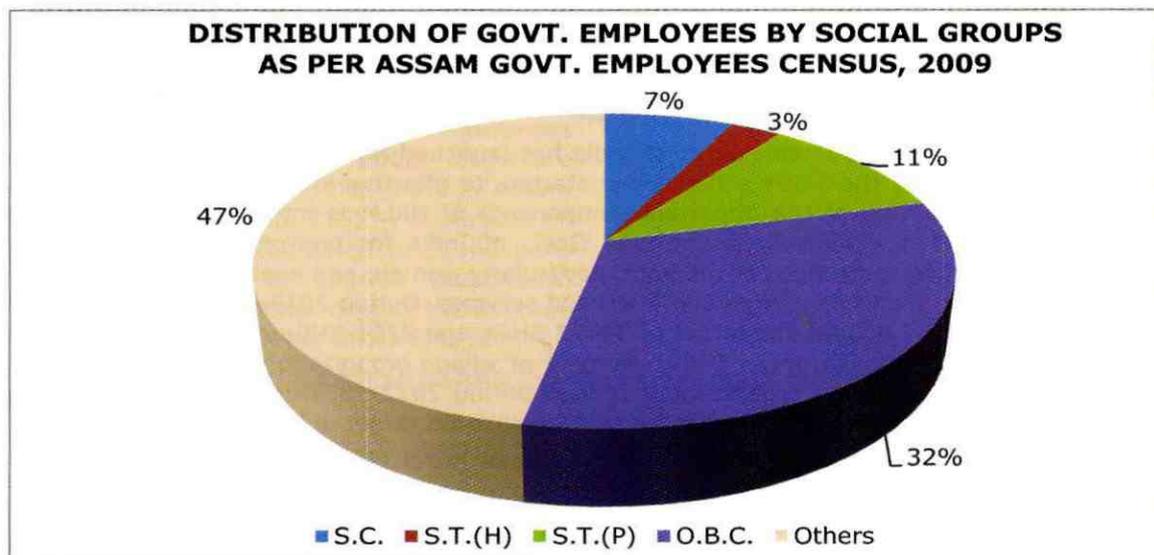
Year	Male	Female	Total
1989	239117	31822	270939
1994	259141	45694	304835
1999	269555	56516	326071
2004	264924	59254	324178
2009	318457	74508	392965

Source: Assam Govt. Employees Census, 2009, Directorate of Economics and Statistics, Assam.

The Assam Govt. Employees Census, 2009 report reveals that the total Govt. employees has increased by 21.22 percent over the census figure of 2004 wherein number of male employees have increased by 20.21 percent and number of female employees have increased by 25.74 percent compared to a decrease of total employees by 0.58 percent in 2004 where number of male employees have decreased by 1.72 percent whereas number of female employees increased by 4.84 percent over the census figure of 1999.

The census report shows that the total number of Govt. employees in 2009 comprises of 18.96 percent female employees and 81.04 percent male employees. The male and female Govt. employees as per Census, 1989 was 88.25 percent and 11.75 percent respectively.

The distribution of Assam Govt. employees as per Census, 2009 shows that there are 4.28 percent Class-1 employees, 2.15 percent Class-II employees, 69.43 percent Class-III employees, 19.69 percent Class-IV employees and 4.45 percent are employees with fixed or consolidated pay. The graph below depicts the composition of social group wise number of Govt. employees in the State.



#### AVERAGE DAILY WAGE RATE IN RURAL AREAS

As per data collected by the Directorate of Economics and Statistics, Assam, the Average Daily Wage Rate of skilled, unskilled and other agricultural labours shows a more or less steady upward trend. The wage rate in rural areas shows that under skilled labour, wage rate of Carpenter and Blacksmith increased by 12 percent and 15 percent respectively during 2013-14 over 2012-13 and under unskilled labour, wage rate of male ploughman, herdsman and Reaper and Harvester increased by 21 percent, 5 percent and 25 percent respectively during 2013-14 over 2012-13. During 2013-14 the female wage rate for Reaper and Harvester increased by 28 percent over the previous year. The wage rate (other agricultural labour) for male and female increased by 22 percent and 38 percent respectively during 2013-14 over the previous year.

**TABLE – 17.10**  
**AVERAGE DAILY WAGE RATE IN RURAL AREAS IN ASSAM (in Rupees)**

Year	Skilled Labour Wage		Un-skilled Labour Wage				Other Agricultural Labour	
	Carpenter	Black-smith	Ploughman	Herdsmen	Reaper and Harvester		Man	Women
	Man	Man	Man	Man	Man	Women		
2001-02	87.01	62.17	52.01	37.56	50.71	40.73	47.02	42.16
2002-03	92.93	68.02	52.32	48.53	52.05	46.50	49.21	47.47
2003-04	102.4	85.11	57.53	52.05	60.13	42.18	55.40	49.32
2004-05	108.77	88.25	62.05	54.85	63.90	49.18	59.27	48.52
2005-06	113.91	94.45	64.19	63.01	65.02	49.02	61.44	47.69
2006-07	120.80	100.69	71.02	63.07	68.09	52.61	65.46	53.88
2007-08	123.53	97.29	76.44	72.19	74.27	59.53	72.11	58.04
2008-09	133.89	104.64	84.65	82.72	82.55	66.76	83.47	66.60
2009-10	147.08	121.33	92.91	92.08	93.25	74.05	102.83	87.00
2010-11	149.54	131.11	119.58	116.66	111.66	87.21	136.66	92.11
2011-12	154.45	133.11	124.58	119.66	118.45	93.21	137.11	98.25
2012-13	196.34	189.22	182.00	164.06	164.02	135.15	169.05	126.30
2013-14	220.02	217.26	219.58	172.17	204.42	173.08	205.75	174.08

Source: Directorate of Economics and Statistics, Assam.

### EMPLOYMENT GENERATION PROGRAMME

Our economy is developing at a fast pace but still a major part of the population who are poverty ridden, illiterate and lack of skill needs support to earn. Keeping this in mind the Central Government and the State Government has initiated and implemented many programmes for self and wage employment generation as well as for creation of production of assets through various organisations like, the Panchayat and Rural Development Department, Directorate of Industries and Commerce, Agriculture Department, etc. The achievements of some of these programmes are briefly discussed as follows:

### NATIONAL RURAL LIVELIHOOD MISSION

The Ministry of Rural Development, Govt. of India has launched National Rural Livelihood Mission (NRLM) by restructuring the SGSY scheme and started its effective implementation in the State since 1<sup>st</sup> April, 2013. One of the important components of NRLM is interest subvention to the women SHGs. NRLM is a flagship program of Govt. of India for promoting poverty reduction through building strong institutions of the poor, particularly women, and enabling these institutions to access a range of financial services and livelihood services. During 2013-14, number of women SHG formed was 28354 against the target of 34473 SHGs and 7761 SHGs received revolving fund during the year against the target of 6880. Number of village organizations formed during 2013-14 is 1463 against 192 village organizations formed during 2012-13. During 2013-14, 59 village organizations received community investment fund against the target of 96.

National Rural Livelihood Project (NRLP) under National Rural Livelihood Mission (NRLM) is an intensive strategy with investment support from the World Bank.

### MAHATMA GANDHI NATIONAL EMPLOYMENT GUARANTEE ACT (MGNREGA)

The Mahatma Gandhi National Employment Guarantee Programme was introduced during the 11<sup>th</sup> five year Plan for giving wage employment opportunities to the rural poor during the lean agricultural season when they require wage employment for boosting their purchasing power to supplement their income requirement for livelihood. The other objective of the Act is to create durable community assets for development of rural infrastructure for upliftment of quality of the rural people.

During the year 2013-14 a total of 12.62 lakh households were provided job under MGNREGA and out of them 15505 households got 100 days employment against 9807 households in the previous year. In 2013-14, a total of 10786 women have been engaged as mates under the programme compared to 3000 women mates engaged in 2012-13. In addition, 2372 numbers of disabled persons from BPL households were provided employment in 2013-14.

**PRIME MINISTER EMPLOYMENT GENERATION PROGRAMME (PMEGP)**

The Prime Minister Employment Generation Program (PMEGP) has been introduced by merging the PMRY and REGP with the objective of providing employment to the educated unemployed youth. The scheme facilitates self-employment through setting up of industries/service and business ventures with a limited amount of Bank loan with subsidy on the recommendation of Task Force Committees constituted for the purpose. The KVIC is the nodal agency for implementing the PMEGP scheme at the national level and at the State level the scheme is implemented by the state KVIC Directorate, State KVIB and the District Industries and Commerce Centers and Banks. The Government subsidy under the scheme is being routed through the KVIC to the identified Banks. The target and achievement under PMEGP from 2008-09 to 2013-14 is reflected in the table below.

**TABLE - 17.11  
TARGET AND ACHIEVEMENT OF PMEGP DURING THE YEAR 2008-09 TO 2013-14**

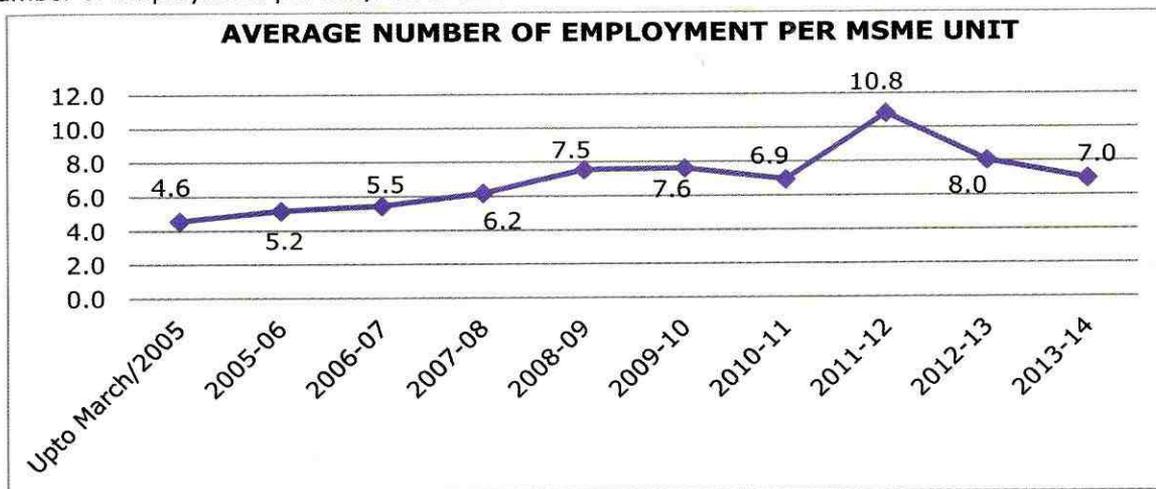
Year	Physical target (in nos.)	Financial Target (margin Money) (Rs. in Lakh)	Total Cases sanctioned (Rs. in Lakh)	Physical achievement (in no.)	Financial achievement (Rs. in lakh.)	P.C. of Physical achievement	P.C. of Financial achievement
2008-09	685	820.22	861	617	676.95	90	83
2009-10	1292	1550.00	2440	2440	1899.71	189	123
2010-11	3193	4469.66	4756	4756	4801.10	149	107
2011-12	5047	7065.80	5280	5280	5544.99	105	78
2012-13	4644	6500.20	7336	7336	5801.15	158	89
2013-14	4588	6210.97	8049	8049	7219.90	175	116

Source: Directorate of Industries and Commerce, Assam.

**SMALL SCALE INDUSTRIES/MICRO, SMALL AND MEDIUM ENTERPRISE (MSME)**

The small scale industries sectors have a vital contribution towards the process of industrialization of the State. Presently the small-scale industries have been sub-divided into Micro, Small and Medium Enterprise under the Micro, Small and Medium Enterprises Development (MSMED) Act 2006. There are 39028 numbers of SSI/ MSME units in Assam providing employment to 215574 of persons till the end of 2013-14 compared to 37168 units giving employment to 202603 persons in 2012-13. The graph below depicts the average number of employment per SSI/MSME unit.

NO. OF SSI & MSME UNIT AND EMPLOYMENT		
Year	No. of SSI/MSME Unit	Employment
Upto March/2015	31315	154484
2009-10	1678	12787
2010-11	1506	10458
2011-12	1218	13203
2012-13	1451	11671
2013-14	1860	12971



Source: Directorate of Industries and Commerce, Assam.

## MULTI DISCIPLINARY SKILL DEVELOPMENT PROGRAMME

The Multi Disciplinary skill Development Programme is a flagship programme taken up by the Department of Industries and commerce for the Twelfth Five Year Plan to create skilled manpower and employment for the rural youth. The scheme also has provision for training of entrepreneurs to enhance their skills. Construction of four Multi Disciplinary skill Development centre has been started at Karimganj, Dhubri, Nagaon and Tinsukia district along with up gradation of existing training institute "Cottage Industries Training Institute" at Kalapahar in Guwahati. Another 23 training centres are going to be constructed during 2012-13 to provide one training centre in each district of the State. Till the construction of the training centres are completed, the Department has initiated to provide training at few recognized national institutes of repute within and outside the State. During the year 2013-14, the Department sponsored 1390 persons and the same number completed their training against physical target of 1500 and a financial target of ₹450.00 lakh.

## MUKHYA MANTRIR KARMAJYOTI AACHANI

The basic objective of the scheme is to uplift the economic status and skill development of traditional artisans through financial assistance from the Government. Traditional trade like manufacturing of decorative textile, black smithy, pottery, carpentry, toy making etc will cover under the scheme. The scheme is under implementation from the year 2005-06 under the sponsorship of the Government of Assam. During the year 2013-14, 1257 artisans were benefited with a financial assistance of ₹422.65 lakh against 1903 number of artisans being benefitted with an assistance of ₹178.62 lakh in 2012-13.

## VOCATIONAL TRAINING

The Vocational Training Programme is being continued by the Department of Industries and Commerce, Assam to provide assistance to the interested unemployed youth of the State for self employment. The following table shows the target and achievement under the Vocational Training Programme.

**TABLE - 17.12**  
**VOCATIONAL TRAINING PROGRAMME**

Year	Physical target (in nos.)			Financial Target (Rs. in Lakh)			No. of trainees sponsored			No. of trainees completed training		
	Gen	SCSP	TSP	Gen	SCSP	TSP	Gen	SCSP	TSP	Gen	SCSP	TSP
2011-12	520	520	135	50.00	50.00	14.00	520	520	135	520	520	135
2012-13	310	Nil	Nil	30.00	Nil	Nil	310	Nil	Nil	310	Nil	Nil
2013-14	310	350	78	30.00	34.00	8.00	310	350	78	Under implementation		

Source: Directorate of Industries and Commerce, Assam.

## FACTORY EMPLOYMENT

During 2013, there were 5271 number of factories (registered under Factory Act, 1948) employing 192543 number of persons in the State showing an increase of 8 percent in the number of factories employing 4 percent more than that of 2012. The maximum number of workers were engaged in manufacturing of beverages (36%) followed by manufacturing of fabricated metal products, except machinery and equipment (32%), manufacturing of rubber and plastic products and manufacturing of articles of straw and plaiting materials (4%) and the rest distributed amongst of factories as per NIC-2008.

## APPENDIX-17.1

## DISTRICTWISE NUMBER OF EMPLOYMENT EXCHANGES IN ASSAM, 2013

Sl. No.	District	General	Special	Employment Information & Guidance Bureau(EI GB)	Employment Information & Assistance Bureau(EIAB)	Total
1	Kokrajhar	2	-	-	1	3
2	Dhubri	2	-	-	1	3
3	Goalpara	1	-	-	1	2
4	Barpeta	1	-	-	1	2
5	Morigaon	2	-	-	1	3
6	Nagaon	3	-	-	1	4
7	Sonitpur	2	-	-	1	3
8	Lakhimpur	1	-	-	2	3
9	Dhemaji	2	-	-	-	2
10	Tinsukia	4	-	-	-	4
11	Dibrugarh	3	1	1	1	6
12	Sivasagar	4	-	-	2	6
13	Jorhat	2	-	1	2	5
14	Golaghat	2	-	-	2	4
15	Karbi-Anglong	3	-	-	2	5
16	Dima-Hasao	2	-	-	3	5
17	Cachar	1	-	-	2	3
18	Karimganj	2	-	-	1	3
19	Hailakandi	1	-	-	1	1
20	Bongaigaon	1	-	-	1	2
21	Chirang	-	-	-	-	-
22	Kamrup	5	-	1	1	7
23	Kamrup (M)					
24	Nalbari	1	-	-	2	3
25	Baksa	-	-	-	-	-
26	Darrang	1	-	-	1	2
27	Udalguri	1	-	-	-	1
<b>ASSAM</b>		<b>49</b>	<b>1</b>	<b>3</b>	<b>29</b>	<b>82</b>

Source: Directorate of Craftsmen &amp; Employment Training, Assam

## APPENDIX-17.2

## EMPLOYMENT THROUGH EMPLOYMENT EXCHANGES IN ASSAM, 2013

Sl. No.	District	No. of Registration	No. in Live Register	No. of Vacancies Notified	No. of placement
1	Kokrajhar	5205	44743	1	0
2	Dhubri	8457	71242	9	0
3	Goalpara	5478	41534	7	1
4	Barpeta	19074	80500	65	15
5	Morigaon	3515	39219	0	0
6	Nagaon	11138	130732	110	5
7	Sonitpur	14142	77283	238	12
8	Lakhimpur	8566	42876	11	3
9	Dhemaji	3543	38014	11	0
10	Tinsukia	5977	42364	68	77
11	Dibrugarh	14963	109144	195	10
12	Sivasagar	10688	108489	359	38
13	Jorhat	12658	88453	729	67
14	Golaghat	6497	66104	34	25
15	Karbi-Anglong	4235	42165	8	4
16	Dima-Hasao	1486	5116	0	8
17	Cachar	9401	67027	69	3
18	Karimganj	4556	30177	83	1
19	Hailakandi	9253	22717	41	0
20	Bongaigaon	5051	36971	191	0
21	Chirang	-	-	-	-
22	Kamrup Metro	28793	341754	1853	464
24	Nalbari	10838	77592	26	2
25	Baksa	-	-	-	-
26	Darrang	8500	41022	96	10
27	Udalguri	2643	31954	0	0
<b>ASSAM</b>		<b>214654</b>	<b>1677192</b>	<b>4204</b>	<b>745</b>

Source: Directorate of Craftsmen &amp; Employment Training, Assam.

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## CHAPTER – XVIII

## PANCHAYAT AND RURAL DEVELOPMENT

The responsibility of the *Panchayat* and Rural Development Department includes alleviation of rural poverty, enhancement of rural livelihoods by providing self-employment to the people living below poverty line as defined by the Planning Commission from time to time through implementing variety of programmes and to strengthen the *Panchayati Raj* Institution (PRI). The Department is concerned to empower PRIs increase the capability of poor through self employment programme and by developing the critical infrastructures in the rural areas. At present, there are 21 *Zila Parisads*, 189 *Anchalik Parisads* and 2202 *Gram Panchayats* in the State under three tier PRI systems in 21 plain districts excluding the 6<sup>th</sup> Scheduled districts viz., 2 Hill districts - Karbi-Anglong, Dima Hasao and 4 BTAD districts under BTC where PRI system is not in existence. Moreover, there are District Rural Development Agency one in each district and 219 Community Development Blocks to look after the implementation of the programmes/schemes of the Department.

## SCHEMES IMPLEMENTED BY THE PANCHAYAT AND RURAL DEVELOPMENT DEPARTMENT

## A. CENTRALLY SPONSORED SCHEME

(ON 90:10 COST SHARING BASIS WITH THE CENTRAL AND STATE GOVERNMENT)

## MAHATMA GANDHI NATIONAL RURAL EMPLOYMENT GUARANTEE ACT (MGNREGA)

Mahatma Gandhi National rural Employment Guarantee Act (MGNREGA), a wage employment programme for providing guaranteed wage employment/livelihood to the rural un-skilled labourers for at least 100 days. The programme provides employment to the adult members of a family having a Job card and volunteer to do unskilled manual labour in every financial year. The other objective of the Act is to create durable community assets for development of rural infrastructure for upliftment of quality of life of the rural people. In Assam, MGNAREGA has empowered millions of lives in Assam penetrating even in inaccessible and difficult areas. The enhanced income help the rural poor to come out from the vicious cycle of poverty and able to afford better education and health care for their children and families. Although creation of durable assets and securing livelihood of rural households is the objective of the programme, to facilitate it, presently the process of convergence of MGNREGA works with the schemes available of other sectors have been initiated and the technical expertise and knowhow of the officials of the line department would be used to the implementation of MGNREGA more effective in the field. At present, the convergence of MGNREGA work has been taken up with the line departments like water resources, PWD, Irrigation, Sericulture, Handloom and Textiles, Agriculture etc. in Assam.

During the year 2013-14, an amount of ₹662.00 crore have been utilised as compared to the utilisation of ₹651.00 crore in the previous year. About 98 percent fund has been utilised under MGNREGA. More than 60 percent works have been completed in 2013-14. Towards employment front, a total of 12.62 lakh households were provided job under MGNREGA and out of them 15505 households got 100 days employment during 2013-14 against 9807 households provided 100 days work in the previous year.

Women participation has increased to 29 percent in the state of Assam. In 2013-14, a total of 10786 women have been engaged as mates under this programme compared to 3000 women mates engaged in 2012-13. Till the end of March 2014, 41.48 lakh rural households (cumulative from 2006-07) have been provided with job cards in the State. During the year 2013-14, 299.16 lakh mandays have been generated, out of which 73.87 lakh mandays were generated by women. In addition, 2372 nos. of disabled persons from BPL households were provided employment during the year. Presently, it has a comprehensive MIS. e-FMS has been rolled out in the entire State. 5500 Social Audit has been conducted against the target of 5244 accordingly.

## INDIRA AWAS YOJANA (IAY)

*Indira Awas Yojana* [IAY] is implemented for providing dwelling houses to the houseless and shelter less people living below the poverty line in the rural areas. The Department has completed more than 144583 numbers of IAY houses out of which 66298 nos. of IAY houses has actually been constructed against the target of 138698 during 2013-14. The rest are the incomplete houses of previous years but completed during the year. As far as a financial achievement is concerned an amount of ₹587.32 crore has been utilised during 2013-14 against the total available fund of ₹1389.36 crore. Similarly, more than 155907 IAY houses against the annual target of 184408 numbers has been completed with an amount of ₹712.06 crore out of the total available fund of ₹1005.40 crore during 2012-13. The quality of life of these IAY beneficiaries is considered better off for being provided with a unit of IAY house which costs ₹75,000/. Now toilet has been made mandatory for IAY houses by the Government of India.

## B.CENTRAL SECTOR SCHEME

### NATIONAL SOCIAL ASSISTANCE PROGRAMME (NSAP)

National Social Assistant Programme (NSAP) is a social welfare programme for BPL people. Economic assistance is given to socially disadvantaged people of BPL families. It consists of five sub components viz. IGNOAPS (Indira Gandhi National Old Age Pension Scheme), IGNWPS (Indira Gandhi National Widow Pension Scheme), IGNDPS (Indira Gandhi National Disabled Pension Scheme), NFBS (National Family Benefit Scheme) & *Annapurna*. An amount of ₹204.89 crore or 99.50 percent of the total available amount of ₹206.00 crore has been utilised during 2013-14 and 785836 numbers of beneficiaries inclusive of both categories were benefitted. As far as reference year 2013-14 is concerned, beneficiary under IGNOAPS (80 years. and above) are provided @ ₹550/- per month while the beneficiary of the age group of 60 – 79 years are provided @ ₹250/- per month. Similarly, Pensioners have been provided with @ ₹300/- per month per beneficiary under IGNWPS (40 – 79 years) & IGNDPS (18 – 79 years). During the year 2013-14, number of beneficiaries under IGNWPS were 64686 and under IGNDPS were 24391. As regards to NFBS, it is implemented with the objective of providing onetime economic/financial assistance at the death of the bread earner of a family. The existing amount of assistance of ₹10, 000/- has been enhanced to ₹20,000/- during 2013. In 2013-14 as many as 1344 families were provided financial support under the scheme. As regards, *Annapurna*, the head of the BPL family who attains 65 years of age and not covered under IGNOAPS are provided with at least 10 Kg of rice free of cost. During the year 2013-14, 25308 no. of families were got assistance under the scheme. The process of digitisation of data under the component of IGNOAPS has almost been completed during the year under reference.

### BACKWARD REGION GRANT FUND (BRGF)

Backward Regional Grant Fund (BRGF) is designed to redress regional imbalances in development. The financial resources provided to supplement and converging existing developmental inflows into 13 districts of the state of Assam identified by the Planning Commission, Government of India. It has two funding wings – (1) Development Grant, and (2) Capacity Building. The Govt. of India allocates the fund to the BRGF districts under the components like –

- i) Special component plan for SC (SCPSC);
- ii) Special component plan for ST Sub Plan (STSP) ; and
- iii) Non SCPSC/STSP category.

An amount of ₹126.01 crore have been utilised out of the total available fund of ₹195.00 crore and 1130 no. of schemes (including the schemes of previous years) have been completed in 2013-14. In 2012-13, an amount of ₹87.15 crore was utilised out of the total available fund of ₹145.07 crore and 1755 no. of schemes were completed.

**STATE PLAN SCHEME****DISTRICT DEVELOPMENT PLAN (DDP)**

District Development Plan(DDP) is the process for preparing an integrated plan for the local govt. section in the district taking into account the resources (National, Human & Financial) available and covering the sectoral activities and schemes assigned to the district level and below and those implemented through local Govt. in the State. The document that embodied the statement of resources and their allocation for various purposes is known as District Plan. It has been implemented by the *Panchayat* and Rural Development Department through PRIs and ULBs since 2007-08. More than ₹69.84 crore have been utilised and 2045 number of schemes completed during the year 2013-14 as against the utilisation of amount of ₹113.16 crore in respect of more than 2579 number of schemes during 2012-13.

**13<sup>TH</sup> FINANCE COMMISSION AWARD**

Under the 13<sup>th</sup> Finance Commission, an amount of ₹110.91 crore have been utilised against the available fund of ₹167.43 crore and more than 3265 number of schemes were completed during the year 2013-14. The achievement during 2012-13 was like completion of 13920 numbers of schemes out of total utilisation of ₹249.49 crore against the available amount of ₹283.88 crore.

**4<sup>TH</sup> STATE FINANCE COMMISSION**

The award period of this programme is 2011-12 to 2015-16 and funded by the State Govt. Under this programme the construction of *Zila Parishad* office building, multipurpose hall and office building of *Anchalik Panchayats*, *Gaon Panchayats*, residential quarter of BDOs/EOs/Grade-III, IV staff and for *Anchalik Panchayats* and for *Gaon Panchayat Secretaries* etc., followed by the implementation of visible schemes like construction of roads, drains, park etc. are also implemented by the *Zila Parisads* of the districts. Under this programme, an amount of ₹15.67 crores has been utilised and more than 372 nos. of schemes were completed during the year 2012-13 but no fund was received during 2013-14, hence the status of achievement could not be recorded.

**E-GOVERNANCE PROJECT FOR PANCHAYATI RAJ INSTITUTIONS (E-PRI) MODULES**

Assam has become the Pioneer in implementation of e-PRI Module in the country by rolling out almost all the programme modules under e-PRI. All GP, AP & ZP have registered their separate website and these have been integrated with National Portal. 100 percent mapping of village, GP and district under Local Government Directory has been completed.

**RAJIV GANDHI PANCHAYAT SASHAKTIKARAN ABHIYAN (RGPSA)**

The Ministry of *Panchayati Raj*, Govt. of India has introduced the scheme from the year 2012-13 with the objective of enhancing capacities and effectiveness of *Panchayats* and *Gram Sabhas*, enable democratic decision-making and accountability in *Panchayats* and promote people's participation, strengthen institutional structure for knowledge creation and capacity building of *Panchayats*, promote devolution and responsibilities to *Panchayat* according to the spirit of the constitution and PESA Act, strengthen *Gram Sabhas* to function effectively as the basic forum of people's participation, transparency and accountability within the *Panchayat* system, create and strengthen democratic local self-government in areas where *Panchayats* do not exist, strengthen the constitutional mandate framework on which *Panchayats* are founded.

The scheme has been implemented in the state from the year 2013-14. The Budget sanctioned for the year under reference is ₹3700.82 lakh. Out of that ₹1665.00 lakh has been released by the Govt. of India. The fund so sanctioned and released has been utilised for taking up the

components like technical and administrative support at GP level, construction and repair of GP *Bhawan*, capacity building and training, institutional structure, e-enablement, strengthening of SEC (State Election Commission, Informatics, Education and Communication (IEC) and programme management etc. During the year under reference, new buildings for 46 *Gram Panchayats* have been approved @₹15.00 lakh for each unit. Out of that the process of construction for more than 36 nos. of GP buildings has already started in the state. Moreover, for technical support at the GP level, GOI has sanctioned 2202 post of Accountant-Cum-Computer Operator (contractual) out of that – 2111 no. of Contractual staff has been engaged across the State. Similarly, for e-enablement of the *Panchayats*, 983 no. of Computers has been provided to equal number of GP at present.

#### OTHER STATE PLAN SCHEME:

#### CM'S JEEVAN JYOTI SWARNIYOJAN YOJANA/CM'S SPECIAL EMPLOYMENT GENERATION SCHEME

A self employment generation programme under CM's special employment generation programme under State Plan Scheme has been implemented during the 11<sup>TH</sup> Five Year Plan period for imparting training and providing materials for self employment among the rural BPL families. This programme is continuing.

#### SKILL DEVELOPMENT TRAINING/STRENGTHENING OF EXTENSION TRAINING CENTRES PROGRAMME UNDER SIRD

The State Institute of Rural Development (SIRD), Assam has been organising skill development training programmes on different activities for providing self employment avenues for unemployed youths, farmers, weavers, artisans, entrepreneurs etc., as well as given thrust for upgrading the skill of traditional activities for income generation and livelihood promotion. The Government of India has been providing 100 percent grant for strengthening the infrastructure of SIRD and the State Government also borne its share of 10 percent of total recurring grant. Moreover, the Government of Assam has set up the Resource Centre in IT and Skill Development at Kahikuchi with a view to transfer the benefit of technology development directly to the communities at the grass root level to uplift life and livelihood of rural poor.

Since 2001-2013, the Extension Centre has provided managerial and skill development training to 1.6 lakh persons comprising youths, women, farmers, weavers, artisans etc., for livelihood. During 2013-14 about 6000 persons have undergone skill development training on various activities.

#### SCHEMES/PROJECTS FOR 2014-15

As regards proposed schemes for 2014-15, the Hon'ble Chief Minister, Assam desires to undertake and implement a few projects as indicated below in the entire 219 Development Blocks across the state through the *Panchayat* and Rural Development Department under MGNREGA :

- Construction of Indira Gandhi *Adarsha Gramin Paki Path* in each Development Blocks @ ₹70.00 lakh.
- Construction of Gramin Sports Complex in commemoration of Pt. Jawaharlal Nehru in each Development Block @ ₹57.00 lakh.
- Construction of Dr. Bhupen Hazarika *Mukali Mancha Aru Uddayan*, an open air stage and garden in each Dev. Block @ ₹25.00 lakh.
- Construction of Swargadeo Rudra Singha *Adarsha Pukhuri* in each Dev. Block @ ₹75.00 lakh.

All these projects have already started in the field.

## APPENDIX 18.1

## DISTRICT WISE PHYSICAL ACHIEVEMENT UNDER MGNREGA IN ASSAM 2013-14

Sl. No.	Name of District	EMPLOYMENT GENERATED (Lakh Mandays)				
		SC	ST	OTHERS	TOTAL	WOMEN
1	Kokrajhar	45854	586262	775623	1407739	509088
2	Dhubri	17858	875	1062271	1081004	334864
3	Goalpara	33172	212321	551604	797097	275153
4	Barpeta	34907	14320	819173	868400	270859
5	Morigaon	498818	473730	3091226	4063774	693177
6	Nagaon	297815	188651	3666094	4152560	674888
7	Sonitpur	87767	151021	1025688	1264476	380208
8	Lakhimpur	28669	182446	468726	679841	144469
9	Dhemaji	23207	390624	712733	1126564	375436
10	Tinsukia	14060	52914	587890	654864	159108
11	Dibrugarh	60537	157689	1334027	1552253	527921
12	Sivasagar	57906	85376	1694878	1838160	526820
13	Jorhat	106102	216355	861718	1184175	207762
14	Golaghat	31639	80216	584114	695969	173640
15	K.Anglong	21956	593398	156263	771617	257475
16	Dima Hasao	783	89104	5737	95624	31378
17	Cachar	53228	9662	670768	733658	110643
18	Karimganj	42234	3699	181386	227319	22621
19	Hailakandi	40935	7828	395749	444512	64760
20	Bongaigaon	45547	14520	727078	787145	281253
21	Chirang	35246	278455	270937	584638	227323
22	Kamrup	136982	185734	1163188	1485904	336048
23	Kamrup(M)	15508	31344	46797	93649	34022
24	Nalbari	20158	17255	495656	533069	71253
25	Baksa	75075	366779	480428	922282	344515
26	Darrang	37881	1766	758886	798533	114540
27	Udalguri	59928	425173	517245	1002346	238248
	<b>ASSAM</b>	<b>1923772</b>	<b>4817517</b>	<b>23105883</b>	<b>29847172</b>	<b>7387472</b>

Source: Office of the Commissioner of Panchayat and Rural Development.

**APPENDIX-18.2**  
**DISTRICT-WISE JOB CARDS ISSUED AND**  
**EMPLOYMENT GENERATED IN ASSAM DURING 2013-14**

Sl. No.	District	Total no. of Job Cards Issued	No. of Households demanded Employment	No. of Households provided Employment	No. of Households provided 100 days employment	No. of Disabled persons provided employment
1	Kokrajhar	180201	46234	46173	385	74
2	Dhubri	196325	46754	45337	296	7
3	Goalpara	146962	48844	48132	155	28
4	Barpeta	250151	34907	33265	394	522
5	Morigaon	171131	109127	107133	5003	71
6	Nagaon	230096	116434	111835	4315	64
7	Sonitpur	242882	96820	92335	102	622
8	Lakhimpur	167003	34085	33522	144	67
9	Dhemaji	120057	38682	37176	275	111
10	Tinsukia	126002	36115	33938	231	20
11	Dibrugarh	150379	83755	79963	480	98
12	Sivasagar	139561	69338	67609	1212	107
13	Jorhat	126994	55038	49004	555	10
14	Golaghat	134519	45305	42766	83	50
15	Karbi-Anglong	211062	74936	72820	3	12
16	Dima-Hasao	40309	5999	5841	29	1
17	Cachar	203957	48837	41765	15	24
18	Karimganj	175866	12633	12252	167	24
19	Hailakandi	117369	39427	37553	1	33
20	Bongaigaon	115283	39338	35294	443	106
21	Chirang	108347	24938	24152	459	25
22	Kamrup	197214	58590	56350	345	87
23	Kamrup (M)	37598	6559	6241	36	0
24	Nalbari	106248	24352	23245	82	8
25	Baksa	181625	41922	37837	69	153
26	Darrang	152356	37917	36423	75	29
27	Udalguri	119484	44262	43817	151	19
	<b>ASSAM</b>	<b>4148981</b>	<b>1321148</b>	<b>1261778</b>	<b>15505</b>	<b>2372</b>

Source: Office of the Commissioner of Panchayat and Rural Development.

## APPENDIX-18.3

**DISTRICT WISE TARGET AND PHYSICAL ACHIEVEMENT UNDER NATIONAL SOCIAL ASSISTANCE PROGRAMME IN ASSAM, 2013-14**

Sl. No.	District	Indira Gandhi National Widow Pension Scheme		National Family Benefit Scheme	
		Target	Achievement	Target	Achievement
1.	Kokrajhar	1872	1872	45	45
2.	Dhubri	3922	3922	47	47
3.	Goalpara	1969	1969	45	45
4.	Barpeta	3423	3423	43	43
5.	Morigaon	1859	1859	45	45
6.	Nagaon	5543	5543	97	97
7.	Sonitpur	4027	4027	59	59
8.	Lakhimpur	2129	2129	45	45
9.	Dhemaji	1370	1370	45	45
10.	Tinsukia	2754	2754	45	45
11.	Dibrugarh	2833	2833	45	45
12.	Sivasagar	2519	2519	45	45
13.	Jorhat	2393	2393	60	60
14.	Golaghat	2266	2266	47	47
15.	Karbi-Anglong	2559	2559	47	42
16.	Dima-Hasao	686	686	38	4
17.	Cachar	3461	3461	45	45
18.	Karimganj	2414	2414	45	45
19.	Hailakandi	1300	1300	46	46
20.	Bongaigaon	1424	1424	44	44
21.	Chirang	959	959	46	46
22.	Kamrup	3125	3125	101	101
23.	Kamrup (M)	2507	2507	45	45
24.	Nalbari	1650	1650	45	45
25.	Baksa	2143	2143	42	42
26.	Darrang	1788	1788	81	81
27.	Udalguri	1791	1791	45	45
	<b>ASSAM</b>	<b>64686</b>	<b>64686</b>	<b>1383</b>	<b>1344</b>

Source: Office of the Commissioner of Panchayat and Rural Development.

## APPENDIX-18.4

## DISTRICT WISE PHYSICAL PROGRESS UNDER NATIONAL SOCIAL ASSISTANCE PROGRAMME IN ASSAM, 2013-14

Sl. No.	District	Indira Gandhi National Disability Pension Scheme		Annapurna	
		Target	Achievement	Target	Achievement
1.	Kokrajhar	714	714	669	669
2.	Dhubri	1496	1496	1716	1716
3.	Goalpara	751	751	794	794
4.	Barpeta	1305	1305	1205	1205
5.	Morigaon	709	709	760	760
6.	Nagaon	2114	2114	1718	1718
7.	Sonitpur	1536	1536	1698	1698
8.	Lakhimpur	812	812	1028	1028
9.	Dhemaji	522	522	569	569
10.	Tinsukia	1051	1051	1276	1276
11.	Dibrugarh	1081	1081	1506	1506
12.	Sivasagar	960	960	1213	1213
13.	Jorhat	913	913	1038	1038
14.	Golaghat	865	865	984	984
15.	Karbi-Anglong	977	749	-	-
16.	Dima-Hasao	264	174	-	-
17.	Cachar	1319	1319	1445	1445
18.	Karimganj	921	921	1115	1115
19.	Hailakandi	496	496	533	533
20.	Bongaigaon	543	543	666	666
21.	Chirang	366	366	711	711
22.	Kamrup	1229	1229	1390	1390
23.	Kamrup (M)	954	954	328	328
24.	Nalbari	629	629	436	436
25.	Baksa	817	817	841	841
26.	Darrang	682	682	1007	1007
27.	Udalguri	683	683	662	662
	<b>ASSAM</b>	<b>24709</b>	<b>24391</b>	<b>25308</b>	<b>25308</b>

Source: Office of the Commissioner of Panchayat and Rural Development.

## APPENDIX-18.5

## DISTRICT WISE PHYSICAL PROGRESS UNDER NATIONAL SOCIAL ASSISTANCE PROGRAMME IN ASSAM, 2013-14

Sl. No.	District	Indira Gandhi National Old Age Pension Scheme			
		Age Group of 60-79 Years		80 Years and above	
		Target	Achievement	Target	Achievement
1.	Kokrajhar	26483	26483	1589	1589
2.	Dhubri	31793	31793	2814	2814
3.	Goalpara	21960	21960	1482	1482
4.	Barpeta	19307	19307	2204	2204
5.	Morigaon	27002	27002	1575	1575
6.	Nagaon	82631	82631	4078	4078
7.	Sonitpur	53279	53279	2644	2644
8.	Lakhimpur	26093	26093	1556	1556
9.	Dhemaji	17031	17031	1088	1088
10.	Tinsukia	23808	23808	1697	1697
11.	Dibrugarh	22403	22403	1433	1433
12.	Sivasagar	30637	30637	2053	2053
13.	Jorhat	41997	41997	1394	1394
14.	Golaghat	22057	22057	1339	1339
15.	Karbi-Anglong	24572	24572	987	987
16.	Dima-Hasao	9511	9511	265	265
17.	Cachar	29263	29263	2463	2463
18.	Karimganj	21122	21122	1687	1687
19.	Hailakandi	19955	19955	1010	1010
20.	Bongaigaon	14119	14119	1057	1057
21.	Chirang	7500	7500	803	803
22.	Kamrup	60568	60568	1839	1839
23.	Kamrup (M)	16475	16475	323	323
24.	Nalbari	33752	33752	1345	1345
25.	Baksa	26118	26118	1577	1577
26.	Darrang	18490	18490	1340	1340
27.	Udalguri	14928	14928	1340	1340
	ASSAM	742854	742854	42982	42982

Source: Office of the Commissioner of Panchayat and Rural Development

**APPENDIX-18.6**  
**DISTRICT WISE TARGET AND PHYSICAL ACHIEVEMENT**  
**UNDER IAY IN ASSAM DURING 2013-14**

Sl. No.	District	Annual Target (No. of houses)	Houses completed against Target	Under construction (sanction before 2013-14)	Percentage of achievement against
1.	Kokrajhar	5501	3051	2450	55.46
2.	Dhubri	9117	4272	4845	46.86
3.	Goalpara	5399	3924	1475	72.68
4.	Barpeta	8186	3819	4367	46.65
5.	Morigaon	4986	2728	2258	54.71
6.	Nagaon	12402	54	12348	0.43
7.	Sonitpur	7622	0	7622	0
8.	Lakhimpur	5033	2890	2143	57.42
9.	Dhemaji	3814	7320	0	191.92
10.	Tinsukia	3869	3802	67	98.27
11.	Dibrugarh	4136	527	3609	12.74
12.	Sivasagar	3785	2105	1680	55.61
13.	Jorhat	4000	457	3543	11.43
14.	Golaghat	4019	1596	2423	39.71
15.	Karbi-Anglong	6224	6976	0	112.08
16.	Dima-Hasao	1755	1368	387	77.95
17.	Cachar	6912	4705	2207	68.07
18.	Karimganj	5473	3150	2323	57.56
19.	Hailakandi	3000	1188	1812	39.60
20.	Bongaigaon	3416	0	3416	0
21.	Chirang	2874	1646	1228	57.27
22.	Kamrup	7919	0	7919	0
23.	Kamrup (M)	1078	87	991	8.07
24.	Nalbari	3319	1634	1685	49.23
25.	Baksa	6053	8069	0	133.30
26.	Darrang	3864	721	3143	18.66
27.	Udalguri	4939	209	4730	4.23
	<b>ASSAM</b>	<b>138695</b>	<b>66298</b>	<b>78671</b>	<b>47.80</b>

Source: Office of the Commissioner of Panchayat and Rural Development

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## CHAPTER-XIX

## SOCIAL SECTOR

## EDUCATION

Education is the key input for the development of individual as well as the society. Education is accepted as one of the crucial inputs for nation building. In line with the goal of nation building, India has been committed to providing free and compulsory education to all children. Towards this end, Indian Parliament has enacted a legislation making free and compulsory education a Right of every child in the age group 6-14 years which has come into force from 1st April, 2010. Rashtriya Madhyamik Shiksha Abhiyan has been launched recently as a step to universalize secondary education. Simultaneously, efforts are being made to create a robust and vast system of higher and technical education.

As per 2011 Census, Literacy Rate of Assam is 72.19 with male literacy rate 77.85, which is behind the National rate of 72.99 and male literacy rate of 80.89 respectively. The female literacy rate with 66.27 stood above the National rate of 64.64. To achieve the goal of Universal Elementary Education, educational programmes of Sarva Siksha Abhijan (SSA) along with various innovative schemes are being implemented by the State Government. The State Government equally gives emphasis in providing qualitative technical education to build technical skills to cater the needs of the economy. Keeping in view of importance of education in the socio-economic development the State Government has been implementing various educational programmes.

## ELEMENTARY EDUCATION

To provide free and compulsory education to all children up to the age of 14 years the State Govt. is implementing the "Right to Education Act 2009" as "The Assam Right of Children to Free and Compulsory Education Rules, 2011" in Assam. The Directorate of Elementary Education (DEE), Assam is functioning under the Act to achieve the goal of Universalisation of Elementary Education in the State to provide useful and relevant elementary education to all children in the age group of 6 to 14 years. It aims to bridge all gender and social category gaps at primary stage with focus on elementary education of satisfactory quality. All schemes for elementary education are implemented through SSA. The table below shows the number of Govt./Provincialised schools functioning under DEE.

**TABLE-19.1**  
**NUMBER OF GOVT./PROVINCIALISED SCHOOLS**  
**AND TEACHERS IN ASSAM, 2013-14**

	Lower Primary	Lower Primary with Upper Primary	Upper Primary	Upper Primary with High Schools
Schools	40355	940	6706	1588
Teachers	113192	2026	7371	47711

Source: Educational Statistics at a Glance, 2013-14, Axom Sarba Siksha Abhiyan Mission.

The State Government has taken many steps to promote quality education and to attract children of all social groups and also implement various Central Government schemes/programmes. The DEE provides:

- Mid-day meal for students of primary and upper primary schools.
- Teaching Learning Material (TLM) to Govt. & Provincialised schools.
- Free text books up to Class VIII to all categories of schools including institutions not receiving financial assistance.
- Scholarship to SC, ST, disabled children and meritorious students.
- Uniform to students up to Class VIII.
- Other incentives such as bicycles, umbrella, etc.
- Special scholarship to 1 lakh students.

OVER VIEW OF 10<sup>TH</sup> AND 11<sup>TH</sup> FIVE YEAR PLAN

Plan Period	Outlay (Rupees in lakh)	Expenditure (Rupees in lakh)
10 <sup>th</sup> Plan	72852.45	74129.68
11 <sup>th</sup> Plan	66813.00	90997.00

Source: Draft Twelfth Five Year Plan and Annual Plan, 2012-13 (Vol-1), Planning and Development Department, Assam.

The Budget Outlay in 11<sup>th</sup> Five year Plan was ₹66813.00 lakh against which expenditure incurred during the period was ₹90997.00 lakh, an excess of ₹24184.00 lakh which had been met by re-appropriation from the non-plan head. The major part of expenditure has been incurred for releasing the State share for implementation of SSA and Mid-Day Meal schemes. The major achievement of the 10<sup>th</sup> Five Year Plan is conversion of the liabilities of salaries from plan to non-plan.

KEY ACHIEVEMENTS IN ELEMENTARY EDUCATION DURING 11<sup>TH</sup> FIVE YEAR PLAN (2007-2012)

During the Eleventh Five Year Plan the State has achieved a lot at the lower primary and upper primary level. Some of the key achievements during this period are as follows:

- ❖ During the Plan period, 5015 Education Guarantee Scheme (EGS) centers have been upgraded to Govt. Lower Primary Schools.
- ❖ To make the Elementary Cycle of eight years, Class-V has been amalgamated to Lower Primary and Class-VIII to Upper Primary as like the rest of the Country.
- ❖ State curriculum has been reformed in the light of National Curriculum Framework (NCF), 2005 for class-I to VIII and new text books are introduced accordingly from January, 2011. The NCERT text books for core subjects-Maths, Science, English and Hindi are being introduced in the State.
- ❖ During the period, 135301 girl students were provided Bi-cycle under Chief Minister's Special Scheme, "Assam Bikash Yojana".
- ❖ Free uniform and textbooks were provided to elementary school students.
- ❖ Girl students of Class I and Class II of primary schools in rural areas were provided footwear.
- ❖ 6555 numbers of lower primary and upper primary were provincialised w.e.f 1<sup>st</sup> January 2013.

## DROP-OUT RATES

The average annual drop-out rate at Primary level in the State during 2012-13 as per DISE, 2013-14 was 6.24 in total with 7.02 for boys and 5.46 for girls as against the all India drop-out rates of 4.67, 4.68 and 4.66 respectively. At the Upper Primary level the average drop out rate in the State during 2012-13 was 7.20 in total, 7.89 for boys and 6.55 for girls against the all India rate of 3.13, 2.30 and 4.01 respectively. The drop-out rate at the Elementary Level (Class I to Class-VIII) in the age group 6 years to 14 years in the State was 6.54 as against the all India rate of 4.17 in 2012-13.

The table below shows the drop-out rates during 2009-10 in the NE States and at all India level.

TABLE-19.2

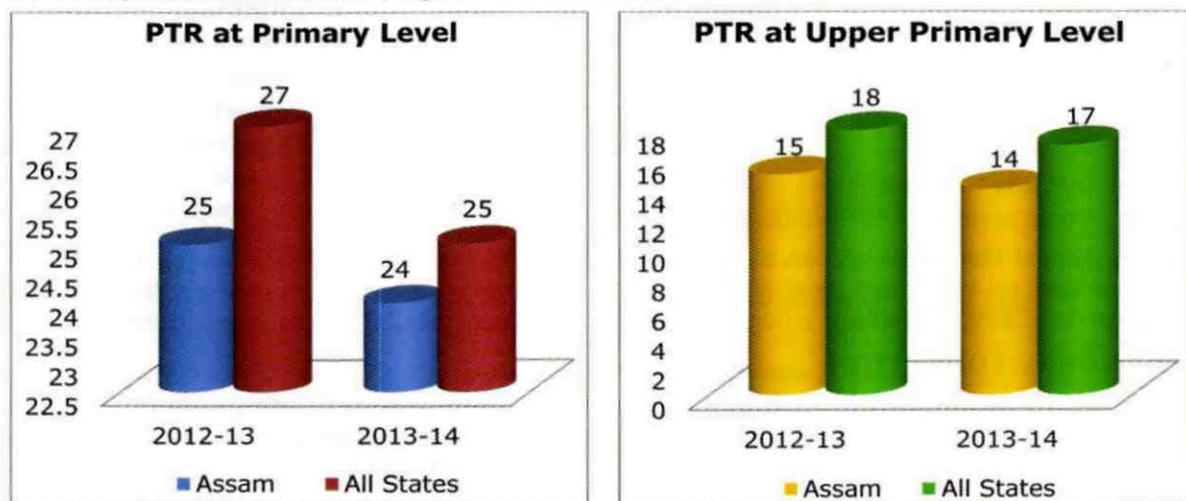
## AVERAGE ANNUAL - DROP OUT RATES IN NORTH-EASTERN STATES AND ALL INDIA, 2012-13

States	Primary Level			Upper Primary Level			Elementary Level (Class I to Class-VIII)
	Boys	Girls	Total	Boys	Girls	Total	
Arunachal Pradesh	15.84	14.44	15.16	5.86	9.06	7.47	12.88
Assam	7.02	5.46	6.24	7.89	6.55	7.20	6.54
Manipur	10.24	9.48	9.86	5.48	6.65	6.06	8.79
Meghalaya	11.32	8.96	10.14	8.43	7.34	7.85	9.50
Mizoram	24.27	23.93	24.11	19.35	19.21	19.28	22.62
Nagaland	7.11	7.03	7.07	10.15	9.51	9.83	7.91
Sikkim	4.78	2.31	3.60	2.60	3.64	3.15	3.44
Tripura	2.31	2.11	2.22	3.10	3.07	3.08	2.52
<b>India</b>	4.68	4.66	4.67	2.30	4.01	3.13	4.17

Source: Flash Statistics, DISE-2013-14.

## PUPIL-TEACHER RATIO

The Pupil-Teacher Ratio in the Primary and Upper Primary Levels of the State during the year 2013-14 was 24 and 14 respectively as against the all States ratio of 25 and 17 respectively. The DISE 2013-14, Flash Statistics, shows that two district of the State have Pupil Teacher Ratio above 30 and also reflects that 39 percent of Govt. primary schools and 12 percent of Govt. upper primary schools have PTR greater than 30. The graph below depicts the PTR of primary and upper primary in the State and at all States level from 2010-11 to 2012-13 as per the Flash Statistics: Elementary Education in India: Progress towards UEE, 2013-14.



According to the report, the percentage of Single-Teacher Schools with 15 and more students in the State during 2011-12, 2012-13 and 2013-14 was 19.39, 9.14 and 9.71 respectively and the percentage for all Schools during the same periods was 14.55, 6.87 and 7.31 respectively.

## ENROLMENT RATIO

The Gross Enrolment Ratio (GER) at Primary Level during 2012-13 and 2013-14 in Assam is 109.56 and 113.43 against 105.98 and 101.36 respectively for all States. The GER at Upper Primary Level during 2012-13 and 2013-14 in Assam is 76.68 and 93.13 compared to 82.50 and 89.33 for all States respectively.

## EDUCATION DEVELOPMENT INDEX

The National University of Educational Planning and Administration (NUEPA) and the Ministry of Human Resource and Development (Department of School Education and Literacy), Govt. of India computes the Education Development Index (EDI) for primary and upper primary and composite index for the entire elementary education based on the District Information System for Education (DISE). To compute EDI, 24 indicators are regrouped into four sub groups viz. access, infrastructure, teacher and outcome.

According to DISE 2013-14-Flash Statistics, the State is ranked 32 at primary level, 30 at upper primary level and 30 at composite level with EDI 0.490, 0.557 and 0.524 respectively. The all India ranking of the State as per EDI 2013-14 for access to primary schools is 7, for infrastructure is 32, for teacher is 34 and is placed at the top for outcome. The EDI rank of the State in respect of access, infrastructure, teacher and outcome at upper primary level is 33, 34, 29 and 5 respectively.

## MID DAY MEAL (MDM)

The Mid Day Meal, a CSS programme has been started in Assam with effect from January 2005 and the State is providing cooked meal to the students of class I to Class VIII since 2005-06 to achieve the objectives like increasing enrolment and regularity of attendance, reducing dropouts and sustaining retention and improving level of learning and self esteem impact on nutrition of students. Total fund approved for the programme in 2013-14 is ₹587.27 crore which includes both Central share and the mandatory State share of 10 percent. The amount proposed under State share for MDM scheme for the year 2014-15 is ₹55.00 crore.

**ANNUAL PLAN 2013-14**

An amount of ₹362.00 crore was provided in the State Budget, 2013-14 for implementation of various programmes taken to improve elementary education in Assam. Subsequently, through supplementary demand an amount of ₹62.00 crore was provided to meet the expenditure to implement the schemes taken up for the Annual Plan 2013-14. The major expenditure during the annual plan are as follows.

▪ State share for SSA	:	:	:	:	₹155.00 crore
▪ State share for MDM	:	:	:	:	₹55.00 crore
▪ 13 <sup>th</sup> Finance Commission Award	:	:	:	:	₹59.00 crore
▪ Uniform for APL (Footwear)	:	:	:	:	₹22.00 crore
▪ Free textbooks to Boy student of general category:					₹15.00 crore
▪ Scholarship	:	:	:	:	₹50.00 crore
▪ Drinking water facilities	:	:	:	:	₹5.00 crore
▪ Other normal works including committee liabilities:					₹1.00 crore

For the Annual Plan 2014-15, an amount of ₹380.65 crore is proposed to continue the ongoing schemes and to implement new schemes such as development of infrastructure for computer education in 40899 elementary schools for which an amount of ₹17.25 crore is proposed.

**SECONDARY EDUCATION**

The secondary education is a crucial stage after passing out the stage of elementary education to prepare the student with higher level of knowledge and skills for higher education. In Assam, Secondary Education covers Class IX to Class X for the age group of 14 years to 16 years and Higher Secondary stage covers Class XI to Class XII for the age group 17 years to 18 years. However, amalgamated Secondary Schools are imparting education from Class VI onwards. During 2012-13, there were 5743 numbers of High Schools and 1080 numbers of Higher Secondary Schools as reported by Rastriya Madhyamik Shiksha Abhijan, Assam.

The State Secondary Report Card, 2013-14 prepared by National University of Educational Planning and Administration (NUEPA) reveals that the ratio of upper Primary Schools to Secondary Schools/sections in the State is 2.28 and the ratio of Secondary schools to Higher Secondary schools/sections is 4.36. The report further shows that the dropout ratio at Class-IX level is 17.92, at Class-X level is 39.06 and at Class XI is 4.69. The table below shows enrolment by caste in Assam during 2013-14.

**TABLE-19.3**  
**ENROLMENT BY CASTE IN SECONDARY SCHOOLS IN ASSAM**  
**(IN PERCENTAGE)**

Caste	Secondary		Higher Secondary	
	Total	Girls	Total	Girls
SC	10.32	52.32	8.18	48.49
ST	18.00	50.50	18.58	47.98
OBC	30.79	51.24	29.63	49.03
Muslim	24.43	55.73	19.99	49.03

Source: Secondary Education: State Report Cards, NUEPA

**ACHIEVEMENTS OF ELEVENTH FIVE YEAR PLAN**

The total allocation for improvement of secondary education in the State during the 11<sup>th</sup> Five year Plan was ₹951.11 crore against which an amount of ₹892.31 crore has been utilised. The total expenditure during the annual plan 2012-13 was ₹360.52 lakh against an allocation of ₹372.63 lakh. Few achievements during the plan period are given as follows.

- Anundoram Baruah Award to 86266 students.
- Financial grant to 36 numbers of Secondary Schools attaining 100 years or above.
- Grant to 166 numbers of Secondary schools for distinguished performance.

- Scholarship to 25113 numbers of BPL students.
- Repair and renovation grant to 1016 numbers of secondary schools at the rate of ₹5.00 lakh.
- Financial assistance to 2021 numbers of recognized HS and HM, 185 permitted HSS and 199 numbers of Junior colleges receiving Govt. concurrence.
- Launching of Rajiv Gandhi Computer Literacy Programme.
- Study tour to NASA.
- Grant to RMSA for taking innovative schemes under Secondary Education and for providing quality education.
- Grant to Mobile Science Laboratory.
- Vocational Education through National Vocational Education Qualification Framework (NVEQF).
- Establishment of Model schools and Girls' hostel.
- Dropout rate at the Secondary level reduced to a great extent.

### **AIMS AND OBJECTIVES FOR TWELFTH FIVE YEAR PLAN**

The following are the thrust area for development of Secondary education in the State.

- Recruitment of quality teachers through TET examination.
- Engagement and maintenance of contractual teachers.
- Improvement of infrastructure of Secondary Schools.
- Providing scholarship of various kinds to students.
- Running of ICT in Secondary Schools (Rajiv Gandhi Computer Literacy Programme).
- Tour of top position holders to NASA.
- Providing assistance to Secondary Schools for publication of magazines, hoisting of youth festival and sports festival.
- Tour of teachers to places of repute.
- Vocationalisation of secondary education.
- Maintaining the existing vocational stream in secondary schools.
- Establishment of Model Schools and Girls' hostel.
- Implementation of RMSA schemes.
- Establishment of digital rooms in Secondary Schools.
- Reduction of school dropouts in Secondary Schools.
- Improvement in English teaching by introducing spoken English in Secondary Schools.

The total approved outlay for Secondary Education in Assam during 2013-14 was ₹440.92 crore and for the Annual Plan 2014-15 an amount of ₹534.46 crore is proposed.

### **RASHTRIYA MADHYAMIK SHIKSHA ABHIYAN (RMSA)**

The Rashtriya Madhyamik Shiksha Abhiyan, Assam has taken up various activities such as infrastructure development, teacher's recruitment, establishment of model schools, establishment of girls' hostel and teachers in service training to uplift Secondary Education in Assam. All the scheme of RMSA is centrally sponsored and the State has to provide only 10 percent matching share to the RMSA.

The RMSA has taken up establishment of 24 model schools and will implement the National Vocational Education Qualification Frame Work with 10 percent State share in the State.

### **MAJOR ACTIVITIES OF RMSA DURING TWELFTH FIVE YEAR PLAN**

- Establishment of new school and up gradation of Upper Primary School to Secondary School. The total requirement in the State is 3957 schools of which 2607 already exists.
- Establishment of new Higher Secondary School and up gradation of existing Upper Primary School to Higher Secondary School. The total requirement in the State is 3100 schools of which 645 already exists.

- To establish 23623 Additional Classrooms as per population projection at Secondary level in the State of which 2204 has already been approved by the Govt. of India.
- To establish 19293 Additional Classrooms as per population projection at Higher Secondary level in the State of. The total requirement is 31000 classrooms of which 1887 already exist and 9820 rooms of new school.
- Integrated Science Laboratory. The total requirement is 2607 of which 149 laboratories exist and 1038 has already been approved by the Govt. of India. The target to achieve is 1420 Science laboratories in the Secondary section.
- Subject wise 3 Science Laboratory per school for Higher Secondary sections.
- Lab equipments for all 7057 Secondary and Higher Secondary Schools of which approval for 1038 schools is being granted by the Govt. of India.
- Construction of Headmaster and Principal room.

For construction of Model School, Girls' Hostel, NVEQF through RMSA ₹52682.77 lakh is proposed for the 12<sup>th</sup> Five Year Plan 2012-17.

### MADRASSA EDUCATION

A separate Directorate of Madrassa Education was created in 2005; earlier it was a part of Directorate of Secondary Education. At present, there are as many as 524 pre-senior Madrassas, 164 Senior Madrassas, 5 Arabic Colleges and 14 Title Madrassas continuing Madrassa education in the State. During the Eleventh Five Year Plan, 327 numbers of venture Madrassa of various categories have been provincialised.

Achievements during the Eleventh Five Year Plan were as follows:

Establishment of the Directorate of Madrassa Education, 700 Khariji Madrassa have been provided with financial assistance for infrastructure development, the Govt. of India has released an amount of ₹1498.53 lakh as 100 percent Central assistance under the 'Scheme for Providing Quality Education in Madrassa (SPQEM)', a Centrally Sponsored Scheme. Under the provincialisation Act, 327 venture Madrassa of various categories have been provincialised.

### NEW INITIATIVES FOR 12<sup>TH</sup> FIVE YEAR PLAN

- Establishment of Madrassa University and Training College.
- Establishment of six Zonal Offices.
- Construction of Hostel for Boys and Girls.

Both the Central and State Government are equally concerned for upliftment of Madrassa Education in the State. The Govt. of India has taken up the Prime Minister's New 15 Point Programme for the 12<sup>th</sup> Five Year Plan for posting of urdu teachers, modernisation of Madrassa (SPQEM & IDMI) and infrastructure development through Moulana Azad Education Foundation. The total amount of plan proposal for development of Madrassa Education in Assam for the 12<sup>th</sup> Five Year Plan (2012-17) is ₹71350.00 lakh.

### ADULT EDUCATION

Adult Education programme was started all over the nation in the year 1978-79. Subsequently after constitution of National Literacy Mission (NLM) in 1988, the total literacy campaign came into being. During the year 2009 the **Sakshar Bharat Mission** was launched by the Government of India to achieve 80 percent literacy level by 2012 at national level, by focusing on adult women literacy to reduce the gap between male and female literacy. The mission has four broader objectives, viz. imparting functional system and numeracy to non-literates; acquiring equivalency to formal educational system; imparting relevant skill development programme; and promote a leaning society by providing opportunities for continuing education. The Adult Literacy Programme is implemented to eradicate illiteracy of the age group 15 years and above in the population.

The strategic primary focus of the programme is on women, Scheduled Castes, Scheduled Tribes, Backward Communities, Char Areas, Hill Areas and Tea Tribes to achieve 80 percent literacy within 2012 as stipulated in Sakshar Bharat Mission. The 11<sup>th</sup> Five Year Plan targeted to cover 12 districts in Slot-I and Slot-II of the programme namely Dhemaji, Sonitpur, Darrang, Bongaigaon, Karbi-Anglong, Dhubri, Kokrajhar, Goalpara, Barpeta, Morigaon, Hailakandi and Tinsukia.

The Twelfth Five Year Plan targets to cover 28.48 lakh non-literates of age 15 years and above and SBM will pursue the literacy movement in the 12 districts having female literacy less than 50 percent. An amount of ₹2.00 crore is proposed in the Annual Plan 2014-15.

**STATE COUNCIL OF EDUCATIONAL RESEARCH AND TRAINING (SCERT)**

State Council of Educational Research and Training (SCERT), Assam is the State Academic Authority engaged in academic resource development through various programmes such as organizing long and short term training, workshops, seminars and research and evaluation activities for teachers and teacher educators to make them professionally competent for effective teaching. The present picture of trained teachers as per DISE 2013-14 is shown in the table below.

**TABLE-19.4**  
**PERCENTAGE OF TEACHERS RECEIVED IN-SERVICE TRAINING DURING PREVIOUS ACADEMIC YEAR IN ASSAM**

Year	All Schools	All Govt. Schools	All Aided Schools	All Unaided Schools
2011-12	33.71	44.27	28.23	2.02
2012-13	24.20	30.16	22.84	0.90
2013-14	16.44	20.72	12.34	0.89

Source: Flash Statistics, DISE-2013-14.

The percentage distribution of professionally trained regular teachers in the State is presented in the table below.

**TABLE-19.5**  
**PERCENTAGE OF PROFESSIONALLY TRAINED REGULAR TEACHERS IN ASSAM**

Year	All Schools	Govt. Managements	Private Aided Managements	Private Unaided Managements	Unrecognised Schools
2012-13	36.52	52.34	6.34	9.63	-
2013-14	38.68	51.17	5.90	10.92	3.71

Source: Flash Statistics, DISE-2013-14.

During the Eleventh Five Year Plan (2007-12), an amount of ₹3.38 crore was utilised against the revised allocation of ₹4.67 crore on training of teachers, development of textbook, seminar/workshop, research and action research, publication and State level science exhibition.

The main objective of the Twelfth Five Year Plan for teacher education is to strengthen capacity building of teachers and teacher educators through intensive training, school visit and spot academic support programme, increase of intake capacity and strengthening of TEIs.

To create infrastructure facilities for teacher training an amount of ₹84.40 crore is proposed for the Twelfth Five Year Plan (2012-17) and ₹6.60 crore is proposed for the Annual Plan 2014-15.

**HIGHER EDUCATION**

The Directorate of Higher Education and Directorate of Secondary Education is established to give primary focus on expansion and promotion of Higher Education by granting financial assistance to the needy educational institutions besides implementing various programmes for development of general education and assisting for infrastructure development in general with special focus to rural and backward areas.

The number of institutions that grew up till the end of the Eleventh Five Year Plan and in the first two years of Twelfth Five Year Plan in the State are as follows.

**TABLE-19.6**  
**NUMBER OF HIGHER EDUCATIONS IN ASSAM**

Institutions	No. up to the end of the 11 <sup>th</sup> Five Year Plan	Achievement during the 1 <sup>st</sup> two year of the 12 <sup>th</sup> Five Year Plan	Total at the end of the 12 <sup>th</sup> Five Year Plan
Universities	7	3	10
Govt. Colleges	6	0	6
Provincialised Colleges	189	77	266
Non-Govt. Colleges	95	0	95
Provincialised Sanskrit & Pali Tols	82	15	97
Non-Govt. Sanskrit Tols	85	0	85
Literary & Voluntary Organisation	14	5	19

Source: Draft Twelfth Five Year Plan and Annual Plan, 2014-15 (Vol-1), Planning and Development Department, Assam.

The year wise approved allocation and expenditure for development of higher education during the Eleventh Five Year Plan (2007-12) is as follows-

**TABLE-19.7**  
**ALLOCATION AND EXPENDITURE DURING 11<sup>TH</sup> FIVE YEAR PLAN**  
(Rupees in crore)

Year	Allocation	Expenditure
2007-08	15.50	13.79
2008-09	9.90	9.63
2009-10	36.38	34.28
2010-11	90.03	80.33
2011-12	130.77	116.83

Source: Draft Twelfth Five Year Plan and Annual Plan, 2014-15 (Vol-1), Planning and Development Department, Assam.

Few major achievements during 11<sup>th</sup> Five Year Plan:

- Provided ₹490.00 lakh for Gauhati University, ₹975.00 lakh for Dibrugarh University and ₹49.00 lakh for Cotton College for infrastructure development.
- Private University Act and Rules passed.
- Don Bosco University and Down Town University formed.
- Kokrajhar College has been taken over as Govt. College.
- K.K. Handique State Open University established.
- 5 year LLB course in B.R.M. Govt. Law College and 4 whole time and 4 part time lecturer post created.
- The Bodo Land University Act passed.

During the Twelfth Five year Plan (2012-17) an amount of ₹1031.00 crore is proposed for the development of Higher education. The approved allocation for the annual plan 2012-13 was ₹111.39 crore against which the expenditure incurred was ₹77.23 crore. The approved allocation for the year 2013-14 was ₹114.50 crore.

### TECHNICAL EDUCATION

The Directorate of Technical Education, Assam prepares, supervises and implements the plans and schemes for overall development of Technical Education in the State. A brief review about allocation of fund for State Plan and centrally sponsored schemes during the 11<sup>th</sup> Five Year Plan and physical achievement is presented through the tables below.

**TABLE-19.8**  
**YEAR WISE APPROVED ALLOCATION OF FUND FOR TECHNICAL EDUCATION DURING THE 11<sup>TH</sup> FIVE YEAR PLAN**  
(Rupees in crore)

Year	State Plan Fund		Centrally Sponsored Scheme	
	Allocation	Utilisation of fund	Allocation	Utilisation of fund
2007-08	2.00	0.42	0.40	0.40
2008-09	10.78	5.56	0.46	0.46
2009-10	23.38	9.67	1.06	1.06
2010-11	42.92	30.40	9.28	9.28
2011-12	40.19	38.70	15.11	13.97

Source: Draft Twelfth Five Year Plan and Annual Plan, 2014-15 (Vol-1), Planning and Development Department, Assam.

To implement various programmes for overall development of Higher Education in the State an amount of ₹434.00 lakh is proposed for the 12<sup>th</sup> Five Year Plan period which includes a proposal of ₹10000 lakh under the scheme, 'Chief Minister's Mission for Technical Education'. The approved allocation for the Annual Plan 2012-13 under the State Plan was ₹39.90 crore of which ₹21.07 crore was utilised. During 2013-14, approved allocation of State Plan Fund was ₹53.15 crore. The approved allocation of fund for the Centrally Sponsored Schemes for development of higher education in the State during 2012-13 was ₹282.30 crore of which an amount of ₹1.80 crore was utilised and during 2013-14 the approved allocation was ₹285.50 crore.

**Few Major Achievements during the Twelfth Five Year Plan including Fund from Non-Plan:**

- Construction of new engineering colleges at Kokrajhar, Barak Valley, Golaghat and Dhemaji is going on.
- Permanent campus of Diphu Polytechnic completed.
- Establishment of 21 numbers of new polytechnics under CSS fund is going on.
- Women University Act has been enacted.
- Admission of 1<sup>st</sup> batch of students and starting of classes of Indian Institute of Information and Technology (IIIT), Assam at temporary campus of Assam Textile Institute, Guwahati.

**MEDICAL EDUCATION**

The Directorate of Medical Education, Assam is entrusted with the task of generating human resources like Doctors, Nurses, Technicians, Physiotherapists, Pharmacists and other Health personnel to meet the growing needs of not only the State but the entire North Eastern region.

The Directorate has a host of institutes under its control that is Assam Medical College(AMC) & Hospital, Gauhati Medical College(GMC) & Hospital, Silchar Medical College (SMC) & Hospital, Jorhat Medical College, Regional Dental College, Guwahati; Regional Nursing College, Guwahati; Govt. Ayurvedic College, Guwahati; S.J.N. Homeopathic Medical College, Guwahati; Dr. J.K. Saikia Homeopathic Medical College, Jorhat; Assam Homeopathic Medical College, Nagaon, three pharmacist institutes associated with AMC, GMC and SMC, Medical Institute at Jorhat and three Institute of Paramedical Sciences at Guwahati, Dibrugarh and Silchar. The Srimanta Sankaradeva University of Health Services, Assam and Jorhat Medical College & Hospital have started functioning from 2009-10.

Besides the above institutes, the State has added three more medical college's viz. Fakaruddin Ali Ahmed Medical College, Barpeta; Tezpur Medical College Tezpur; Assam Hills Medical College and Research Institute, Diphu. Steps have also been taken to establish three more medical colleges at Lakhimpur, Kokrajhar and Dhubri.

**PHYSICAL ACHIEVEMENT DURING THE 11<sup>TH</sup> FIVE YEAR PLAN (2007-12)**

- Jorhat Medical College has started functioning from the session 2010 with an intake capacity of 100 students. Hospital section of Fakaruddin Ali Ahmed Medical College and Hospital started functioning from February 2011.
- The Srimanta Sankaradeva University of Health Science has started functioning fully from 2009-10.
- Three new institutes of Para medical sciences have been established at GMCH, AMCH and SMCH and the courses have already been started from the session 2008.
- A new Directorate of AYUSH has been established during 2010-11.
- Two new Nursing Colleges at AMCH and GMCH has been established.

**TWELFTH FIVE YEAR PLAN**

Director of Medical Education with a mission to accomplish accelerated development and to carry out the processes, an amount of ₹780.00crore including ₹45.00crore under ACA for establishing another three new institutes for opening of Diploma in Medical Rural Health Care course at AMCH, GMCH and SMCH is proposed for the Twelfth Five Year Plan. Under ACA during the Annual Plan 2012-13 steps were taken to construct building for opening of Diploma in Medical Rural Health Care course at AMCH, GMCH and SMCH.

**TABLE-19.9**  
**COMPARATIVE STATEMENT OF PLAN ALLOCATIONS DURING 10<sup>TH</sup>, 11<sup>TH</sup>**  
**AND PROPOSED OUTLAY DURING 12<sup>TH</sup> FIVE YEAR PLAN**

(Rupees in crore)

Plan Period	Plan allocation/ Proposed Outlay	Actual Expenditure/ Anticipated Expenditure
10 <sup>th</sup> Five Year Plan	59.60	66.61
11 <sup>th</sup> Five Year Plan	750.14	697.93
12 <sup>th</sup> Five Year Plan	780.00	780.00

Source: Draft Twelfth Five Year Plan and Annual Plan, 2014-15 (Vol-1),  
Planning and Development Department, Assam.

## HEALTH AND FAMILY WELFARE

The State health service aims at providing reliable, affordable, accountable and effective primary health care to the people of Assam taking special care for women and children. To achieve this goal, the State Govt. is implementing various Central Govt. schemes besides its own schemes/programmes by continuously increasing allocation of fund to the health sector in State Plans.

The State Govt. along with National Health Mission (NHM) has taken up schemes to strengthen existing health facilities and also to build new public health infrastructure in rural, hilly, char and tribal to reduce Infant Mortality Rate (IMR), Maternal Mortality Rate (MMR), and Crude Birth Rate (CBR) in the State.

### STATUS OF HEALTH INFRASTRUCTURE IN THE STATE

- At present 25 District Hospitals are functioning compared to 21 in 2005. Construction of 3 new District Hospital is going on.
- Presently 109 CHCs are functioning compared to 100 in 2005. Construction of 116 CHCs (Model Hospital) are going on out of which 40 are completed.
- Number of Sub Divisional Civil Hospitals as on 9<sup>th</sup> January 2009 is 13 against 3 in 2005.
- Number of PHCs as on 9<sup>th</sup> January 2009 is 975 against 610 in 2005. Construction of 165 new PHCs is going on out of which 78 already completed.
- Construction of 28 new riverine PHCs completed out of 50 taken up.
- Construction of 504 numbers of Labour Rooms taken up out of which 484 completed
- Construction of 2876 Sub Centre taken up out of which 1271 completed
- Construction of 14 MCH Wings taken up.

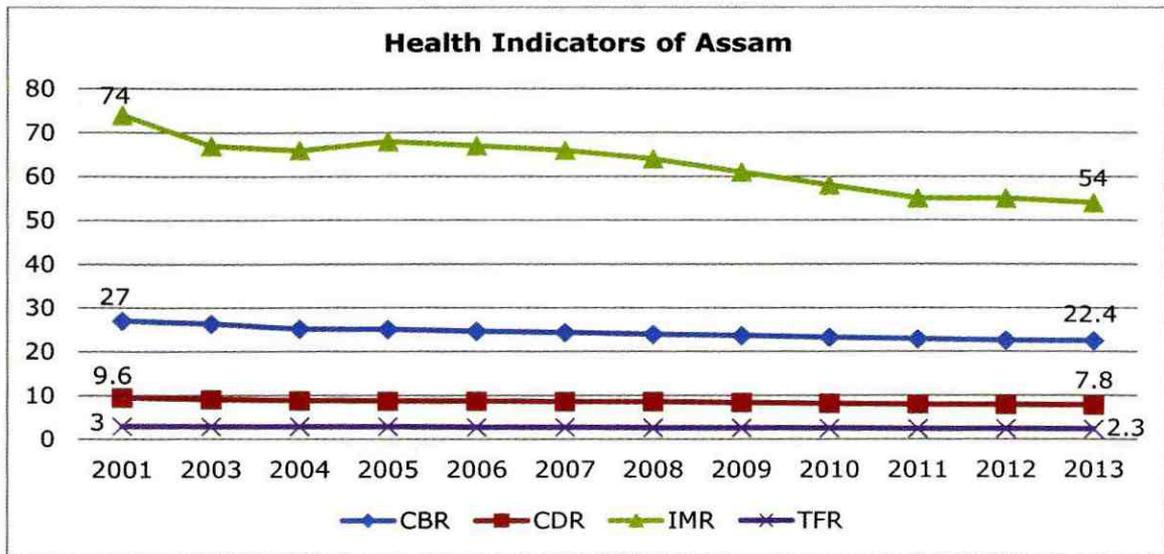
*Source: Status of Universal Health Coverage Assam, NRHM, Deptt. of Health & Family Welfare, Govt. of Assam*

## CHILD HEALTH INDICATOR IN ASSAM: 2013

The health indicators released by RGI shows that the Under Five Mortality rate in Assam is very high than the all India rate. The neo natal mortality has decreased during the last few years compared to the all India rate and this is due to the initiatives taken by the State Health Service for maternal and child health. The table below shows a comparison of some health indicators of Assam and India.

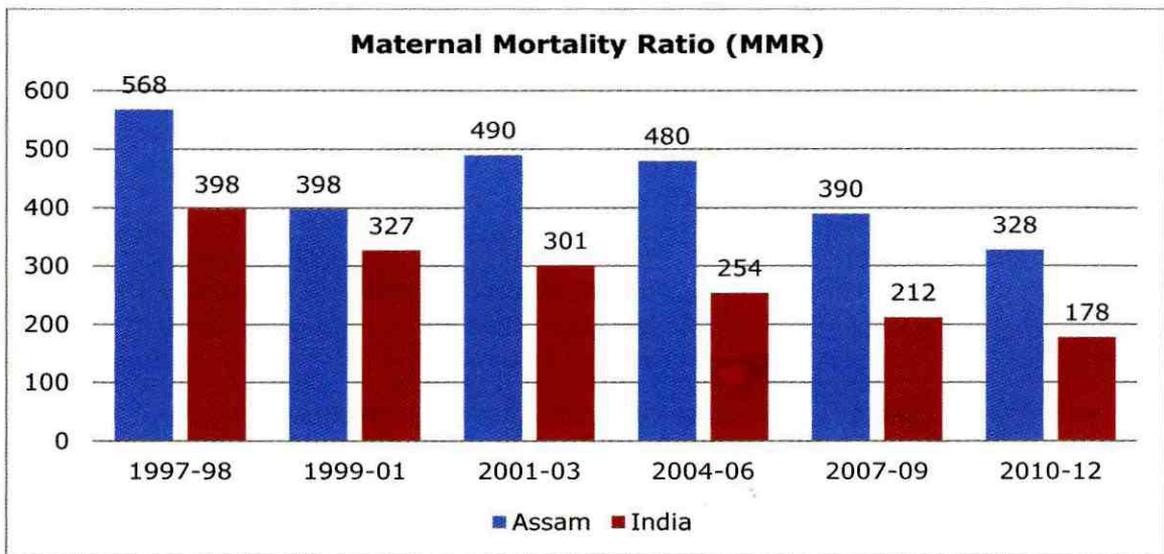
Activity	Total		Rural		Urban	
	Assam	India	Assam	India	Assam	India
Crude Birth Rate	22.4	21.4	23.5	22.9	15.4	17.3
Crude Death Rate	7.8	7.0	8.2	7.5	5.6	5.6
Infant Mortality Rate.	54	40	56	44	32	27
Neo-Natal mortality rate	27	28	29	31	10	15
Under 5(Five) mortality rate	73	49	77	55	34	29

The graph below shows the trend of Crude Birth Rate (CBR), Crude Death Rate (CDR), Infant Mortality Rate (IMR) and Total Fertility Rate (TFR) in Assam since 2001 to 2013. The CBR, CDR, IMR and TFR which was 27, 9.6, 74 and 3 in 2001 decreased to 22.4, 7.8, 54 and 2.3 in 2013.



### MATERNAL MORTALITY RATIO (MMR)

The Maternal Mortality Ratio of Assam and India from 1997 to 2012 is presented through the graph given below.

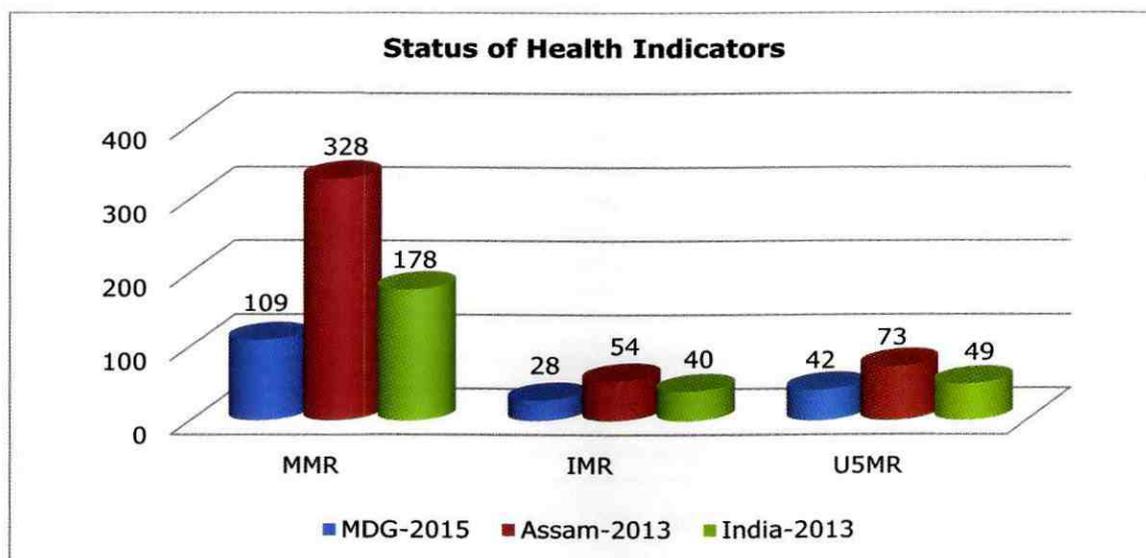


Source: SRS Bulletin, Registrar General of India.

During the period (1997-2012), the relative overall decline of MMR in Assam is 42 percent as against 55 percent in the Country. Though the rate is still very high than that of the Country but due to some improvement in maternal health at birth in the State, the gap between the relative overall decline of MMR of the State and the Country during the period 2004-12 has minimised. For improving MMR various measures for safe delivery have been taken under the National Health Mission (NHM) in the State. Out of these measures, Janani Suraksh Yojana (JSY) introduced in 2005 is a safe motherhood intervention under NHM, which focuses on reducing maternal and neo natal mortality by promoting institutional delivery among the poor pregnant women.

### MILLENNIUM DEVELOPMENT GOAL (MDG)

The United Nation (UN) has set numerical & time bound targets to measure achievements in human and social development. The graph below depicts the MMR, IMR and Under Five Mortality Rate (U5MR) and the target set by UN for Millennium Development Goal (MDG) to be achieved by 2015.



The State is implementing Health Sector Schemes both in the urban and rural areas to provide health care facilities at free or at an affordable cost. Some of the schemes being implemented in the State are as follows.

- ❖ Primary health care both in rural and urban areas.
- ❖ Secondary health care
- ❖ Ayush
- ❖ Control of communicable diseases
- ❖ Non communicable diseases
- ❖ Schemes for food safety measures
- ❖ Public health education
- ❖ School health services
- ❖ Assam Bikash Yojana
- ❖ National Fluorosis Control Programme
- ❖ Pilot project for prevention of burn injuries

#### REVIEW OF ELEVENTH FIVE YEAR PLAN (2007-12)

The projected outlay by the Eleventh Five Year Plan (2007-12) for the State is ₹1179.14 crore at 2006-17 prices. The table below shows year wise allocation and fund utilisation during the plan period.

#### ALLOCATION AND FUND UTILISATION IN ASSAM

(Rupees in crore)

Year	Allocation	Utilisation	Utilisation (in %)
2007-08	80.30	66.08	82.29
2008-09	163.09	160.32	98.00
2009-10	237.50	220.00	92.62
2010-11	370.62	360.79	97.00
2011-12	464.85	443.34	95.37

Source: Draft Twelfth Five Year Plan and Annual Plan, 2014-15 (Vol-1), Planning and Development Department, Assam.

The schemes taken up during the Eleventh Five Year Plan that were implemented through State Health Society are broadly classified as follows.

- ✓ State Schemes under Directorate of Health Service, Assam
- ✓ Grants-in-Aid to NRHM for implementation of State schemes.
- ✓ Centrally Sponsored Schemes such as National Vector Borne Disease Control Programme (NVBDCP), National Programme for Control of Blindness (NPCB), National Leprosy Eradication Programme (NLEP), Revised National Tuberculosis Control Programme (RNTCP), National Iodine Deficiency Disorders Control Programme (NIDDCP) and AYUSH.

## TWELFTH FIVE YEAR PLAN

The Twelfth Five Year Plan was started in Assam with a proposed plan outlay of ₹1588.68 crore. During 2012-13, the first year of the plan period an amount of ₹463.84 crore was allocated against which an amount of ₹421.61 crore was utilised achieving a financial target of 91 percent. The plan allocation for the Annual Plan 2013-14 is ₹520.30 crore to implement the following schemes during the year.

- An amount of ₹10.00 crore was allocated to procure surgical and other consumable items, anti cancer medicines and nephrology medicines for civil hospitals, sub divisional civil hospitals, CHCs and PHCs.
- To purchase heart valves and heart valves accessories for BPL families an amount ₹1.00 crore and ₹0.50 crore was allocated for the year.
- To procure Pace Makers for BPL families an amount of ₹0.60 crore was allocated.
- An amount of ₹3.00 crore was provided to purchase of machineries and equipments for District Hospitals, Sub-Divisional Civil Hospitals, PHCs and CHCs.
- An amount of ₹10.00 crore was provided for improvement and strengthening of office buildings and hospitals in the State.
- An amount of ₹30.00 crore was earmarked for the Chief Minister's Special Scheme-Purchase of Long Lasting Insecticides Treated Bednets (LLIN) for BPL families.

## ANNUAL PLAN 2014-15

The proposed outlay for the Annual Plan 2014-15 is ₹572.32 crore. All the major schemes taken during the previous plan period will be continued on a wider scale. schemes to be taken up during the Annual Plan 2014-15 are as follows.

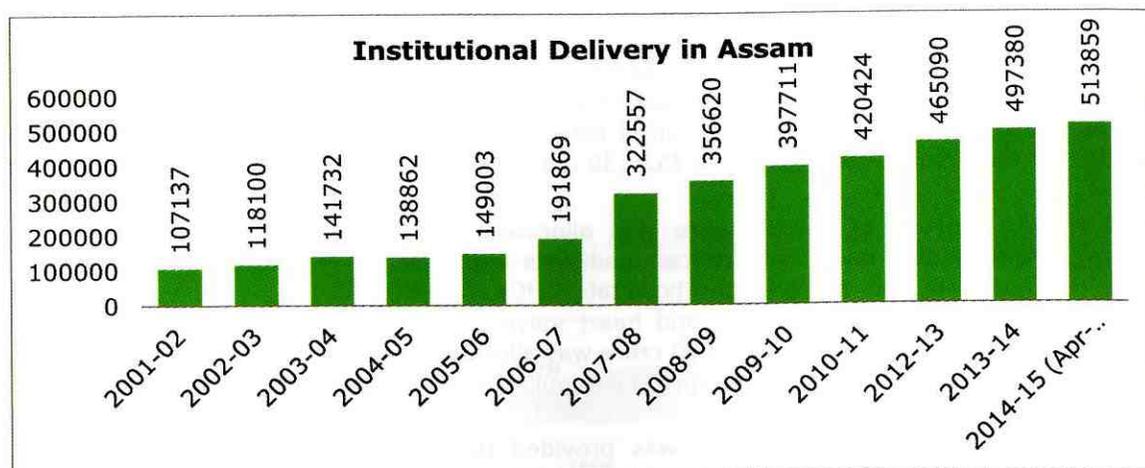
- ❖ Infrastructure development of health institutions.
- ❖ To effectively implement the schemes National Programme for Prevention and control of Cancer, Diabetes, Cardiovascular Diseases & Stroke (NPCDCS) and National Programme for Health Care of the Elderly (NPHCE).
- ❖ To continue the scheme National Programme for Prevention and Control of Deafness (NPPCD).
- ❖ Procurement of Pace Maker, Heart Valve and Heart Valve Accessories.
- ❖ Procurement of Long Lasting Mosquito Bed Net for BPL families.
- ❖ Procurement of Surgical and other consumables.
- ❖ Procurement of machinery and equipments for health institutions.
- ❖ The District Mental Health Programme (DMHP) will be continued in the four districts viz. Nagaon, Goalpara, Morigaon and Nalbari following the guidelines of NMHP.
- ❖ Awareness programme, training of Doctor's and Nurses.
- ❖ Scheme for ensuring food safety in the State will be implemented with a new initiative as per guidelines of "Food Safety and Standards Act 2006".

## NATIONAL HEALTH MISSION

Govt. of India launched the National Health Mission (NHM) to carry out necessary architectural correction in the basic health care delivery system. The Mission's approach is relating health to determinants of good health viz. segments of nutrition, sanitation, hygiene and safe drinking water. It also aims at mainstreaming the Indian systems of medicine to facilitate health care. Various measures taken by National Health Mission (NHM) for child and mothers health are discussed below.

## INSTITUTIONAL DELIVERY

The Govt. under NHM has taken various initiatives to increase institutional delivery in Assam. Institutional delivery in Assam till 2006-07 was not so encouraging. During 2007-08 number of institutional delivery in Assam increased by 68 percent and is on an increasing trend resulting in decline of MMR. In the year 2013-14 (up to Dec.) total Institutional Delivery was 3,78,765 which indicates a 3.49 percent increase in 2014-15 (up to Dec.). The graph below shows the trend of Institutional delivery in the State since 2001.



Source: HMIS Report.

### JANANI SURAKSHA YOJANA

Under the scheme Janani Suraksha Yojana, 27.21 lakh women have got benefitted in the State.

### IMMUNISATION

The Coverage Evaluation survey conducted by RRC, North East during 2012-13 shows 78.25 percent children got fully immunised in the State against the dismal figure of 31.60 percent fully immunised children in 2005-06 as per NFHS-III.

### RURAL HEALTH PRACTITIONER (RHP)

The present number of RHP in the State is 354 posted at the Sub-Centres of the State. Up to December 2013 the RHP conducted 25,409 numbers of institutional deliveries.

### MAMATA KIT

To ensure Post-partum care and stay in Hospital up to 48 hours after delivery, baby kit (Mamata Kit) has been provided. Since 2010-11, a total of 8,84,326 numbers of Mamata Kit has been distributed to the beneficiaries.

### OPD

Assam is showing consistent increase in outdoor and indoor patient registered in the hospitals. During 2012-13, a total of 2,30,97,179 OPD patient recorded in comparison to total of 53,91,318 outdoor patients in 2005-06. In the first eight months of 2013-14, a total of 2,09,44,907 number of OPD patients registered in the State.

### IPD

The State's health record shows a significant increase of IPD patient from 3,26,778 in 2006-07 to 10,15,062 in 2012-13. During the first eight months of 2013-14, a total of 7,82,145 patients were registered in the hospital records.

### FIRST REFERRAL UNIT (FRU)

A total of 40 numbers of First Referral Unit were made functional in the State to provide Comprehensive Emergency Obstetric and New Born Care.

### DISTRIBUTION OF FREE DRUGS

Hospitals in the State were provided with 258 numbers of essential drugs for free distribution.

### SPECIAL NEW BORN CARE UNIT (SNCU)

Presently 19 numbers of Special New Born Care Unit are functioning in the State.

### MOBILE MEDICAL UNIT

At present 50 numbers of Mobile Medical Unit are functioning in the State to provide health care services to the un-served and in the areas not covered under the health care facilities. Since 2007-08 to November 2013, a total of 40,22,686 patients were treated in 31,495 camps organised by Mobile Medical Units.

### BOAT CLINIC

There are 15 Boat Clinics operational in 13 districts of the State to provide health care services to the people living in the riverine and char areas. A total of 9,75,441 patients were treated in 12,276 camps organised by Boat Clinic from 2008-09 to November 2013.

### SARATHI 104 HEALTH INFORMATION HELPLINE

"Sarathi 104", a round the clock health information helpline has been established for medical and counselling services.

**ASHA**

There are 30,508 ASHA workers and 2,848 ASHA supervisors are in the State looking after child and women health care.

**TEA GARDEN HOSPITAL**

There are 150 numbers of Tea Garden Hospitals in the State providing health care services in the tea garden areas.

**OPERATION SMILE**

The programme is being implemented in the State by an international NGO, 'Operation Smile' providing free surgery to children with cleft palate and cleft lip. Up to December 2013, a total of 10,267 children having cleft lip has been operated under the scheme.

**RASHTRIYA BAL SWASTHA KARYAKRAM (RBSK)**

Rashtriya Bal Swasthya Karyakram (RBSK) which is an extension of the School Health Programme is a new initiative under NRHM that seeks to put together a systematic approach to child health screening and early intervention. All children in the age group of 0-18 years will be screened across the state under RBSK through a structured screening process by a dedicated mobile health team consisting of a Medical Officer, Dental Surgeon ANM and a pharmacist (Two teams for each Health block).

The children diagnosed with any of the health conditions identified for screening will receive follow-up referral support and treatment including surgical interventions at identified DEICs (District Early Intervention Centers) and appropriate health facilities free of cost.

**NEW SCHEMES**

Seven new schemes has been launched in the State during 2013-14. The schemes are-

- Assam Tele Radiology Project
- 102 Referral Transport Facility
- NHM-Free Drugs
- MCH Wings
- National Iron Initiatives

Some other Schemes implemented by the State Health Department to provide better health care among the people in the States

**'MAMONI' UNDER ASSAM BIKASHYOJANA**

An amount of ₹1000.00 is paid to pregnant women in the form of account payee cheque of ₹500/.00 each during 2<sup>nd</sup> & 3<sup>rd</sup> Antenatal care (ANC) checkup for nutritional supplement. From 2009-10 to November 2013, a total of 1799511 (for 2<sup>nd</sup> ANC) and 1514865 (for 3<sup>rd</sup> ANC) cheques were provided to the beneficiaries.

**'MAJONI' UNDER ASSAM BIKASHYOJANA**

Social assistance to all the girl child born up to second order is given a fixed deposit of ₹5,000.00 for 18 years. Total 282326 fixed deposits have been issued up to November 2013 since 2009-10.

**"MOROM" UNDER ASSAM BIKASHYOJANA**

The Morom scheme will provide financial support to indoor patients of Government Health Institutions for supplementary nutrition and compensation for wage loss during hospitalisation and post hospital expenses. Indoor patients admitted to a Hospital will receive ₹75/- per day for Medical College, ₹50/- per day for District Hospital and ₹30/- per day for SDCH/ CHC/ PHC. A total of ₹17.22 crore has been distributed under the scheme during the period 2010-11 to October 2013.

**FREE OPERATIONS FOR CHILDREN HAVING CONGENITAL HEART DISEASE**

Children having congenital heart disease are treated at Narayana Hrudayalaya, Bangaluru and Kolkata. A total of 1576 children had been treated up to December 2013.

**SUSRUSHA**

Under the scheme, an amount of ₹1.00 lakh is given as financial assistance to people who have undergone Kidney Transplantation after 1st April 2010. Up to December 2013, a total of 218 patients got benefitted under the scheme.

**SANJEEVANI**

Village Health Outreach programme for early screening, diagnosis and follow up for non-communicable and lifestyle diseases. Village Health Outreach Programme (VHOP) covering 62 lakh populations every month. From 1st Mar 2011 to 6<sup>th</sup> May 2014, total 24,82,234 patients visited Sanjeevani.

**ASSAM AROGYA NIDHI(AAN)**

The Assam Arogya Nidhi provides financial assistance upto ₹1.50 lakh for general and specialized treatment of (i) life threatening diseases, (ii) of injuries caused by natural or manmade disasters to families which have a monthly income of less than ₹10,000.00. Life threatening diseases include Heart Diseases and Heart Surgery, Cancer, Kidney and Urinary diseases, Orthopaedic disorders that include artificial prosthesis for limbs, hip and knee joint replacement, bone diseases, implants for fractures and spinal surgery, Thalassaemia, Bone marrow Transplant, AIDS, Chronic Mental Illness, Brain tumour with surgical treatment etc. The treatment taken at Government hospitals and other hospitals empanelled with State Govt are eligible under Assam Arogya Nidhi.

The Govt. of Assam has released an amount of ₹5.00 crore and the Central Govt. has released ₹1.50 crore for implementation of the programme. NRHM, Assam has already granted ₹2.41 crore to 287 beneficiaries and ₹1.70 crore to the Medical colleges.

**“SNEHA SPARSHA”**

Sneha Sparsha is the recent unique Health Care Initiative for Children launched by the Department of Health & Family Welfare, Government of Assam and launching in 2013-14 in the state. Sneha Sparsha, literally meaning the touch of love, is aimed at extending financial assistance for specialized treatment of children below 12 years of age afflicted with some serious ailments such as (1) Thalassaemia requiring Bone Marrow Transplant, (2) Kidney Transplant, (3) Liver Transplant, (4) Cochlear Implant, (5) Limb deformities requiring artificial and motorized limb, (6) neurological anomaly, (7) specialized eye surgery, (8) blood cancer requiring chemo therapy, and (9) various solid tumors. **Target group/ beneficiaries & criteria:** Children below 12 years of age from families with annual income less than ₹2.50 Lakh while priority given to children belonging to BPL families. NRHM, Assam has released ₹2.29 crore to 55 beneficiaries under Sneha Sparsha.

**RASHTRIYA SWASTHYA BIMA YOJANA**

In Assam RSBY was first started in Jorhat in the month of October 2009. Presently it has been extended to all the districts of the State. A total of 13,43,445 numbers of cards have been issued to the beneficiary family covering 41,80,674 family members up to November 2013.

**PUBLIC HEALTH ( SANITATION & DRINKING WATER)****NIRMAL BHARAT ABHIJAN**

The Total Sanitation Campaign (TSC) was launched by Govt. of India with reform initiatives in rural sanitation sector to accelerate the sanitation coverage and eventually to bring about an improvement in the general quality of rural life. The TSC projects have been renamed as Nirmal Bharat Abhijan (NBA). The target and achievement during the year 2013-14 is presented below.

**Physical Target and Achievement under Nirmal Bharat Abhijan in Assam**

Name of the project	Target	Achievement	Percentage of achievement
Individual Household Latrine (IHHL-BPL)	350000	124408	36
Individual Household Latrine (IHHL-APL)	250000	36194	14
School Toilet	1770	631	36
Anganwadi Toilet	5810	195	3

Source: Chief Engineer (PHE), B&S, Assam.

The total fund available as on 1<sup>st</sup> April 2013 was ₹131.41 crore of which State share was ₹3.24 crore and Central share was ₹128.17 crore. The total fund released for implementing the programme in the State during 2013-14 was ₹42.72 crore comprising of ₹41.81 as Central share and ₹17.01 crore as State share. Out of the total fund of ₹174.13 crore available up to March 2014, an amount of ₹74.69 crore was utilised achieving a financial target of 43 percent. The number of IHHL beneficiary up to March 2014 is 160602.

**APPENDIX-19.1**  
**NUMBER OF STATE GOVT. HOSPITALS AND**  
**HEALTH INSTITUTIONS IN ASSAM AS ON 2012**

Sl.No.	District	CH	SDCH	PHC	FRU	CHC	SC
1	Kokrajhar	1	1	38	1	5	159
2	Dhubri	1	1	40	1	5	246
3	Goalpara	1	0	39	1	1	151
4	Barpeta	1	1	51	2	7	264
5	Morigaon	1	0	25	1	2	123
6	Nagaon	1	0	74	6	9	354
7	Sonitpur	1	2	47	2	4	274
8	Lakhimpur	1	1	28	1	5	155
9	Dhemaji	1	0	21	0	3	98
10	Tinsukia	1	0	21	3	5	164
11	Dibrugarh	0	0	29	2	5	231
12	Sivasagar	1	2	42	3	2	219
13	Jorhat	1	2	41	3	5	144
14	Golaghat	1	1	39	1	5	144
15	Karbi Anglong	1	1	51	0	5	145
16	Dima-Hasao	1	0	11	0	2	65
17	Cachar	1	0	32	0	4	270
18	Karimganj	1	0	21	0	1	217
19	Hailakandi	1	0	13	0	2	105
20	Bongaigaon	1	0	44	2	4	76
21	Chirang	1	0	23	0	2	86
22	Kamrup	1	1	21	5	9	280
23	Kamrup (M)	0	0	54	1	1	51
24	Nalbari	1	0	67	2	6	121
25	Baksa	1	0	44	0	5	157
26	Darrang	1	0	47	1	3	163
27	Udalguri	1	0	23	0	3	147
	<b>ASSAM</b>	<b>25</b>	<b>13</b>	<b>986</b>	<b>38</b>	<b>110</b>	<b>4609</b>

CH-Civil Hospital, SDCH-Sub-divisional Civil Hospital, PHC- Primary Health Centre,  
FRU-First referral Unit, CHC- Community Health Centre, SC- Sub Centre.

Source: Directorate of Health Services, Assam.

**APPENDIX-19.2**  
**NUMBER OF BEDS IN DIFFERENT TYPES OF**  
**HEALTH INSTITUTIONS IN ASSAM AS ON 2013**

Number of Beds							
Sl.No.	District	C H	BPHC	MPHC	CHC	SDCH	TOTAL
1	Kokrajhar	150	24	136	90	75	475
2	Dhubri	200	42	132	150	40	564
3	Goalpara	150	30	136	30	0	346
4	Barpeta	100	54	168	210	30	582
5	Morigaon	100	18	88	60	0	266
6	Nagaon	190	66	216	270	0	742
7	Sonitpur	190	48	156	120	120	634
8	Lakhimpur	100	36	88	150	50	424
9	Dhemaji	100	30	64	90	0	284
10	Tinsukia	100	24	68	150	0	342
11	Dibrugarh	0	36	92	150	100	278
12	Sivasagar	150	48	136	60	100	494
13	Jorhat	200	42	136	150	50	628
14	Golaghat	100	30	136	150	50	466
15	Karbi Anglong	100	48	172	150	0	520
16	Dima-Hasao	100	18	28	60	0	206
17	Cachar	50	48	96	120	0	314
18	Karimganj	100	30	64	30	0	224
19	Hailakandi	100	24	36	60	0	220
20	Bongaigaon	150	36	152	120	0	458
21	Chirang	150	0	92	60	0	302
22	Kamrup	200	78	32	270	100	680
23	Kamrup (M)	0	6	212	30	0	248
24	Nalbari	100	42	240	180	0	562
25	Baksa	150	0	176	150	0	476
26	Darrang	100	42	160	90	0	392
27	Udalguri	150	0	92	90	0	332
	<b>ASSAM</b>	<b>3280</b>	<b>900</b>	<b>3240</b>	<b>3240</b>	<b>715</b>	<b>11459</b>

CH-Civil Hospital, BPHC-Block Primary Health Centre, MPHC-Mini Primary Health Centre.

Source: Directorate of Health Services, Assam.

**APPENDIX-19.3**  
**DISTRICT WISE BIRTHS AND DEATHS REGISTERED IN ASSAM DURING 2013**

Sl. No.	District	Current Year Registration		Delayed Registration		Total Registration	
		Birth	Death	Birth	Death	Birth	Death
1.	Kokrajhar	19482	4276	1622	367	21104	4643
2.	Dhubri	38621	8016	1860	156	40481	8172
3.	Goalpara	16576	2520	1620	72	18196	2592
4.	Barpeta	35114	4478	5862	202	40976	4680
5.	Morigaon	19344	2304	9780	204	29124	2508
6.	Nagaon	58724	7489	4052	1019	62776	8508
7.	Sonitpur	37242	6010	2760	468	40002	6478
8.	Lakhimpur	19527	3880	1776	206	21303	4086
9.	Dhemaji	12228	1836	1776	216	14004	2052
10.	Tinsukia	20176	5848	186	72	20362	5920
11.	Dibrugarh	29774	1464	2026	1992	31800	3456
12.	Sivasagar	17330	2218	772	209	18102	2427
13.	Jorhat	1989 03	4006	3480	420	22383	4426
14.	Golaghat	13902	4355	1582	171	15484	4526
15.	Karbi Anglong	19622	3068	786	190	20408	3258
16.	Dima-Hasao	2292	456	2748	36	5040	492
17.	Cachar	31442	4873	2786	482	34228	5355
18.	Karimganj	25613	1191	22438	3247	48051	4438
19.	Hailakandi	14304	2256	864	240	15168	2496
20.	Bongaigaon	12328	3924	2208	360	14536	4284
21.	Chirang	5088	2488	1992	204	7080	2692
22.	Kamrup	19760	3620	982	342	20742	3962
23.	Kamrup (M)	25740	6096	2172	408	27912	6504
24.	Nalbari	15545	3734	811	310	16356	4044
25.	Baksa	18722	3310	3661	374	22383	3684
26.	Darrang	13701	3286	1376	582	15077	3868
27.	Udalguri	18362		1966	370	20328	370
	<b>ASSAM</b>	<b>579462</b>	<b>97002</b>	<b>83944</b>	<b>12919</b>	<b>663406</b>	<b>109921</b>

Source: Directorate of Health Services, Assam.

**APPENDIX-19.4**  
**DISTRICTWISE IMMUNISATION PROGRAMME IN ASSAM 2013-14**

Sl. No.	District	TARGET		PERFORMANCE				
		Infant	PW	BCG	DPT-3	OPV-3	MLS	TT(PW)
1	Barpeta	37059	40765	33539	35977	34897	34122	36625
2	Bongaigaon	16206	17827	16541	14898	14848	14613	14806
3	Baksa	17141	19953	12911	15838	15612	15298	15935
4	Chirang	9738	10712	9789	9226	9100	8895	10165
5	Cachar	44058	51285	36418	38013	37947	37211	38577
6	Darrang	20252	22277	20900	19642	19382	19366	20380
7	Dhemaji	15433	17965	14660	13893	13962	13996	14230
8	Dhubri	49123	54035	46823	46888	46559	45032	53962
9	Dibrugarh	24931	29021	23843	22129	22205	22895	23421
10	Goalpara	24549	27004	21368	22612	22546	21344	25770
11	Golaghat	21921	25517	16644	17744	16834	17935	18766
12	Hailakandi	20280	23606	15776	16174	15989	15633	17250
13	Jorhat	20272	27958	15251	19199	19178	19522	27958
14	Kamrup	31061	34167	29574	30949	30943	30577	30974
15	Kamrup (M)	24958	27454	29551	24462	24556	22796	33059
16	Karbi-Anglong	20727	22800	20125	19482	19333	18846	21181
17	Karimganj	30556	35568	26518	27171	26427	25104	30868
18	Kokrajhar	19141	22280	16719	16744	16749	15709	18916
19	Lakhimpur	24007	27945	19684	20551	20459	20145	21527
20	Morigaon	22583	24841	21638	22198	21780	22118	23418
21	Nagaon	66120	76965	58665	60618	59832	60578	69966
22	Nalbari	14744	16218	12905	13749	13630	13403	12815
23	N.C.Hills	4465	4912	2754	4255	4255	3780	4325
24	Sivasagar	21152	24622	18313	19208	19015	19152	18280
25	Sonitpur	37330	41063	35232	36481	35712	36457	37565
26	Tinsukia	26643	31013	21251	23225	21666	23301	23325
27	Udalguri	16449	19147	12230	14063	13965	14136	13801
	ASSAM	680900	776919	609622	625389	617381	611964	677865

Source: Directorate of Health Services, Assam.

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## CHAPTER – XX

## PROVISIONAL RESULTS OF SIXTH ECONOMIC CENSUS OF ASSAM

The Sixth Economic Census has been a joint effort of a Central Statistics Office (CSO) and Directorate of Economics & Statistics (DES) of States/Union Territories. The field work of Sixth Economic Census was conducted in Assam by the Directorate of Economics and Statistics, Assam under the guidelines of Economic Census Division Central Statistics Office (CSO), Ministry of Statistics & Programme Implementation (MOSPI), Govt. of India during January, 2013 to July, 2013. The Sixth Economic Census covered all establishments in various agricultural and non-agricultural activities excluding crop production, plantation, public administration, defence and compulsory social security.

The few important initiatives were incorporated in the Sixth Economic Census, viz. ( I) The Enumeration Blocks (EBs) of Population Census, 2011 as the basic enumeration unit both in rural and urban areas duly supported by Census Frame consisting of Layout Map, Abridged House List and Charge Register for ensuring proper coverage of houses and establishment; (II) Keeping in view the international practices, the establishments falls under the public administration, defence & compulsory social security services has been excluded in the Sixth Economic Census due to the organizational structure and inclusion of activities in general government sectors; (iii) Canvassing of a separate schedule "Directory of Establishment" for the establishment employing 8 or more than 8 and would provide its outcomes for preparation of Business Register; and (IV) Handicraft /Handloom establishments were indentified separately for the first time and number of persons working therein was also collected during the time of field work of Sixth Economic Census.

Economic Census (EC) is the complete count of all establishments (i.e. units engaged in production and/or distribution of goods and services not for the purpose of sole consumption) located within the geographical boundaries of the country and involves all the economic activities of Agricultural (excluding crop production and plantation) and Non-agricultural activities (public administration, defence & compulsory social security services) sectors of the economy. The Economic Census is a massive exercise and important statistical activity involving collection of basic entrepreneurial data through complete enumeration of all economic units, viz. establishments irrespective of employment size and turnover.

Economic Census is to bridge the data gap especially in the unorganized sector of the economy which plays an important role in capital formation and generation of employment in the economy of the country as well as the state.

The main purpose of conducting Economic Census is to generate an updated frame of all "Establishments" engaged in various economic activities which serves as a basic input for conducting detailed surveys pertaining to any specific activity of the economy.

The results of these censuses has provided basic entrepreneurial data relating to unorganized segment of the different sectors of the economy for the purpose of planning, development, administration and for improving the estimation of national income and related aggregates.

So far five Economic Censuses were conducted in the State successfully under the aegis of the CSO, Ministry of Statistics & Programme Implementation (MOSPI), Govt. of India during the period from 1977-2005. The First Economic Census was conducted in 1977 covering only non-agricultural establishments employing at least one hired worker on a fairly regular basis. The Second and Third Economic Censuses were conducted 1980 and 1990 along with House listing operations of 1981 and 1991 Population censuses respectively. These two censuses covered all agricultural and non-agricultural establishments including the own account establishments, expecting those engaged in crop production and plantation. The Fourth and Fifth Economic Censuses were carried out in 1998 and 2005 respectively with the same coverage.

## MAIN OBJECTIVES FOR CONDUCT OF SIXTH ECONOMIC CENSUS ARE AS UNDER

- i) To provide detailed information on operational and economic variables, activity wise, of all the establishments (excluding crop production, plantation, public administration, defence and compulsory social security ) of the country including its distribution at all-India, State and sub-state levels for comprehensive analysis of the structure of the economy. To provide similar data at lower geographical levels like Circles/villages in case of rural areas and towns/wards in case of urban areas for decentralized planning purposes;
- ii) To provide information on number of workers working in establishments, activity wise and area wise in operation;
- iii) To provide information on number of workers working in unorganized;
- iv) To provide updated Directory of Establishments employing 8 or more workers for local level planning purposes and also for using as a 'list frame' for conduct of survey of such establishments in the non manufacturing/services and
- v) To provide an up to date 'area frame' containing information on number of establishments and number of workers by industry, by type of ownership of the of the establishments, etc at the village/block level, from which sample villages/blocks could be drawn as the primary sampling units for collecting detailed information about the establishments in the follow-up sample surveys of establishments.

**PROVISIONAL RESULT OF SIXTH ECONOMIC CENSUS, ASSAM**  
**(Excluding Crop Production, Plantation, Public Administration,**  
**Defense & Compulsory Social Security Services Activities)**

Sl. No.	Item	Rural	Urban	All
1	a) Number of Establishment	1411254	542489	1953743
	b) Percentage share	72.23%	27.77%	100%
2	a) Number of establishment			
	i) Outside household without fixed structure	513551	149337	662888
	ii) Handicraft/Handloom	73132	20632	93764
	b) Percentage share in total establishment			
	i) Outside household without fixed structure	36.39%	27.53%	33.93%
	ii) Handicraft/Handloom	5.65%	2.30%	4.28%
3	Growth rate (%) in number of establishments over Fifth Economic Census	108.36%	81.61%	100.17%
4	a) Number of persons employed	2603447	1131312	3734759
	b) Percentage share	69.71%	30.29%	100%
5	Percentage of hired workers in the total persons employed	40.63%	49.35%	43.27%
6	Percentage of total female workers in the total persons employed	21.48%	13.87%	19.17%
7	Growth rate (%) in total employment over Fifth Economic Census	85.55%	65.11%	78.84%

The detailed district wise provisional results are presented in the Tables -1 to 4.

TABLE-1

RURAL

**DISTRICT WISE TOTAL NUMBER OF ESTABLISHMENTS AND  
NUMBER OF PERSONS EMPLOYED**

**(Excluding Crop Production, Plantation, Public Administration,  
Defense & Compulsory Social Security Services Activities)**

District	Total Number of Establishments				Number of persons employed on last working day				
	Outside HH with fixed structure	Outside HH without fixed structure	Inside HH	All	Hired		Non-Hired		All
					Male	Female	Male	Female	
Kokrajhar	15474	13766	10780	40020	18014	4688	36463	4393	63558
Dhubri	31018	29403	12590	73011	42582	13423	67749	6304	130058
Goalpara	18514	14294	7027	39835	25529	9486	34590	5716	75321
Barpeta	18579	37588	42248	98415	31625	7243	93418	37717	170003
Morigaon	16101	10787	9156	36044	20249	7643	31769	4830	64491
Nagaon	47712	47841	50458	146011	81401	24048	132884	30237	268570
Sonitpur	34320	18643	19059	72022	48073	18291	61698	9807	137869
Lakhimpur	18622	16282	10182	45086	31528	12667	35619	7100	86914
Dhemaji	11054	4892	6398	22344	13628	6235	17890	4790	42543
Tinsukia	14133	6907	21681	42721	45421	29260	38182	14534	127397
Dibrugarh	21682	10860	12651	45193	37281	20172	40094	5974	103521
Sivasagar	26841	9736	19062	55639	41567	20482	41890	28128	132067
Jorhat	19397	20366	23989	63752	31719	11882	54897	10893	109391
Golaghat	24732	13476	14833	53041	33272	12957	46198	9334	101761
Karbi Anglong	10812	17070	16471	44353	14986	5831	41121	15481	77419
Dima Hasao	2903	9844	1742	14489	4281	1482	12137	5000	22900
Cachar	22121	66679	21675	110475	32275	10664	108638	10854	162431
Karimganj	15790	48485	13640	77915	22204	5387	80998	8170	116759
Hailakandi	11289	17495	6152	34936	14515	4619	32997	2768	54899
Bongaigaon	13090	11625	4769	29484	17031	5989	26914	2842	52776
Chirang	7817	2166	4808	14791	8366	3868	12571	2135	26940
Kamrup-R	33177	22585	22720	78482	52222	15288	68949	15738	152197
Kamrup-M	4770	2657	3691	11118	11114	3609	10315	2613	27651
Nalbari	16020	22970	8863	47853	26377	7429	44783	8033	86622
Baksa	14445	14426	16833	45704	24290	8188	39631	12383	84492
Darrang	16384	13402	7991	37777	23217	7723	33501	2916	67357
Udalguri	14178	9306	7259	30743	18367	8195	27323	3655	57540
<b>State</b>	<b>500975</b>	<b>513551</b>	<b>396728</b>	<b>1411254</b>	<b>771134</b>	<b>286749</b>	<b>1273219</b>	<b>272345</b>	<b>2603447</b>

TABLE - 2

URBAN

**DISTRICT WISE TOTAL NUMBER OF ESTABLISHMENTS AND  
NUMBER OF PERSONS EMPLOYED**

**(Excluding Crop Production, Plantation, Public Administration,  
Defense & Compulsory Social Security Services Activities)**

District	Total Number of Establishments				Number of persons employed on last working day				
	Outside HH with fixed structure	Outside HH without fixed structure	Inside HH	All	Hired		Non-Hired		All
					Male	Female	Male	Female	
Kokrajhar	3680	2480	1853	8013	6850	1074	7682	466	16072
Dhubri	10194	6016	3152	19362	13585	2323	18892	1555	36355
Goalpara	6377	3259	1693	11329	9244	1843	9707	1136	21930
Barpeta	8226	7264	8937	24427	16126	2430	23158	7031	48745
Morigaon	5340	1529	1436	8305	6958	1444	7805	747	16954
Nagaon	16205	9225	5257	30687	26409	4433	28839	2655	62336
Sonitpur	13158	3384	3324	19866	19262	3809	19167	2274	44512
Lakhimpur	6317	3259	2214	11790	11357	2245	10963	1120	25685
Dhemaji	3375	718	444	4537	3627	723	4250	461	9061
Tinsukia	15961	7191	6053	29205	26663	4901	28048	3129	62741
Dibrugarh	14065	5491	5433	24989	25371	5609	23897	2373	57250
Sivasagar	9281	2443	2255	13979	17490	3523	12099	2027	35139
Jorhat	13036	7016	6109	26161	19954	4658	23443	2598	50653
Golaghat	7963	2002	1565	11530	10152	2240	11025	1395	24812
Karbi Anglong	4581	3687	2845	11113	7023	1883	9605	2049	20560
Dima Hasao	3179	2167	942	6288	3495	1424	5210	1353	11482
Cachar	11876	13665	3138	28679	14567	2776	27107	1882	46332
Karimganj	4923	4330	845	10098	7466	1072	9769	557	18864
Hailakandi	3336	2267	597	6200	3082	668	5886	398	10034
Bongaigaon	8210	3784	2658	14652	13043	2225	14536	1587	31391
Chirang	2146	205	232	2583	2788	506	2436	122	5852
Kamrup-R	6527	3110	4324	13961	11572	4560	12273	3157	31562
Kamrup-M	90178	49529	46050	185757	176384	31854	173803	23315	405356
Nalbari	2460	2185	1153	5798	4400	1160	5458	1090	12108
Baksa	644	304	182	1130	814	91	1144	115	2164
Darrang	4115	1559	1663	7337	6069	1197	6528	745	14539
Udalguri	2692	1268	753	4713	3270	598	4637	318	8823
<b>State</b>	<b>278045</b>	<b>149337</b>	<b>115107</b>	<b>542489</b>	<b>467021</b>	<b>91269</b>	<b>507367</b>	<b>65655</b>	<b>1131312</b>

TABLE - 3

COMBINED

**DISTRICT WISE TOTAL NUMBER OF ESTABLISHMENTS AND  
NUMBER OF PERSONS EMPLOYED**

**(Excluding Crop Production, Plantation, Public Administration,  
Defense & Compulsory Social Security Services Activities)**

District	Total Number of Establishments				Number of persons employed on last working day				
	Outside HH with fixed structure	Outside HH without fixed structure	Inside HH	All	Hired		Non-Hired		All
					Male	Female	Male	Female	
Kokrajhar	19154	16246	12633	48033	24864	5762	44145	4859	79630
Dhubri	41212	35419	15742	92373	56167	15746	86641	7859	166413
Goalpara	24891	17553	8720	51164	34773	11329	44297	6852	97251
Barpeta	26805	44852	51185	122842	47751	9673	116576	44748	218748
Morigaon	21441	12316	10592	44349	27207	9087	39574	5577	81445
Nagaon	63917	57066	55715	176698	107810	28481	161723	32892	330906
Sonitpur	47478	22027	22383	91888	67335	22100	80865	12081	182381
Lakhimpur	24939	19541	12396	56876	42885	14912	46582	8220	112599
Dhemaji	14429	5610	6842	26881	17255	6958	22140	5251	51604
Tinsukia	30094	14098	27734	71926	72084	34161	66230	17663	190138
Dibrugarh	35747	16351	18084	70182	62652	25781	63991	8347	160771
Sivasagar	36122	12179	21317	69618	59057	24005	53989	30155	167206
Jorhat	32433	27382	30098	89913	51673	16540	78340	13491	160044
Golaghat	32695	15478	16398	64571	43424	15197	57223	10729	126573
Karbi Anglong	15393	20757	19316	55466	22009	7714	50726	17530	97979
Dima Hasao	6082	12011	2684	20777	7776	2906	17347	6353	34382
Cachar	33997	80344	24813	139154	46842	13440	135745	12736	208763
Karimganj	20713	52815	14485	88013	29670	6459	90767	8727	135623
Hallakandi	14625	19762	6749	41136	17597	5287	38883	3166	64933
Bongaigaon	21300	15409	7427	44136	30074	8214	41450	4429	84167
Chirang	9963	2371	5040	17374	11154	4374	15007	2257	32792
Kamrup-R	39704	25695	27044	92443	63794	19848	81222	18895	183759
Kamrup-M	94948	52186	49741	196875	187498	35463	184118	25928	433007
Nalbari	18480	25155	10016	53651	30777	8589	50241	9123	98730
Baksa	15089	14730	17015	46834	25104	8279	40775	12498	86656
Darrang	20499	14961	9654	45114	29286	8920	40029	3661	81896
Udalguri	16870	10574	8012	35456	21637	8793	31960	3973	66363
<b>State</b>	<b>779020</b>	<b>662888</b>	<b>511835</b>	<b>1953743</b>	<b>1238155</b>	<b>378018</b>	<b>1780586</b>	<b>338000</b>	<b>3734759</b>

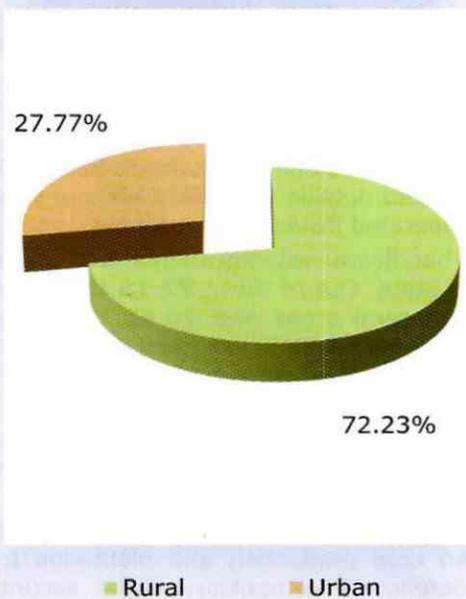
TABLE - 4

**PERCENTAGE GROWTH IN TOTAL NUMBER OF ESTABLISHMENTS (EXCLUDING CROP PRODUCTION, PLANTATION, PUBLIC ADMINISTRATION, DEFENCE & COMPULSORY SOCIAL SECURITY SERVICES ACTIVITIES) AND EMPLOYMENT IN 2013 (SIXTH EC) AS COMPARED TO 2005 (FIFTH EC)**

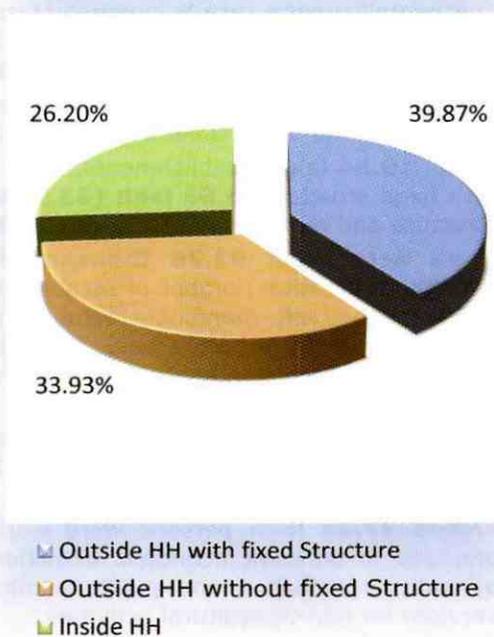
Districts	Growth in Establishment			Growth in Employment (%)		
	Rural	Urban	Combined	Rural	Urban	Combined
Kokrajhar	99.05	67.11	92.90	58.05	16.88	47.56
Dhubri	77.22	25.05	62.96	87.71	15.47	65.14
Goalpara	44.92	115.22	56.22	41.13	71.21	46.95
Barpeta	109.80	93.63	106.37	96.66	107.95	99.07
Morigaon	102.65	121.11	105.87	78.05	84.76	79.41
Nagaon	135.02	29.22	105.76	130.76	24.33	98.72
Sonitpur	118.60	68.63	105.44	113.76	76.37	103.24
Lakhimpur	82.69	66.22	79.01	68.82	49.31	63.94
Dhemaji	106.87	74.90	100.68	86.32	47.50	78.09
Tinsukia	124.34	87.44	107.73	169.82	67.66	124.65
Dibrugarh	95.97	49.12	76.25	71.41	40.91	59.14
Sivasagar	89.56	43.65	78.13	94.39	37.12	78.71
Jorhat	212.62	127.76	182.04	117.70	57.66	94.28
Golaghat	104.39	65.07	96.05	87.46	73.64	84.58
Karbi Anglong	219.34	86.80	179.59	161.58	37.80	120.09
Dima Hasao	269.81	115.42	203.89	189.58	34.91	109.40
Cachar	127.94	51.89	106.62	109.50	23.95	81.67
Karimganj	103.86	71.68	99.57	106.26	36.71	92.62
Hailakandi	191.01	64.02	160.60	123.02	4.61	89.82
Bongaigaon	82.25	114.27	91.76	72.57	60.30	67.78
Chirang	95.00	-14.36	63.89	103.18	-2.98	69.99
Kamrup-R	120.48	75.46	112.25	122.64	35.36	100.44
Kamrup-M	39.73	125.72	118.14	7.63	130.73	115.03
Nalbari	83.65	18.09	73.26	83.25	-4.96	64.53
Baksa	83.50	0.00	88.04	84.42	0.00	89.14
Darrang	71.40	53.08	68.13	69.94	35.45	62.59
Udalguri	64.46	23.77	57.58	62.41	20.76	55.29
<b>State</b>	<b>108.35</b>	<b>81.61</b>	<b>100.17</b>	<b>85.55</b>	<b>65.11</b>	<b>78.84</b>

PICTORIAL PRESENTATION

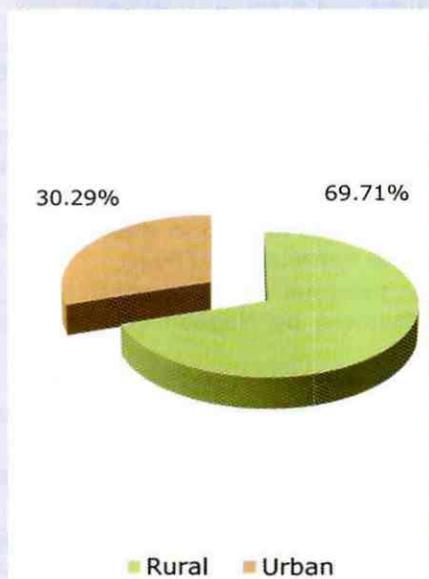
**Total Number of Establishments and their Percentage Distribution by Rural-Urban**



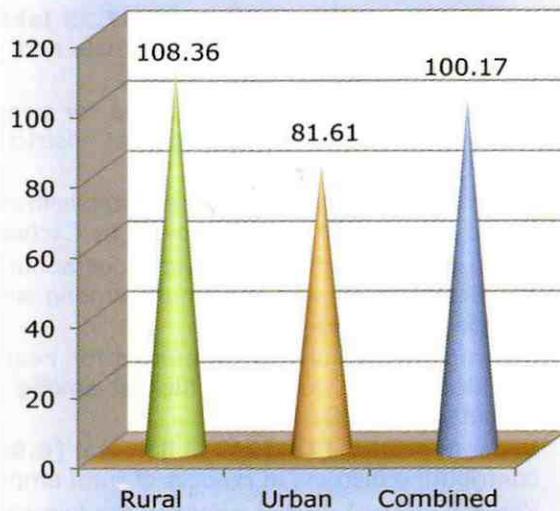
**Percentage of Distribution of establishments by Type of Structure**



**Total Number of Employments and their Percentage Distribution by Rural-Urban**



**Percentage Growth Rate in number of Establishments**



## HIGHLIGHTS OF THE PROVISIONAL RESULTS OF SIXTH ECONOMIC CENSUS CONDUCTED IN THE STATE OF ASSAM DURING JANUARY-JULY, 2013

- As per the Provisional Results of Sixth Economic Census, there were about **19.54 lakh** establishments in the state engaged in different economic activities other than crop production and plantation in case of agricultural activities and public administration, defence & compulsory social security services for non-agricultural activities.
- The overall growth rate in number of establishments in the State during the intervening period of Fifth Economic Census and Sixth Economic Census was found **100.17%** as against the national growth rate of **41.73%**.
- Out of the total **19.54 lakh** establishments, **14.11 lakh (72.23%)** establishments were located in Rural areas while **5.43 lakh (27.77%)** in Urban areas.
- Out of **19.54 lakh** establishments, **7.79 lakh (39.87%)** were operated outside household with fixed structure, **6.63 lakh (33.93%)** were operated outside household without fixed structure and remaining **5.12 lakh (26.20%)** were operated inside the household.
- There were about **93.76 thousand** handicraft /handloom establishments accounting **4.80%** of the total number of establishments in the State. Out of these **73.13 thousand (80%)** handicraft /handloom establishments were in rural areas and **20.63 thousand (20%)** were in urban areas. The State shared about **4.28%** in total number of handicraft/handloom establishments in the country which is eight among 10 top States/UTs of the country.
- The overall growth rate in number of employments in the State during the intervening period of Fifth Economic Census and Sixth Economic Census was found **78.84%** as against the national growth rate of **34.35%**.
- Around **37.35 lakh** persons were working in **19.54 lakh** establishments in the state engaged in different economic activities other than crop production and plantation for agricultural activities and public administration, defence & compulsory social security services for non-agricultural activities.
- About **26.04 lakh (69.71%)** of the total employment in the State were engaged in Rural areas against **11.31 (30.29%)** in Urban areas.
- Out of the total workers of the State, around **16.16 lakh (43.28%)** persons were working as hired workers in different sectors of the economy.
- Out of the total hired workers, **10.58 lakh (65.46%)** persons were working in Rural areas against **5.58 lakh (34.54%)** in Urban areas.
- An average person per establishment (Rate of employment) of the State was found around **1.91**. The same for rural and urban areas were found **1.84** and **2.09** respectively.
- Out of the total employment of **37.35 lakh**, **30.19 lakh (20.44 lakh** in rural areas and **9.75 lakh** in urban areas) were male and **7.16 lakh (5.59 lakh** in rural areas and **1.57 lakh** in urban areas) were female.
- Kamrup (Metro) district accounted for nearly **10.08%** in the State total establishments which was found highest among all districts, followed by Nagaon (**9.04%**) and Cachar (**7.12%**).
- The maximum number of rural establishments in the State was located in Nagaon district with a share of **10.34%**, followed by Cachar (**7.83%**) and Barpeta (**6.97%**).
- Kamrup (Metro) district provided for about **34.24%** in the total urban establishments of the State which was maximum among all districts, followed by Nagaon (**5.66%**) and Tinsukia (**5.38%**).
- Kamrup (Metro) district accounted for nearly **11.59%** in the State total employments of the State which was found highest among all districts, followed by Nagaon (**8.86%**) and Barpeta (**5.86%**).
- Nagaon district (**10.32%**), Barpeta (**6.53%**) and Cachar (**6.23%**) were three main contributing districts in respect of rural employment of the State.
- Kamrup (Metro) district provided the lion share of percentage (**35.83%**) to the total urban employment of the State among all the districts, followed by Tinsukia (**5.54%**) and Nagaon (**5.23%**).
- Among the districts maximum growth rate of establishment during 2005-2013 was observed in Dima Hasao (**14.91%**) followed by Jorhat (**13.84%**), Karbi Anglong (**13.71%**), Hailakandi (**12.72%**) and Kamrup (Metro) (**10.74%**).

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