



GOVERNMENT OF KARNATAKA

DRAFT EIGHTH FIVE YEAR PLAN

1992 - 97

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I REVIEW OF DEVELOPMENT DURING THE SEVENTH PLAN 1985-90 AND ANNUAL PLANS 1990-92

After the State achieved a long-term growth higher than that for All India during the two and half decades preceding 1980s, the rate of growth in the 1980s has been lower than All India average. The growth in agriculture has exhibited decelerating trends in recent years; particularly the foodgrains production has almost stagnated for over a decade. However, the development base in the state has vastly improved over the years in terms of infrastructural and institutional development. Significant and desirable structural changes have also taken place imparting a greater dynamism and resilience to the State's economy. The non-agricultural sector has developed faster than the agricultural sector. The economy as a whole is much more diversified at present compared to the earlier decades although the State has still a good deal of potential to tap and harness for development.

There were quite a few constraints to development the State had to contend with. The State has an ultimate irrigation potential of 55 lakhs hectares of which only 31.14 lakh hectares has been created so far whereas the net sown area is about 107 lakh hectares. The ultimate as well as the exploited irrigation potential in the State is much less compared to the neighbouring States. Even in respect of power, which is one of the most crucial inputs for the modern sector, the State is handicapped by lack of coal and oil resources. The total hydro-electric potential existing is estimated to be 7700 MW of which 200 MW only is harnessed so far. In addition 630 MW of capacity is created from thermal sources. The State had to depend largely on the hydel power which is subject to instability depending upon rainfall and the demand for power has rapidly risen. With the result, the State, which had surplus power in earlier years, has developed chronic shortages. Frequent visitations of drought have also impaired the growth process. Particularly in 1980's, frequent droughts have adversely affected the agricultural sector resulting in deceleration in the growth of agricultural output. Despite considerable efforts regional imbalances in development have persisted.

The State had implemented one of the most radical Land Reforms in the country. While growth with social justice formed the main plank of development plans since the Fourth Five Year Plan, poverty-alleviation programmes and provision of basic minimum needs received greater attention in recent years. A fairly good network of social security measures have been introduced. All these have led to perceptible reduction in poverty and extreme forms of deprivation. Another radical reform introduced in recent years is the Decentralisation of political and economic power. This had ensured greater participation of people in development at the lower rungs viz., Mandal and District levels.

During the Seventh Plan period, the annual average growth in the State Domestic Product (SDP in real terms, which reflects the growth of real output in economy), is placed at 5 per cent compared to 5.6 percent at the National level. During 1990-91 the real SDP in Karnataka is anticipated to have registered only a marginal growth of 1.7 percent as against 5 per cent for the country. The annual average growth in Agriculture and Allied Activities in the State during the Seventh Plan period was only 2.1 percent compared to 3.4 percent for All India. In the sphere of industrial production, although the State has achieved a significant rate of growth at 6.6 percent per annum during the Seventh Plan period, the growth rate is still lower compared to All India (7.5 percent). Particularly the growth in the unorganised component of the industry which accounted for nearly 50 percent of the industrial output of Karnataka in early 1980s seems to have slackened. The most prominent reasons for this slow down in the growth of State's economy are low growth in creation of irrigation potential coupled with frequent droughts and chronic power shortages. More than $\frac{3}{4}$ ths of the net sown area in the State still depends on rainfall. Consequently not only the growth in agricultural output is low but a greater part of the agricultural economy is still caught in the low productivity - low income - low investment trap.

The State also lagged behind in infrastructure development. The CMIE's Index of Infrastructure Development for Karnataka in 1988-89 is

95 (Base All India = 100) compared to the neighbouring States: Andhra Pradesh 100, Maharashtra 113, Tamil Nadu 137 and Kerala 137.

The extent of poverty also is higher in Karnataka compared to All India, despite considerable reduction in poverty during the decade ending 1987-88. In 1987-88 the proportion of people below poverty line in Karnataka is placed at 32 per cent as against 29.2 per cent for All India.

It is pertinent to note here that the performance of the State's economy during the Sixth Plan was still more unsatisfactory. With the annual average growth in the State's economy as reflected in the real SDP is placed at 3.6 per cent compared to 5.6 percent for the country as a whole. Thus, during the Seventh Plan the gap between the rate of growth in the State's economy and the country has tended to reduce, although the growth rate in the State still remained lower than that of All India.

Investment Trends

The State Plan outlays were considerably stepped up from plan to plan. The level of State plan outlay has gone up by more than 10 times from the Second Plan to Seventh Plan, even in real term. If we add the non-plan capital outlay it is still higher. So also, the investment on Centrally Sponsored Scheme has registered a marked increase, particularly during the Sixth and Seventh Plan. There has been a marked increase in the private investment also as can be seen from the over-all growth achieved in the economy. But still the rate of growth in investment, both in public and private sectors in the State appears to be relatively less than for All India. The total investment in the State appears to be significantly less than envisaged in recent years leading to shortfalls in achieving the targets and or perhaps the capital output ratio has deteriorated in the State. There were significant shortfalls in the State plan expenditure also. The plan expenditure in real terms was less than the envisaged level by about a quarter during the Sixth Plan and by about 6 per cent during the Seventh Plan period.

The State's share in the total plan outlay for all States in the country which was 5.5 per cent during the Fifth Plan has declined to 4.4 per cent in the Seventh Plan. Concerted efforts have been made to enhance the plan outlay during the two years viz. 1990-91 and 1991-92 taking the State's share in the plan outlay of all States to about 5.4 per cent. However to regain the lost momentum and to catchup with the rest of the country in growth and development, the plan investment needs to be considerably stepped up in the Eighth Plan coupled with necessary policy adjustments to make public investment more effective in not only contributing directly to achieve a higher rate of growth but also to induce higher levels of private investment.

A. Plan Expenditure

The expenditure in comparison with the approved outlays for Seventh Plan and Annual Plans 1990-92 by major sectors is presented in Table-1. The approved outlay for the Seventh Plan was Rs.3575 crores at 1984-85 prices. The total expenditure in nominal terms is placed at Rs.4056 crores. Although on the face of it, the expenditure appears to be more than the approved outlay, in real terms it is about 6 percent less than the envisaged level. This has happened despite incurring a much higher expenditure on rural development programmes, in 'industry & minerals' sector and also in 'social welfare & nutrition'. Compared to the envisaged levels, there were significant shortfalls in expenditure in respect of transport and 'water supply, housing & urban development'.

Table-1

Seventh Five Year Plan 1985-90 and Annual Plan 1990-91 and 1991-92
Approved Outlay and Expenditure by Major Sector

Sector	Rs.Lakhs					
	Seventh Plan 1985-90		Annual Plan 1990-91		Annual Plan 1991-92	
	Appro- ved Outlay*	Expnd. iture	Approved Outlay (B.E.)	Expnd. diture (R.E.)	Appr- oved Outlay (BE)	Expr. Anti cipa ted
A. ECONOMIC SERVICES						
1. Agri. & Allied Services	30180	35368	9760	9588	15486	14684
2. Rural Development	16912	37475	8671	8330	11091	9133
3. Spl.Area Programme	-	10	4500	5500	7000	7000
4. Irrigation and Flood Control	74600	77670	21233	21331	24713	24683
5. Energy	80048	82890	27529	28369	37218	36606
6. Industry and Minerals	24100	34058	7644	7579	10767	10766
7. Transport	24300	21959	5960	7206	9326	9325
8. Science, Tech. & Environment	400	383	115	123	188	188
9. Gen.Eco.Services	2915	2471	880	676	1441	1041
TOTAL: A	253455	292284	86292	88702	117230	113426
B. SOCIAL SERVICES						
10. Education, Sports Arts & Culture	10420	15590	7249	7266	9834	9834
11. Health	11800	14770	4152	4152	4700	4700
12. Water Supply, Housing & Urban Devt.	55600	45751	9289	9203	14929	14929
13. Information & Publicity	700	627	225	204	247	247
14. Welfare of SCs, STs and Other Backward Classes	7580	7555	2148	2148	2801	2801
15. Labour and Labour Welfare	2800	4200	869	869	945	945
16. Social Welfare & Nutrition	12345	23618	2351	2351	3134	3134
17. Other Social Services	-	-	-	-	-	-
TOTAL: B	101245	112111	26283	26193	36590	36590
C. GEN.SERVICES	2800	5141	1925	1925	1960	2003
TOTAL(A+B+C)	357500	405640	114500	116820	155780	152019

* At 1984-85 Prices

For the first four years since 1985-86 to 1988-89 the expenditure figures given in Table-1 are actuals. For 1989-90 revised estimates have been adopted. Sectoral expenditure figure include an unspent balance of Rs.38.96 crores with the ZPs, which is included in the sectoral expenditure but excluded in the grand total. Therefore, the sectoral expenditure figures do not add up to the total given.

The approved outlay for the Annual Plan 1990-91 was Rs.1145 crores as against which the provisional expenditure is placed at Rs.1168 crores, an increase of about 2 percent in expenditure compared to the budgeted outlay. The budgeted outlay for Annual Plan 1991-92 is Rs.1558 crores. In 1991-92 the outlays for 'agriculture & allied services', special area programmes, 'industry & minerals', 'water supply, housing & urban development' and 'social welfare and nutrition' have been stepped up significantly over the levels of 1990-91. The total expenditure anticipated during 1991-92 is placed at Rs.1520 Crores.

Minimum Needs Programme(M.N.P)

The outlays and expenditure on MNP are presented in Table-2. The expenditure on MNP during the Seventh Plan is placed at Rs.576.87 crores in nominal terms as against Rs.483.31 crores of approved outlay. In real terms the total expenditure on all the programmes was roughly equal to the envisaged level. However, there was a sizeable shortfall in expenditure on elementary education, adult education, rural water supply & sanitation and environmental improvement of slums. But the expenditure on Nutrition was much higher than the approved outlay.

During 1990-91 also there is a shortfall of about 10 per cent in expenditure compared to the outlay budgetted. Particularly in rural health the shortfall has been nearly 40 per cent. In rural water supply also there was a shortfall to the extent of about 30 per cent. During 1991-92, however, it is anticipated that the entire outlay will be spent.

Table-2
Minimum Needs Programme: Seventh Plan 1985-90 and Annual Plans
1990-91 and 1991-92: Outlay and Expenditure

Sector	Rs. Lakhs					
	Seventh Plan 1985-90		Annual Plan 1990-91		Annual Plan 1991-92	
	Appro- ved Outlay	Expnd- iture**	Approved Outlay (B.E.)	Expnd- diture (R.E.)	Appr- oved Outlay (BE)	Exp. Anti- cipa- ted
1. Rural						
Electrification	5274	5159	580	580	2595	2593
2. Fuelwood and						
Fodder	500	451	-	170	314	314
3. Rural Roads	4866	4875	1588	1562	2154	2154
4. Elementary						
Education	5000	4057	2341	2341	4428	4428
5. Adult						
Education	1100	793	231	231	332	332
6. Rural Health	3653	4483	2151	1284	2175	2175
7. Rural Water						
Supply	12653	10206	2489	1981	3706	3706
8. Rural						
Sanitation	365	54	54	13	79	79
9. Rural Housing	7438	7625	1509	1509	3514	3514
10. Environmental						
Improvement						
of Slums	1800	1377	675	675	845	845
11. Nutrition))				
12. Public Dis-	)5700	)18607	823	823	950	950
tribution))				
System*			-	-	-	-
Total:(1 to 12)	48331	57687	12441	11170	21090	21090

** The expenditure of the Seventh Plan comprises of accounts for first four years and Revised estimates for the year 1989-90.

* Transferred to Non-Plan from 1990-91 onwards.

B. Sectoral Review

1. Agriculture and Allied Activities

The growth rate in agriculture in the State which was significantly higher than that of All India till the end of 1970s has declined to a lower level. Although the growth in agricultural sector has slackened during 1980s both at the national level and in the State the deceleration trends in Karnataka are more marked. While lack of technological innovations appears largely to be responsible for not sustaining the significant growth rate achieved during the earlier years, in Karnataka additional factor of frequent droughts during 1980s also contributed to slackening of growth in agricultural sector. The foodgrains production in particular has almost remained stagnant for over a decade in Karnataka. This is largely due to lower growth in creation of irrigation facilities in Karnataka and major part of the area under foodgrains being under rainfed conditions. There also appear to be significant shifts in favour of commercial/garden crops perhaps due to the comparative price advantages. One redeeming feature of the State's agricultural development in recent years is that the performance has been exceedingly good in the production of oilseeds (which is in critical short supply in the country), sugarcane, coconut, mulberry etc. The State's agricultural economy is yet to acquire the resilience to cope with the adverse natural conditions. This underscores the need for substantial improvement in the productivity under dry land farming through watershed management and more efficient use of the available land and water resources. Another area where the performance of the State has been significant is dairy development and also horticulture.

Progress achieved during the Seventh Plan and Annual Plans 1990-92 in relation to the targets is presented in Table-3. It can be seen that the foodgrains production in the State achieved by the end of the Seventh Plan is placed at 74 lakh tonnes compared to the target of 100 lakh tonnes. In fact, this level of foodgrains production has already been attained in 1970s in the State. The shortfall in the production has been more conspicuous in the production of pulses which is another commodity in critical short supply; The production achieved by the

end of Seventh Planj was only about 6 lakh tonnes as against 9 lakh tonnes targetted. During the Annual Plans, however, the indications are that by the end of the current year the foodgrains production is likely to go up to 79 lakh tonnes. But still it is less compared to the target set i.e. 84 lakh tonnes. It is heartening to note that the pulses production is expected to register nearly 25% increase in the current year compared to 1989-90. The target for oilseeds production during the Seventh Plan period has been exceeded by about 4 per cent. The production of oilseeds continues to maintain a higher growth rate and the total oilseeds production anticipated by the end of 1991-92 is placed at 20 lakh tonnes compared to 14 lakh tonnes by the end of Sixth Plan (1984-85). Similarly the targets have been exceeded in respect of sugarcane production in the State during the Seventh Plan. A target of 200 lakh tonnes is set for sugarcane production during the current year which is most likely to be achieved as against about 134 lakh tonnes in 1984-85-an increase of nearly 50% in seven years. Although the production of cotton has gone up significantly during 1980s, the achievement during the Seventh Plan (about 10 lakh bales) fell short of the target set (11 lakh bales). In fact, Seventh Plan target is not anticipated to be achieved even by the end of the current year. As far as the crucial inputs are concerned, the targets set have by and large been achieved. But in respect of improved seeds and HYV coverage, there has been a significant shortfall during the Seventh Plan. Even during the Annual Plans the target for HYV is not expected to be fully achieved.

In addition to low growth in creation of irrigation potential and frequent droughts, there are some other constraints which contributed to poor performance of the agricultural sector in the State in recent years. They are:

- a) Inadequate extension support;
- b) Non-adoption of appropriate soil and moisture conservation measures in rain-fed areas;
- c) Lack of proper water-management and deviations from prescribed cropping patterns under irrigation commands;
- d) Shortcomings in the availability and use of inputs like fertilisers, quality seeds, planting materials, implements etc;

- e) Adverse terms of trade for agricultural output in general and unremunerative prices for foodgrains etc in particular; and
- f) Huge losses incurred in handling and processing due to lack of appropriate storage and loss-prevention orientation.

Table-3
Agriculture And Allied Activities

Item	Unit	Seventh Plan 85-90		Annual Plans 90-92	
		Target	Achievement	Target	Achievement(ant)
1. Crop Production					
a) Foodgrains					
i) Cereals	Lakh M.T.	91.00	68.22	76.70	71.51
ii) Pulses	"	9.00	5.76	7.50	7.18
iii) Total: Foodgrains	"	100.00	73.98	84.20	78.69
b) Oil Seeds	"	14.68	15.32	19.00	19.62
c) Sugarcane	"	154.00	190.00	200.00	200.00
d) Cotton	Lakh Bales	11.12	9.77	9.00	9.00
2. Distribution of Chem. Fertilizers(N+P+K)	Lk.M.T.	7.30	7.79	9.20	9.08
3. Distribution of Improved Seeds	000MT	49	41	40	40
4. Area covered under HYVs	Lakh Hects	37.54	31.74	38.20	32.12
5. Agril. Markets					
a) Regulated Markets	No. cum	125	116	120	120
b) Sub-Markets	"	241	280	320	320
6. Storage Capacity created	'000 MT	157.30	98.30	26.00	6.00
7. Production of Milk	'000 Tons	2600	2600	2856	2856
8. Procurement of Milk	LakhMT	2.32	2.79	3.68	3.68
9. Artificial Insemination done	Lakhs	N.A	19.78	-	-
10. Production of Eggs	Mln	1300	1300	1487	1487
11. Production of Wool	Lk.Kgs	40	40	44	44
12. Production of Fish	oooMT	280	242	235	235
13. Forestry					
a) Plantation of Quick growing species	Hect	21000	46144	25558	23397
b) Economic and Commercial Plantation	"	29000	59351	7766	8695
c) Social Forestry	"	63500	124298	22103	21139

Production as well as procurement of milk has registered a marked rise during the Seventh Plan. As against the target of 2.32 lakh tons the achievement during the Seventh Plan in respect of average annual milk procurement, was 2.79 lakh tons. The State had a good record of cross breeding and during the Seventh Plan period alone, nearly 20 lakh artificial inseminations have been done. In contrast to dairy, the production of fish has fallen short of the target during the Seventh Plan and during the Annual Plans the target set itself is lower than the level achieved in the Seventh Plan and it is anticipated that the target would be fulfilled. Under forestry, it can be seen that the targets for the three important programmes including social forestry have been exceeded to a marked extent during the Seventh Plan. But some shortfalls are anticipated during the Annual Plans.

2. Cooperation

In the Cooperation sector, almost all the targets have been fulfilled in the Seventh Plan except in creation of storage capacity where the achievement during the Seventh Plan constitutes hardly about 27 per cent of the target. During the Annual Plans also the anticipated achievement is hardly 50 percent of the target set. As far as the cooperative loans are concerned, it can be seen that the target for short term loans has been exceeded during the Eighth Plan; but that of the medium term loans was not achieved. This was because the recovery rate under short-term loans has greatly improved during the Seventh Plan and the need to convert the short term into medium term loans was less than envisaged. During the Annual Plans, however, the target set for all the three types of loans are not likely to be achieved. (See Table-4 for details)

Table-4

COOPERATION

Item	Unit	Seventh Plan 85-90		Annual Plans 90-92	
		Target	Achievement	Target	Achievement (anticipated)
1. Loans Advanced:					
a) Short-term	Rs.Cr.	220.00	745.00	547.00	366.00
b) Medium Term	"	125.00	40.00	58.00	39.00
c) Long Term	"	250.00	308.00	240.00	198.00
2. Value of Retail Sale of Fertilisers	"	65.00	59.06	101.00	101.00
3. Value of Agricultural Produce Marketted	"	250.00	250.00	250.00	250.00
4. Cooperative storage created	Lakh MT	8.80	2.39	1.10	0.53

m

3. Rural Development

Rural Development programmes, particularly the poverty-alleviation programmes have been intensified during the period under review compared to the levels envisaged at the beginning of the Seventh Plan and accordingly the Seventh Plan targets have been exceeded. The employment created under Jawahar Rojgar Yojana during the Seventh Plan was 134 percent higher than the target. Nearly 12 crore mandays of employment was created. During the two Annual Plans, the level of employment generation is expected to go up further to about 5 crore mandays per annum. The targets under 100-Wells programme have been fulfilled during the Seventh Plan and the targets are anticipated to be exceeded during the Annual Plans. All the released bonded labourers in the State have been covered under the scheme of Rehabilitation of Bonded Labourers by 1990-91 itself and the scheme is therefore discontinued. (See Table-5 for details).

Table-5
Rural Development Programmes

Programme	Unit	Seventh Plan 1985-90		Annuals Plan 1990-92	
		Target	Achievement	Target	Achievement (Anticipated)
1. IRDP Beneficiaries Assisted	'000s	683	749	213	229
2. JRY-Employment generated	Lakh Mandays	524	1225	1095	1051
3. D.P.A.P.					
a) Minor Irrigation	'000 Hec	36	11	1	1
b) Soil & Water Conservation-area covered	"	75	75	44	43
c) Afforestation & Pasture Development	"	37	37	32	22
4. Assistance to Surplus Land Grantees	No	11440	10571	3019	5229
5. 100 Wells Programme	'000s	61401	61640	8786	12569
6. Rehabilitation of Released Bonded Labourers	No.	27897	26100	1797*	1797*

*Relates to 1990-91

4. Irrigation and Command Area Development

Despite according highest priority to irrigation development under Plns and spending considerable outlays on Cauvery Basin Projects outside the Plan, the growth achieved in creation of irrigation potential has been less than expectations. By the end of 1991-92 the total irrigation potential created is 31.14 lakh hectares forming only about 56.6 percent of the ultimate irrigation potential of the State. While the progress under ground water development has been very good, the progress under minor irrigation (surface) and major & medium irrigation fell far short of the targets throughout the seven year period under review. Especially under major and medium projects hardly about 52% of the Seventh Plan targets were achieved. This was largely because of cuts in Annual Plan outlays for the last three years

of Seventh Plan and the axe falling heavily on irrigation. This has further aggravated the cost and time over-runs of the projects. Added to this, the utilisation of potential created under major and medium projects is stated to be only 80%. Under minor irrigation also a good part of the irrigated area has been lost under tanks due to heavy siltation over the years. This has led to realisation of less than commensurate agricultural output in relation to the investment in irrigation. In the context of the need to reduce the gap between creation of potential and utilisation, the Command Area Development (CAD) calls for higher priority. But the progress under CAD works also fell significantly short of the targets. The details are presented in Table-6.

Table-6
Irrigation & Command Area Development

Item	Unit	Seventh Plan 85-90		Annual Plans 90-92	
		Target	Achievement	Target	Achievement (Anticipated)
1. Irrigation Potential created					
A: Minor Irrigation					
i. Ground Water	000Hect	121	130	65	65
ii. Surface Water	"	60	37	19	13
B: Major & Medium	"	281.49	147.63	87.78	76.85
2. Command Area Development					
a) Area covered by Field Channels	000Hec	2500	1649	840	716
b) Area covered by Land Levelling	"	2000	1287	857	680

5. Power Development

Serious energy imbalances have developed in the State since early 1970s. The demand for electrical energy has far outpaced the supply. The State has no coal or hydro carbon reserves and depended entirely on the hydel sources till recently. The ultimate hydel power generation capacity existing in the State is estimated to be 7700 MW of which only 2208 MW is exploited. Another 630 MW of capacity has been created from thermal sources. Thus, by the end of the current year, the total installed capacity in the State is expected to be 2838 MW.

Power sector is accorded highest priority in plan allocations. About 1/5th of the outlays were spent on this sector during the Seventh Plan. But still the progress achieved in installed capacity has been far from satisfactory, especially in relation to demand. The installed capacity at the end of the Seventh Plan was only 2645 MW compared to the target of 2801 MW. Hardly 425 MW of capacity was added during the five year period. Added to this, there were considerable fluctuations in the actual generation of electricity due to vagaries of monsoons. The T&D losses still constituted about 1/5th, although the losses were reduced during the Seventh Plan from 22.56 percent in 1984-85 to 20 percent in 1989-90. With the result, the State had to rely heavily on imports, which have gone up from 1364 MU in 1984-85 to 2622 MU by the end of the Seventh Plan.

During the Annual Plans, however, 420 MW of capacity is expected to be added to the State grid.

Under Rural Electrification Programme, the targets have been fully achieved. By 1988-89 the State has achieved 100 per cent electrification of villages. In the subsequent years, the programme aims at electrification of hamlets and thanidas in an expeditious manner. More than 46 thousand pumpsets were energised on an average per year during the Seventh Plan and this has further been increased to about 65 thousand in the Annual Plans.

Needless to say that serious power shortages have adversely affected the overall growth in the economy in general and industrial development in particular. Therefore investment in power sector needs to be stepped up in a big way.

The details of targets and achievements in the Power Sector are presented in Table-7.

Table-7
Power Development

Item	Unit	Seventh Target	Plan 85-90 Achievement	Annual Target	Plans 90-92 Achievement (Anticipated)
1. Installed Capacity	MW	2801	2645	3065	3065
2. Elec.y.generated	MU	11888	11113	11685	11685
3. Transmission Lines 220 KV & above	ckt Kms	1419	954	788	523
4. Rural Electri- fication					
a) Villages electrified	000s	3157	3157*	-	-
b) Hamlets and Than- das Electrified	"	2500	2009	700	486
c) Pumpsets energised (including Tubewells)	"	225	230	120	130

*100 per cent village electrification was achieved by 1988-89.

6.Industrial Development

The State had started with a weak industrial base at the time of reorganisation. But the State has achieved significant industrial development over the years. The longterm growth achieved in industrial production in the State is marginally higher than that of All India. The industrial production (manufacturing) contributed nearly 1/5th of the State income in the State and the share of Karnataka in the total income from manufacturing sector of all States stood at 6.7 percent in 1988-89. There are about 650 large and medium industries in the State with an investment of Rs.4500 crores and providing employment to about 3.5 lakh persons. In the smallscale sector there are more than a lakh of smallscale units in a wide array of manufacturing activities with an investment of about Rs.858 crores and employing more than 7.5 lakh persons. As per the Annual Survey of Industries the share of the State in registered factories in the country was 5.6 percent in 1987-88, share in employment 5 percent and the share in the value of output 4.3 percent. The real per capita State Domestic Product in manufacturing sector in Karnataka in 1988-89 was Rs.401.5 compared to Rs.325.2 for all States at 1980-81 prices.

The State has made significant strides in the development of electronics, engineering and food processing industries. Particularly the electronics industry has registered a rapid growth in recent years. The production of electronic goods in the private sector has grown from Rs30 crores in 1982-83 to Rs.727 crores in 1988-89, a 24-fold increase. The smallscale industrial development also received a fillip in recent years.

Although the share of the State in industrial investment as well as output in the country has marginally declined during the Sixth Plan period, the growth has picked up during the Seventh Plan. The annual average growth in industrial production, as reflected in the Index of Industrial production (Manufacturing) is about 6.8 percent during the Seventh Plan period. But still the growth rate achieved in the State is less compared to All India. The organised sector in the State has registered an impressive growth during the Seventh Plan compared to the unorganised sector. In the smallscale sector more than ten thousand units were set up on an average per year during the Seventh Plan period and the same level is anticipated to be maintained during the Annual Plans 1990-92. However, the production in handloom industry, powerloom industry, khadi and village industry during the Seventh Plan period has fallen significantly short of the targets. However, during the Annual Plans, all the targets are anticipated to be fully achieved. The details of progress under industry are presented in Table-8.

7. Transport and Communications:

The details of progress during Seventh Plan and Annual Plans 1990-1992 are presented in Table-9. It can be seen that the achievement in respect of all types of roads except State highways has fallen significantly short of the targets. The shortfall in traffic handled in minor ports has also been more conspicuous during the

Table-8
Industry

Item	Unit	Seventh Plan 85-90		Annual Plans 90-92	
		Target	Achievement	Target	Achievement (anticipated)
<u>1. Village & Small Scale Industries</u>					
a) Units set-up	'000s	56.00	52.85	20.00	19.88
b) Employment	Lakh Persons	3.24	2.72	1.08	1.08
<u>2. Handloom Industry</u>					
a) Production	Mln.Meters	43	30	34	34
b) Employment	Lk.Person	2.50	2.00	2.60	2.60
<u>3. Powerloom Industry</u>					
a) Production	M.Mtr	350	275	270	270
b) Employment	L.Per	0.35	0.28	3.13	3.13
<u>4. Khadi and Village Industries</u>					
a) Value of Production	Rs. Lakhs	10000	6500	5200	5200
<u>5. Sericulture</u>					
a) Raw Silk Production	'000 Kgs	5668	6076	6938	6938
b) Employment	'000 pers.	2544	3568	2743	2743
6. Industrial Estate	No. (cum)	75	30	45	45
7. Industrial Sheds	"	4000	3600	4000	4000

Seventh Plan. In respect of State highways, particularly in surfaced roads the target has been exceeded by nearly 32 per cent during the Seventh Plan. During the Annual Plans 1990-92, all the targets are expected to be fulfilled in road works. But in case of traffic handled in minor ports it is anticipated that there may be considerable shortfall.

Table-9

Transport

Item	Unit	Seventh Plan 85-90		Annual Plans 90-92	
		Target	Achievement	Target	Achievement (anticipated)
1. Roads					
i) State Highways					
a) Total Road Length	KM	8500	11255	11255	11255
of which	(cum)				
b) Surfaced	"	8500	11241	11250	11250
ii) District Roads					
a) Total	"	24500	21181	21181	21181
Of which					
b) Surfaced	"	24000	20915	20941	20941
iii) Village Roads					
a) Total	"	48000	45001	45760	45760
Of which					
b) Surfaced	"	27300	32161	33452	33452
iv) Total Roads(i to iii)					
a) Total Length	"	81000	77437	78187	77187
Of which					
b) Surfaced	"	59800	64317	65634	65634
2. Minor Ports:					
Total Traffic handled	Lakh Tons	113.35	34.05	30.85	22.59

8. Social and Community Services

The progress achieved in terms of selected indicators in social and community services is presented in Table-10. During the Seventh Plan, the enrolment in lower classes of elementary education (classes I to IV) was only 47 lakhs compared to the target of 53 lakhs during the Seventh Plan period. However, in classes V to VII the enrolment targets have almost been fully achieved. Under Adult Literacy Programme as many as 35 lakhs of adults have been covered during the Seventh Plan compared to the target of 56.5 lakh adults. In respect of health institutions the targets have been exceeded during the Seventh Plan. Particularly in respect of sub-centres the achievement has been 7793 as against the target of 7025 during the Seventh Plan. As far as rural water supply is concerned during the Seventh Plan, the target for piped water supply schemes has slightly been exceeded.

But there is a sizeable shortfall in respect of mini-water supply schemes and borewells. In urban areas the target for urban water supply schemes has been exceeded while there was a shortfall in respect of piped water supply schemes. Under housing, the target set for allotment of free sites to the poor in rural areas was fully achieved during the Seventh Plan. But in urban areas the progress was very poor and the scheme was discontinued from 1988-89. But, in respect of house construction for the poor both in rural areas and urban areas there were significant shortfalls in achievement. The target set for pre-matric scholarships to Scheduled castes and Scheduled Tribes as well as backward classes and minorities have been exceeded during the Seventh Plan. Under Nutrition programme the achievement during the Seventh Plan both under Special Nutrition Programme and Mid-day Meals was less than the targets. The shortfall in achievement under Mid-day meals scheme was due to withdrawal of CARE assistance to the extent of one-third.

During the Annual Plans 1990-1992, almost all the targets are anticipated to be fully achieved except in adult literacy programme, house construction for the poor, Midday Meals and urban water supply schemes where shortfalls are expected.

Table-10(continued)
Social And Community Services

Item	Unit	Seventh Plan 85-90		Annual Plans 90-92	
		Target	Achievement	Target	Achievement (anticipated)
<u>A. Education</u>					
1. <u>Elementary Edn.</u>					
<u>-Enrollment</u>					
i) Classes I to IV	'000s	5288	4721	5450	5450
ii) Classes V to VII	"	2050	2044	2475	2475
2. <u>Adult Literacy</u>					
<u>Programme</u>					
Adults covered	"	3651	3504	630	477
<u>B. Health and Family</u>					
<u>Welfare</u>					
1. Primary Health Centres	No. (cum)	1142	1148	1248	1248
2. Sub-Centres	"	7025	7793	7793	7793

Table-10(concluded)

Item	Unit	Seventh Plan 85-90		Annual Plans 90-92	
		Target	Achievement	Target	Achievement (anticipated)
<u>C Water Supply & Sanitation</u>					
1 Rural Areas					
a Piped Water Supply Schemes	No.	1250	1259	1341	1443
b Mini-Water Supply Schemes	"	3090	1281	1277	1374
c Bore Wells with Handpumps	"	15000	10343	6489	6923
2 Urban Areas					
a Piped Water Supply Schemes	"	60	43	31	29
b Urban Water Supply Schemes	"	10	12	20	12
<u>L Rural Housing</u>					
1 Allotment of Free sites to the poor	000s	225	225	75	72
2 Houses under Peoples' Housing Scheme & Experimental Low cost Houses	"	243	178	123	101
<u>E Urban Housing</u>					
1 House sites to Weaker Sections	No.	20000	2306	-	-
2 Houses for Urban Poor(BhagyaMandira)"	"	11000	8739	63000	-
<u>F Welfare of SCs & STs</u>					
1 Pre-Matric Scholarships	'000s	209	555	142	152
<u>G Welfare of Minorities and Backward Classes</u>					
1 Pre-Matric Scholarships	"	175	190	109	109
<u>H Labour & Labour Welfare</u>					
1. Industrial Training Institutes					
i) Persons undergone Training	No.	10500	9203	8596	8596
ii Out turn	"	5000	5957	6000	6000
2. Apprentices Trained	"	7500	5390	6390	6390
<u>I. Nutrition(Beneficiaries)</u>					
1. Special Nutrition Programme					
	Lakh	16.71	12.88	19.76	20.26
2. Mid-day Meals Programme					
	"	14.85	12.24	12.24	9.91

II.Objectives and Strategy

The Eighth Five year Plan is being launched in an environment of economic policy changes undertaken by the Government of India. The objectives of the Plan would, therefore, have to be dovetailed with those at the National level while formulating the Eighth Five Year Plan. Therefore, the Plan proposals focus on areas where investment efficiency in public sector in terms of welfare gains is maximum, leaving some areas for private investment to come in and improve productivity.

Plan proposals have also been set in the background of the State having made concerted effort to increase investment in development, at least in the last two interregnum years. In the Seventh Five Year Plan, the Plan expenditure of Rs.5300.00 crores constituted on an average 43.7% in the entire budget expenditure of the State. During 1990-91, this share was 47% and during 1991-92, it was 45.7%. On point to point consideration, the Plan effort has been higher by 47% during 1990-91 and by 57% during 1991-92, when compared with that of 1989-90. While formulating the Eighth Plan, continuance of this impetus to increase Plan investment in the State constitutes the second consideration.

While there have been areas of achievements during the Seventh Five Year Plan, there have also been some serious constraints, specially in the infrastructural sector, which have slowed down the process of development with all the attendant adverse effects on productive sectors. While formulating Plan proposals, therefore, efforts have been made to ease up these constraints, particularly in irrigation, power and social sectors.

II.2

The State has had a satisfactory trend in welfare programmes and delivery of benefits to the weaker sections. However, the disparities in income, particularly in rural areas, continue to be daunting. Keeping this in mind, a renewed thrust in welfare activities is being sought to be given in the Plan, particularly in the areas of housing and education for the weaker sections and rural water supply.

Population in the State has increased from around 40 million in 1985 to 44.8 million in the year 1991, registering an annual growth rate of 2.1% which is on par with that at the National level. However, in the growth rate of income, particularly of rural incomes, the performance of the State was below that of the country during the Seventh Plan period, with the State Domestic Product in the primary sector in the State having shown a growth rate of 3.4%, as against the National growth rate of 4.3%. This is particularly noticeable because the State had achieved a growth rate of 5.5% per annum in the primary sector during the Sixth Plan period which was higher than the National growth rate of 5.1%. This steep decline in the pace of development in Karnataka has been a matter of great concern while finalising the Eighth Plan proposals.

Yet another area of concern has been the relatively steeper decline in the rural incomes, without any commensurate transfer of population from agriculture related activities to non-agricultural activities. This would call for on the one hand an increased investment in infrastructure that would promote employment in non-agricultural activities, and, at the same, equally pronounced increased investment to expand employment opportunities in rural areas.

Objectives of the Eighth Plan:

In this background and also the national objectives for the Eighth Plan, the following objectives have guided the formulation of the State's Plan:

- i) Reduction of poverty;
- ii) Generation of productive employment;
- iii) Provision of basic needs to the people;
- iv) Sustainable growth in the economy, particularly in the important sectors like agriculture and industry, with development in the supporting infrastructure specially irrigation and power; and
- v) Protection of environment and ecology.

In order to realise these objectives, the Eighth Plan has the following major targets;

- i) Achieving an annual growth rate of 5.6% per annum, on par with the national growth rate target;
- ii) Bringing down the proportion of population below the poverty line from 32% to 25% by the end of the Eighth Plan;
- iii) Increasing productive employment opportunities by about 15 to 20 lakhs;
- iv) Increasing operational efficiencies specifically in sectors like irrigation and power, in addition to augmentation in capacity needed for realising the objectives set; and
- v) Increasing the basic facilities such as housing, health, education, water supply, etc.

II.4

Sectoral Strategies:

Agricultural Sector:

Performance in the Agricultural Sector has been such that despite increase in the various critical inputs, productivity has not improved; on the contrary, it has declined in case of a number of crops.

Between 1984-85 and 1990-91, area under HYV increased from 28.00 lakh hectares to 32.00 lakh hectares, fertilizer consumption from 5.9 lakh tonnes to 8.4 lakh tonnes, irrigated area from 25.7 lakh hectares to 30.6 lakh hectares, pumpsets energised from 4.4 lakhs to 7.3 lakhs, and energy consumed for irrigation purpose from about 600 million units to 3500 million units. Public investment on irrigation was Rs.133.00 crores per annum on an average during the Sixth Plan period, while it was Rs.200.00 crores per annum during the Seventh Plan period. During 1990-91, it touched Rs.300.00 crores. Similarly, on power development, investment per annum on an average was Rs.160.00 crores during Sixth Plan, while it was Rs.210.00 crores during Seventh Plan and Rs.296.00 crores during 1990-91. Despite these inputs, years being normal years and also heavy financial input through World Bank assistance for the National Agricultural Extension Project and the support given in the form of extension and training, productivity has not improved between the two reference years. In fact, productivity has declined between 1984-85 and 1990-91 in respect of major crops like Ragi, Rice, Jowar, Maize, Tur, Pulses, Groundnut and Oilseeds. Two crops which exhibited improvement in productivity were Sugarcane and Cotton.

Trends in area and production are reflecting a situation of production benefit accruing in the State more from extensive cultivation, than from intensive cultivation. Crux of the problem lies in sub-optimal use of inputs and land holdings and the efforts through extension and training not having a dent on productivity. Services rendered almost free of cost through development programmes not only cripple the State's resource position but would also result in wasteful deployment by the user, who attaches no value to the same. Beneficial impact of services is determined by the price one pays for the same. Hence, the Plan focuses attention not only on increasing efficiency of public investments but also of private investment on various inputs, through appropriate pricing and cost-recovery measures.

More specifically, the main elements of the strategy for the agricultural sector are:

- i) Enhancing productivity of various crops in such a way as to reach a level of at least 1400 Kgs per hectare in cereals, 500 Kgs per hectare in pulses and 900 to 1000 Kgs per hectare in oil seeds;
- ii) Agro-climatic zonal approach will be adopted to achieve the proposed productivity-led improvements in production. Such a strategy will help in crop planning and input management;
- iii) In the irrigated region, through better water budgetting and irrigation scheduling, it is proposed to increase the cropping intensity as well as productivity, in all the major command areas. Yet another strategy would be to bring about desired changes in the cropping pattern so as to make the best use of available water; /to

II.6

- iv) In as much as only about 25% of the land under cultivation enjoys the benefit of assured flow of water, the integrated watershed development strategy would be put to full use. An attempt would also be made to overlay watershed development programme with other elements of land-use planning so that a comprehensive and technologically and administratively feasible approach is perfected and implemented in the coming years;
- v) Both in the irrigated and rainfed areas, by emphasizing the optimal land use, it is hoped to stabilise the area under various crops at a higher level of productivity and returns to the farmer; and
- vi) Human resource development will be another component of the Eighth Plan strategy, with focus on agricultural education, research, and training for agricultural labourers, especially women and youth and on innovative methods of communication.

Irrigation and Water Resource Management:

Closely related to agricultural production strategy is the important aspect of irrigation and water resource management.

Progress of irrigation in relation to investment made so far is low due to the following factors:

- i) Minor irrigation programme has received low priority in investment, compared to major and medium irrigation, despite minor irrigation being less capital intensive and has the advantage of providing more decentralised benefits and of short gestation period;
- ii) Even within the major irrigation programme, investment so far made is thinly spread out on large number of projects, leading to both cost and time over-runs;

II.7

- iii) About 30% of the irrigation potential created under tank irrigation is estimated to have been lost on account of silting up of tanks and inadequate repairs and up-keep;
- iv) Irrigation capacity created under major and medium irrigation has reduced on account of large scale silting of irrigation reservoirs;
- v) Water logging and salinity has also led to less of irrigation, in addition to affecting productivity of land in the area irrigated by major and medium irrigation;
- vi) Potential already created in the command area of major irrigation projects has not been fully utilised due to inadequate progress under CADA.

In respect of ground water, in addition to the problem of 25% of potential remaining unexploited, there is the problem of inefficient utilisation arising due to over exploitation of ground water in certain areas and water table itself going down on account of silting-up of tanks, deforestation, soil erosion, etc.

In addition to the above mentioned physical side of the problem, irrigation investment is not generating adequate financial returns to the Government, thereby eroding the essential pre-requisite maintenance of assets.

The Eighth Plan focuses on speedier completion of on-going projects by ensuring adequate financial resources required for the same, more balanced approach in resource allocation for harnessing water resources in rainfed areas and irrigated areas and on development of dryland areas, in order to conserve both soil and water, in addition improving productivity in rainfed farming and thereby augment rural incomes.

Power

Seventh Plan witnessed almost near stagnation in installed capacity, but for the addition of 115 MW between 1988-89 and 1989-90. Further, there is the problem of system inefficiencies both at generation point and at transmission and distribution point. With rural electrification having touched 100% coverage and with the momentum given for energisation of pumpsets, the centralised source of electrical energy is imposing further burden on the transmission and distribution system. Further, the impact of any cuts in the Plan size invariably falls, in the first instance, on sectors like irrigation and power.

There is an urgent need to have integrated approach to planning in the power sector incorporating elements of both supply and demand management, which are briefly as follows:

- i) Efficiency improvements in various electricity consuming sectors;
- ii) Exploiting de-centralised electricity generation for the benefit of remote areas;
- iii) A structural shift in Karnataka's industry towards non power intensive employment generating industries;
- iv) Load Management; and
- v) Augmentation of electricity supplies.

Forest:

Closely related to the powersector, in the context of energy, is the forestry sector, which is also of importance in land use management. Forest produce is an important source of energy in our economy, in addition to being a source of industrial rawmaterial and input

for construction purpose. Depletion of forest wealth is to be attributed to the consumption of capital stock at a rate faster than the growing rate of the capital stock. Yet another factor which is causing it is our very development programmes like irrigation, power projects, industrial development, etc.,

Given the various sources of problem in the forestry sector and the State's focus on protection of ecology and environment, the following components of development plan for biomass energy in Karnataka emerge:

- i) Biomass energy for the satisfaction of minimum energy needs, starting from the energy needs of the rural and urban poor;
- ii) Increases in the supply of biomass energy sources;
- kii) Dissemination of efficient biomass-based energy devices;
- iv) Satisfaction of urban cooking energy needs;
- v) Biomass demand decreases and supply step-up approach;
- vi) Decentralised biomass energy centres;
- vii) Decentralized land-use management at the micro-level (village, mandal and district levels); and
- viii) Land-use management at the macro-levels (State level).

Industry:

Between 1984-85 and 1988-89, index of industrial production has increased from 247 to 319. State Domestic Product from the Secondary Sector has achieved a growth

rate of 6.1% per annum during the Seventh Plan period, as against the National growth rate of 6.9% per annum. During the Seventh Plan, the growth performance in the Secondary Sector has picked up significantly when compared with the Sixth Plan period when the growth rate in the State was 2.6% per annum and at the National level at 2.7% per annum. However, compared with the growth performance during the Third, Fourth and Fifth Plan periods, when the State achieved a growth rate of 9% to 10% per annum, performance in the Seventh Plan period is not very creditable. Further, the Secondary Sector has not expanded in a manner facilitating expansion of employment opportunities and thereby shift of the work force from the agricultural to the non-agricultural sector. This is imposing strain on the rural economy.

If the industrial sector should be effective in expanding employment opportunities, it is not sufficient to step up its growth rate from around 6% per annum to around 8% per annum, which would enable the overall growth rate to be around 5.6% per annum. Eighth Plan lays emphasis on balanced mix of industrialisation in all sectors, namely, Khadi and Village, Tiny and small scale, as also medium and Large Scale Industries. Further, developments which have already taken place in the industrial sector would be optimised and consolidated by bridging the gaps in key areas of infrastructure; human resource development through training and skill upgradation; technological upgradation and modernisation of the existing industries; providing uninterrupted power supply; and creating suitable environment for the operation of decentralised small scale and tiny industries. Further to improve State's resource position through industrialisation, all-out efforts would be made to pull up the various sick public sector undertakings.

Social Infrastructure:

While the State's position is relatively better in facilities like Shelter, Rural Health, Schools, Potable Water supply in Rural Areas, Urban Water supply and Sanitation, and demographic indicators like Birth and Death Rates, Infant Mortality Rate, Expectation of life at Birth, effective literacy rate, when compared with All India position, gap between State's position and the best fared State is quite significant, exceptions being in shelter, school facilities, potable water supply in rural areas and urban water supply. However, even when the overall position appears satisfactory, the problem in respect of Social Infrastructure is the imbalances in the spatial and demographic spread of these facilities. Hence, the Eighth Plan focusses attention on this aspect.

In the field of health, realising the importance of Integrated Health Service as an important determinant of realising demographic parameters which help arresting the growth of population, the Eighth Plan proposes to cover the various supportive activities identified by the World Health Organisation, for successful implementation of Primary Health Care like:

- Community involvement and participation;
- Intra-and Inter-sectoral co-ordination;
- Development of effective referral support;
- Development and mobilisation of resources;
- Involvement of managerial process;
- Health manpower development;
- Medical and Health Services Research including the innovative approaches; and
- Development and application of appropriate technology.

In respect of Education, the basic thrust of the Eighth Five Year Plan would be for consolidation of gains and qualitative improvement, while efforts will continue to bridge the gaps in the facilities experienced in certain pockets, specially in rural areas. An educational system of a developing economy has been observed to pass through three stages:

- i) The stage of quantitative expansion;
- ii) The stage of consolidation of gains and qualitative improvements;
- iii) The stage of innovation and creative development;

Forty years of planning has, by and large, led to the completion of the first stage of development and hence, the State can enter the second stage at this juncture.

The main components of the education strategy would be to improve the literacy rate, intensify the programme of vocationalisation of higher secondary education and introduce appropriate linkages between education and the demands of the various production and service sectors.

The Eighth Plan would continue to implement programmes for the welfare of SCs and STs in concrete terms in areas like education, housing, drinking water, approach roads, energisation of pumpsets, providing power for domestic use, irrigation, etc.

Implementation:

Effective implementation of plan programme has been posing serious problems, which may not be peculiar to our State's economy only. Objectives are set, strategies are drawn up and programmes are formulated, without giving sufficient attention to the availability of adequate mechanisms for implementation. It is necessary to bridge this gap. Eighth Plan proposes to give specific attention to the following aspects of implementation strategy.

For the planning exercise to be responsive to implementational constraints, there is need for spelling out the quantitative dimensions of the programmes - financial and physical - satisfactorily. Given this, monitoring becomes more effective and meaningful. Another area which can contribute to effective implementation is closer interaction with the public. The State has innovative mechanism in the form of public Grievances Organisation. Further, in the recent past, consumer level organisations are also getting created to keep a vigil on implementation aspects of Government programmes.

There is need for strengthening the management capabilities in the Government organisations by inducting technical skills at various levels and introducing measures which recognise quality service.

Karnataka State has been a pioneer in experimenting with decentralised planning process. While certain advantages of the process have been felt, certain problems are also surfacing in the experiment. Eighth Plan may be the appropriate period to take stock of the limitations in this planning process and introduce corrective measures in the initial stages itself so that the objectives of decentralised planning are not defeated.

III DRAFT EIGHTH FIVE YEAR PLAN 1992-97 AND ANNUAL PLAN 1992-93 - AN OUTLINE

To achieve the objectives of Eighth Plan and to regain the lost momentum so as to catchup with the rest of the country in social and economic development calls for tremendous efforts in Planning and implementation of development programmes. The State is fully geared to meet this challenge and to make determined efforts to achieve a higher rate of growth in the economy and also improve the wellbeing of people. Accordingly, the Eighth Plan of the State is drawn up with an outlay of Rs.11000 crores at 1991-92 prices. This marks a step up of the outlay in real terms by a little more than one-fifth compared to the level envisaged in the 1990-95 plan and nearly double the plan expenditure during the Seventh Plan. For the Annual Plan 1992-93 an outlay of Rs 1810 crores is proposed.

The Eighth Plan aims at realising an annual growth of 5.6 percent in the State's economy as against 5 per cent achieved during the Seventh Plan and at the same time achieve perceptible improvement in the living standards of people. The public sector outlay itself is not adequate to achieve this. The total investment in the economy, particularly the private sector investment has to go up substantially. The Plan, therefore, accords highest priority to development of crucial infrastructure viz. Irrigation, Power etc. All efforts will be made to obtain optimum results for all the past and present investments both in respect of income generation and employment. At the same time, the plan aims at making a greater dent into poverty both in Urban and Rural areas and improve the general wellbeing of the people. This calls for intensification of the poverty-alleviation programmes and Minimum Needs Programme. High priority is given to schemes that help the weaker sections and for implementation of the 20-Point Programme.

New Thrusts under the Eighth Plan

Several thrust areas have been identified for the Eighth Plan, such as:

- i) The Irrigation development to be pursued within the perspective of utilising fully the State's share in river waters and also to exploit the entire ultimate potential available in the State within another decade;
- ii) In the Power Sector, the Plan seeks to step up substantially the installed capacity of Power generation with emphasis on taking up of more mini and micro hydel projects and also to diversify the power-generation-mix make it more stable
- iii) In agricultural sector, the plan aims to improve the value added under both irrigated and dry crops so as to create considerable surpluses;
- iv) A comprehensive scheme to be implemented to reduce the drop-out ratio in Primary schools;
- v) A massive Housing programme to be implemented for the poorer sections both in rural and urban areas;
- vi) A special programme to assist the rural artisans to improve the productivity and incomes to be implemented; and
- vii) Intensify schemes for Drinking Water Supply in both rural and urban areas so as to provide clean drinking water to all by the end of the decade.

Simultaneously, the new Policy thrusts envisaged include the following:

- a) Encouragement of greater privatisation of productive activities in areas like power generation, industries, health, education, housing, afforestation etc.
- b) To derive maximum advantage from the liberalisation policies of Government of India to attract higher private investment from both domestic and foreign sources;
- c) Greater cooperativisation in areas like Minor Irrigation, renovation of tanks, rural water supply, electricity distribution, marketing, supply of inputs/credit etc;
- d) Pricing of all public sector output to be not only based on the principle of cost-plus but also should provide for cross subsidies in favour of the poorer sections in areas like Health, Irrigation, Power, Education, Housing etc;

- e) The efficiency levels in public sector are to be maintained at a fairly comparable levels, with those of the private sector and also disinvestment in public sector undertakings wherever no public purpose is served by its presence;
- f) To liberate the productive forces from innumerable regulations and controls with specific tilt in favour of lower middle class and poor sections of society, so as to enable them to participate in productive activities in a greater measure;.
- g) To ensure better and more effective coordination between and among the various Government agencies in servicing the development activities and programmes;

Allocation of outlay to different sectors is guided by the following considerations:

- i) the general priorities as reflected in the thrust areas identified, perspectives set for major sectors like irrigation, power etc and Government commitment to achieve certain objectives in areas like housing, education, industries, water supply etc.
- ii) full provision for executing the externally aided projects as per schedule; and
- iii) the requirement of ongoing schemes taking note of among other things schemes/projects completed, extent of expenditure transferred to non-plan and also the need to discontinue certain relatively less effective scheme.

The following points are kept in view in allocation of outlay to different projects/schemes within each sector.

- i) Adequate provision for all ongoing works identified to be continued/strengthened with a view to complete them in a timebound manner with priority for the schemes/projects which are in an advanced stage of completion;
- ii) Full provision for externally-aided projects;
- iii) Adequate provision to be made for matching share of the State for all the Centrally Sponsored Schemes;

Critical minimum expenditure levels have been determined for certain crucial schemes/programmes including MNP, SCP, TSP etc and outlays earmarked.

Inter-sectoral outlay

Allocation of outlays of the Eighth Plan 1992-97 and Annual Plan 1992-93 by major sectors is presented in Table-1. It can be seen that power and irrigation sectors together are provided with 47 percent of the total outlay for the Eighth Plan. The outlay proposed for irrigation sector marks an increase of 66 percent and that of power by 5 percent compared to those proposed in 1990-95 Plan. Substantial outlays are proposed to be spent on Cauvery Basin Projects outside the State Plan. If we take into account this outlay also, the total investment in irrigation in the State during the Eighth Plan period may exceed Rs.3400 crores. In the Power Sector the outlay proposed is Rs.2904 crores in the Eighth Plan. Efforts are being made to attract private investment also in power generation. To the extent there is response from the private sector the investment in the Power Sector during the Eighth Plan period will go up.

TABLE-1
Draft Eighth Five Year Plan 1992-97 and
Annual Plan 1992-93

Sl. No.	Sectors	Rs.Lakhs	
		Eighth Plan 1992-97	Proposed Outlay Annual Plan 1992-93
ECONOMIC SERVICES			
	Agriculture & Allied Services	79932	15409
I	Rural Development	56670	9240
II	Special Area Programme	39000	7000
V	Irrigation and Flood Control	225357	29756
	Energy	290455	45057
I	Industry and Minerals	54433	12082
II	Transport	44775	8750
III	Sc.Technology and Environment	1050	225
X	General Economic Services	10051	1695
	TOTAL:A ECONOMIC SERVICES	801723	129214
SOCIAL SERVICES			
I	Education, Sports, Arts & Culture	84505	14010
II	Health	28910	5300
III	Water Supply, Housing and Urban Development	126610	21348
IV	Information and Publicity	1400	265
V	Welfare of SCs, STs and OBCs	23575	4465
VI	Labour and Labour Welfare	2671	448
VII	Social Welfare & Nutrition	18706	3390
VIII	Other Administrative Services	538	101
	TOTAL:B SOCIAL SERVICES	286915	49327
C	GENERAL SERVICES	11362	2459
	GRAND TOTAL (A+B+C)	1100000	181000

Within agricultural and allied activities more than proportionate increase is proposed in the Eighth Plan for animal husbandry, diary development, agricultural research education and regional rural banks compared to those proposed in 1990-95 Plan. Similarly for village and small scale industries, roads & bridges, scientific research, primary & secondary education, collegiate education, rural water supply, housing, slum improvement and welfare of scheduled castes, scheduled tribes & other backward classes. The outlays proposed are more than proportionate to the increase in the total outlay of Eighth Five Year Plan 1992-97 over and above that of 1990-95 Plan. The outlay for priority sectors/programmes proposed in the Eighth Plan in comparison with those of 1990-95 Plan are presented in

TABLE-2
Outlay for Priority Sectors/Programmes

Rs.Lakhs

Sectors/Programme	1990-95 Plan Proposed	Eighth Plan (1992-97)	Percentage increase
1. Major and Medium Irrigation	98632	186109	+ 88.7
2. Power (Generation and Distribution)	187248	288841	+ 54.3
3. Village and Small Scale Industries(excluding Sericulture)	12265	18826	+ 53.5
4. Housing for Weaker Section and K.H.B.	18551	51190	+175.9
5. Primary and Sec.Education	24744	64550	+160.9
6. Rural Water Supply	18300	34050	+ 86.1
7. Urban Water Supply(excluding- Bangalore Water Supply)	1050	15750	+ 50.0

2. Minimum Needs Programme

The details of outlay proposed in the Eighth Plan 1992-97 and Annual Plan 1992-97 by programme are presented in Table-3. It can be seen that highest proportion of outlays under Minimum Needs Programme are allocated to the elementary education (25.5 percent) closely followed by rural housing (25.1 percent). The next higher outlay is for rural water supply (18.1 percent). Thus more than 2/3rds of the outlays under Minimum Needs Programme go to the above three programmes.

In the Annual Plan 1992-93 the total outlay proposed for Minimum Needs Programme is Rs.303 crores of which Rs.90 crores or 30 percent of the total outlay under MNP is ear-marked for rural housing. Elementary education gets 22.8 percent and rural water supply 14.7 percent of the total outlay for 1992-93.

Table-3
Minimum Needs Programme: Outlay proposed
Eighth Plan 1992-97 and Annual Plan 1992-93

Rs.Lakhs

Programme	Outlay proposed	
	Eighth Plan 1992-97	Annual Plan 1992-93
1. Rural Electrification	21090	2579
2. Fuelwood and Fodder	860	224
3. Rural Roads	12000	2200
4. Elementary Education	47750	6914
5. Adult Education	1870	350
6. Rural Health	13050	2675
7. Rural Water Supply	33750	4462
8. Rural Sanitation	500	88
9. Rural Housing		
(i) Allotment of Sites	2050	930
(ii) Construction Assistance	43970	8110
Total (9)	46920	9040
10. Environmental Improvement of Slums	4440	760
11. Nutrition	5650	1000
TOTAL(1 to 11)	186980	30292

3. Key Targets

The key targets set for the Eighth Plan 1992-97 and Annual Plan 1992-93 are presented in Table-4.

TABLE 4(Continued)
Draft Eighth Plan 1992-97 & Annual Plan 1992-93
KEY TARGETS

Sector/Item	Unit	Target	
		Eighth Plan 92-97	Annual Plan 92-93
A. AGRICULTURE & ALLIED ACTIVITIES			
1. Crop Production	Lk.Tonns		
i) Cereals	"	96.40	80.95
ii) Pulses	"	11.60	8.35
iii) Total Foodgrains (i + ii)	"	108.00	89.30
iv) Oilseeds	"	27.29	20.35
v) Sugarcane	"	228.00	194.00
vi) Cotton	Lk.Bales	9.20	8.80
2. Area under High Yielding varieties	Lakh Hectares	41.30	38.74
3. Consumption of Chemical Fertilisers (N+P+K)	'000 Tonnes	1175.00	970.00
4. Distribution of Improved Seeds	"	52.96	42.22
5. Production of Horticulture Crops			
i) Coconut	Mln.Nuts	4662	914
ii) Arecanut	000 Tns	100	96
6. Animal Husbandry & Veterinary Services & Dairy Development			
i) Artificial Insemination	Lakhs	88.60	14.63
ii) Milk Procurement	000 Tonnes	380	380
7. Fisheries			
i) Mechanised Boats for fishing(cum)	Number	3500	3350
ii) Fish Seed Produced	Million	600	225
iii) Fish Production			
a) Inland	'000 Tons	200	70
b) Marine	"	200	175
c) Total	"	400	245

Table-4 (continued)

Sector/Item	Unit	Target	
		Eighth Plan 92-97	Annual Plan 92-93
8. Forestry			
i) Area under economic and Commercial Plantations	'000 Hects	22.14	4.43
ii) Area under Social Forestry	"	43.64	8.73
iii) Plantation of Quick growing species	"	77.14	15.43
B. CO-OPERATION			
9. Loans from Coop.Societies(Annual)			
i) Short term	Rs.Crores	307.70	303.00
ii) Medium term	"	33.40	35.00
iii) Long-term	"	140.00	125.00
C. RURAL DEVELOPMENT PROGRAMMES			
10. IRDP (Beneficiaries)	Lakhs	5.55	1.11
11. Assistance to Surplus land grantees	No.	7900	1600
12. TRYSEM - Youths trained	'000	70	14
13. JRY - Employment generated	Lk.Mandays	3158	502
14. 100 Wells Programme	'000	30	6
D. IRRIGATION AND POWER			
15. Major and Medium Irrigation: Potential created	'000Hect	451.13	90.09
16. Minor Irrigation:			
i) Surface water: Potential created	"	53.00	10.00
17. Command Area Development			
i) Area covered by field Channels	"	420.00	32.00
ii) Area covered by Land Levelling	"	298.00	38.50
18. Power			
i) Installed capacity	MW(cum)	3978	2915
ii) Hamlets Electrification(PA)	Number	530	300
iii) Energisation of Pumpsets(PA)	'000s	60.00	60.00
E. INDUSTRY AND MINERALS			
19(a) Small Industries:			
i) Units Established(Additional)	Number	50,000	10,000
ii) Persons employed	"	300	54
(b) Sericulture			
Production of raw silk	'000Kgs	10040	7685

Table-4 (concluded)

Sector/Item	Unit	Target	
		Eighth Plan 92-97	Annual Plan 92-93
F. ROAD DEVELOPMENT			
20(i) State Highways	Kms(Cum)	11650	11260
ii) District Roads	"	22020	21185
iii) Village Roads	"	48100	45950
G. SOCIAL & COMMUNITY SERVICES			
21. Education Enrolment			
i) Classes I - IV	'000 Pupils	5884	5541
ii) Classes V - VII	"	2672	2516
22. Adult Literacy			
i) Adult Literacy Programme	'000 Participants	60	16
23. Health and Family Welfare			
i) Primary Health Centres(cum)	Number	1764	1298
ii) Sub-Centres (cum)	"	7793	7793
24. Water Supply			
i) Rural Piped Water Supply Scheme	Number	1200	220
ii) Mini-Water Supply Schemes	"	3620	560
iii) Borewells with handpumps	'000s	15.38	2.72
25. Housing			
i) House sites to Weaker Sections in Rural Areas	'000	260.00	70.60
ii) Houses Constructed for the Rural Poor	'000s	260.00	70.45
26. Slum Improvement			
i) Beneficiaries	'000s	334	57
ii) EWS Houses	Number	8900	1400
27. Welfare of SCs and STs			
Pre-matric Scholarships	'000 Students	60	60
28. Welfare of Backward Classes and Minorities			
Pre-matric Scholarships	"	75.34	62.08
29. Employment and Training			
i) Industrial Training Institutes	Number	51	43
a) Persons undergoing Training	Number	11400	9230
b) Out-turn	"	6900	6300
ii) Apprentices training	"	7390	6590

Table-5

PLAN OUTLAY BY MAJOR HEADS OF DEVELOPMENT

Rs.Lakhs

Sl. No.	Heads of Development	Eighth Plan 1992-97	Annual Plan 1992-93
A.	<u>ECONOMIC SERVICES</u>		
1.	<u>Agriculture & Allied Services</u>		
1.	Crop Husbandry		
a(i)	Agriculture	9030	1938
(ii)	Crop Insurance	300	60
b	Horticulture	3802	758
2.	Soil & Water Conservation (Dryland Development)		
a)	Agriculture Department <small>Private</small>	7460	1760
b)	CLUMP	6582	715
3.	Animal Husbandry	11784	2750
4.	<u>Dairy Development</u>		
a	Karnataka Milk Federation	3021	350
b)	Animal Health & Veteri- nary Biological Institute	250	30
5.	Fisheries	3199	704
6.	Forestry		
7.	Environmental Forestry and Wild Life	16230	3607
8.	Food, Storage & Warehousing	100	20
9.	Agril. Research & Education	7207	1000
10.	Investment in Agricultural <u>Financial Institutions</u>		
a)	Cooperative Institutions	2487	200
b)	Regional Rural Banks	140	28
11.	<u>Other Agricultural Programmes</u>		
a)	Marketing & Quality Control	150	45
b)	Others	--	--
12.	Cooperation	8190	1444
	TOTAL : I	79932	15409

Table-5 (continued)

Ru. Lakhs

Sl. No.	Heads of Development	Eighth Plan 1992-97	Annual Plan 1992-93
11.	<u>Rural Development</u>		
13.	<u>Special Programmes for Rural Development</u>		
i)(a)	I.R.D.P.	10415	1790
(b)	TRYSEM	1290	265
(c)	IRDP-Monitoring	1580	275
(d)	Development of Women & Children in Rural Areas (DWACRA)	200	35
ii)	DPAP (Including State DPAP)	4260	700
iii)	Integrated Rural Energy Programme	550	110
14.	<u>Rural Employment</u>		
a)	Jawahar Rozgar Yojana (JRY)	17840	2678
b)			
15.	<u>Land Reforms</u>		
a)	Land Reforms (Revenue Dept)	550	110
b)	Assistance to Surplus Land Grantees (RDPR Dept.)	125	25
16.	<u>Other Programmes of Rural Development</u>		
a)	Anthyodaya	-	-
b)	Assistance to SF/MF to increase Agril. Production, subsidy on wells, pumpsets	2450	490
c)	C.R.T.T.C.	-	-
17.	<u>Community Development (Includes gran' to ZP)</u>	17410	2762
	TOTAL : II	56670	9240
III	<u>Special Area Programme</u>		
18(a)	Hyderabad-Karnataka Devp.	29000	5000
(b)	Border Area Development	5000	1000
(c)	Malnad Area Development	5000	1000
	TOTAL : III	39000	7000

Table-5 (continued)

Rs. Lakhs

Sl. No./	Heads of Development	Eighth Plan 1992-97	Annual Plan 1992-93
IV.	<u>Irrigation & Flood Control</u>		
19.	Major & Medium Irr. Projects	186109	22408
20.	<u>Mirror Irrigation</u>		
a)	Mirror Irrigation (Surface Water)	24673	5100
b)	Ground Water Development	975	198
c)	Sprinkler Irrigation	- Included under horticulture -	
21.	Command Area Development (CADA)	12500	1850
22.	Flood Control Projects (Including Anti-Sea Erosion)	1100	200
	TOTAL : IV	225357	29756
V.	<u>Energy</u>		
23.	<u>Power</u>		
(i)	Generation	178832	27814
(ii)	Distribution	110009	17163
24.	Non-Conventional Sources of Energy	1614	80
	TOTAL : V	290455	45057
VI.	<u>Industry and Minerals</u>		
25(a)	Village and small scale industries	18826	4740
(b)	Agriculture	12838	2687
26(a)	Major and Medium Industries (Other than SI)	22344	4570
(b)	Bureau of Public Enterprises	75	15
27.	<u>Mining</u> Mineral Exploration	350	70
	TOTAL : VI	54433	12082

III-13
Table-5 (continued)

Rs. Lakhs

Sl. No.	Heads of Development	Eighth Plan	Annual Plan
VII.	<u>Transport</u>		
28.	Ports and Light Houses	1750	350
29(a)	Roads and Bridges	28205	5155
	(b) National Highways	4010	645
	(c) Konkan Railway	750	750
30.	Road Transport	9800	1800
31(a)	Pollution Control(MV Dept.)	200	40
	(b) Inland Water Transport	60	10
	TOTAL : VII	44775	8750
VIII.	<u>Science, Tech. & Environment</u>		
32.	Scientific Research (Including S&T)	760	165
33.	Ecology and Environment	290	60
	TOTAL: VIII	1050	225
IX.	<u>General Economic Services</u>		
34.	Secretariat Economic Services		
(a)	Functional Divisions	110	20
(b)	District Planning Machinery	140	27
(c)	Planning Board	30	8
(d)	Studies	30	5
(e)	Institutional Finance	10	2
(f)	Professional Ser. & Journals	40	8
35.	Tourism	6901	1030
36.	<u>Survey and Statistics</u>		
(a)	Statistics	200	35
(b)	Computer	135	25
37.	<u>Other Gen. Eco. Services</u>		
(a)	Weights & Measures	75	10
(b)	Dist. Level Sub-Plan	2030	445
(c)	Modernisation of Admn.	350	80
	TOTAL : IX	10051	1695
	TOTAL : A: ECONOMIC SERVICES	801723	129214

Table-5 (continued)

		Rs. Lakhs	
Sl. No.	Heads of Development	Eighth Plan	Annual Pla
B.	<u>SOCIAL SERVICE</u>		
X.	<u>Education, Sports, Arts and Culture</u>		
38	<u>General Education</u>		
(a)	Pr. & Sec. Education	64550	10274
(b)	Adult Edn. & Akshara Sena	1870	350
(c)	Collegiate Education	2000	500
(d)	Pre-University Edn.	1000	200
(e)	Sanskrit Education	60	12
(f)	D S E R T	130	26
(g)	University Education	3000	600
(h)	Vocational Education	1495	162
	<u>Sub-Total: 38</u>	<u>74105</u>	<u>12124</u>
39.	Technical Education	5000	850
40.	<u>Arts and Culture</u>		
(a)	<u>Kannada and Culture</u>	1750	330
(b)	Archives	40	8
(c)	Archaeology & Museums	1140	225
(d)	Gazetteer	35	8
(e)	Libraries	300	60
41.	Sports and Youth Service	2135	405
	TOTAL : X	84505	14010
XI.	<u>Health</u>		
42.	<u>Medical & Public Health</u>		
(a)	<u>Medical Education</u>	3980	769
(b)	Health	22600	4097
(c)	Family Welfare	1110	185
(d)	I.P.P.III	-	-
(e)	Indian System of Medicine (Including Homeopathy)	800	165

III-15
Table-5 (continued)

Rs. Lakhs

Sl. No.	Heads of Development	Eighth Plan	Annual Plan
(f)	Drug Control	200	40
(g)	F.S.I. Scheme	220	44
	TOTAL : XI	28910	5300
XII.	<u>Water Supply, Housing and Urban Development</u>		
43/	<u>Water Supply & Sanitation</u>		
(a)	B'lore Water Supply (BWS&SB)	10990	1700
(b)	Urban Water Supply (KUWS&SB)	15750	2200
(c)	Rural Water Supply	34050	4510
(d)	Open Drinking Water Wells in Rural Areas	200	40
	<u>Sub-Total : 43</u>	<u>60990</u>	<u>8450</u>
44.	<u>Housing</u>		
(a)	Housing for Weaker Sections - HUD	36010	7190
(b)	Karnataka Housing Board	15180	2800
(c)	Police Housing	2500	600
(d)	Jail Buildings	640	120
(e)	Housing Building Advances to Government Employees	3000	700
	<u>Sub-Total : 44</u>	<u>57330</u>	<u>11410</u>
45.	<u>Urban Development</u>		
(a)	Town Planning (Including Urban Arts Commission)	270	54
(b)	Slum Improvement	4440	760
(c)	Urban Land Ceiling	60	15
(d)	Nehru Rozagar Yojana	1925	350
(e)	B.M.R.D.A.	220	49
(f)	Municipal Administration	1375	260
	<u>Sub-Total : 45</u>	<u>8290</u>	<u>1488</u>
	TOTAL : XII	126610	21348

Table-5 (continued)

		Rs. Lakhs	
Sl. No.	Heads of Development	Eighth Plan	Annual Plan
XIII	<u>Information & Publicity</u>		
46.	Information and Publicity	1400	265
	TOTAL : XIII	1400	265
XIV	<u>Welfare of SCs, STs and Other Backward Classes</u>		
47.	SCs and STs	16100	3080
48.	Backward Class & Minorities	7475	1385
	TOTAL : XIV	23575	4465
XV	<u>Labour & Labour Welfare</u>		
49	<u>Labour and Employment</u>		
a(i)	Employment and Training	1634	298
	(ii) Factories and Boilers	350	40
	(iii) Labour	637	100
	(iv) Rehabilitation of Bonded Labourers	50	10
b(i)	Employment Exchanges	-	-
	(ii) Special Employment Scheme Stipendary Empl. Scheme	-	-
	TOTAL : XV	2671	448
XVI	<u>Social Welfare & Nutrition</u>		
50.	<u>Social Security & Welfare</u>		
(a)	Women & Children Welfare	8467	1560
(b)	Dept. of Disabled Welfare	460	80
(c)	Sari-Dhoti Scheme	3200	575
51.	<u>Nutrition</u>		
(a)	Mid-day Meals	250	40
(b)	Special Nutrition Programme	5400	960
(c)	Consumer Protection	929	175
	TOTAL : XVI	18706	3390
TOTAL: B: SOCIAL SERVICES		286377	49226

Table-5 (concluded)

Sl. No.	Head of Development	Rs. Lakhs	
		Eighth Plan 1992-97	Annual Plan 1992-93
C. <u>GENERAL SERVICES</u>			
53.	Stationery and Printing	450	90
54.	Public Works: Administrative Buildings	10912	2369
55.	Other Administrative Services		
	(1) Training	138	21
	(2) Fire Protection	400	80
	TOTAL: C GENERAL SERVICES	11900	2560
	GRAND TOTAL (A+B+C)	1100000	181000

IV. FINANCIAL RESOURCES

Karnataka's resource management is considered to be reasonably good. The State has been putting in maximum efforts to mobilise tax and non-tax resources and to maintain high level of efficiency in its expenditures. The State's high level of tax effort are shown in Table.1.

TABLE-1

Tax Effort By States: 1989-90(B.E)

States	Tax Effort(Per Capita State's own Tax Revenue as percent of Per Capital Income
1. Andhra Pradesh	16.76
2. Assam	6.06
3. Bihar	7.45
4. Gujarat	14.83
5. Haryana	16.53
6. Karnataka	17.44
7. Kerala	17.16
8. Madhya Pradesh	12.58
9. Maharashtra	15.46
10. Orissa	9.15
11. Punjab	13.45
12. Rajasthan	12.01
13. Tamil Nadu	18.68
14. Uttar Pradesh	10.20
15. West Bengal	12.52
All States (25)	12.91

Declining Share of Central Transfers

In spite of its best tax effort and regulation of non-plan and non-development expenditure, the State has been experiencing considerable hardship in maintaining the tempo of plan investment. From Table-2' it can be seen that the State's share in plan investment of all States has been falling sharply.

One of the major factors affecting the State's ability to improve the plan investment is the declining share of devolution of resources from the Centre. In respect of resources devolved under the Finance Commission's Award, the share of Karnataka which was 4.82 per cent under the award of the Seventh Finance Commission has declined to 4.38 per cent under Eighth Finance Commission's Award and further to per cent under the award of the Ninth Finance Commission. Fall in the share of devolution has seriously affected the over-all financial position of the State. In respect of the resources transfer under Article 282 for State plan, the share of Karnataka has also been fast dwindling. The declining share of plan assistance is shown in Table-3.

TABLE-2
Karnataka's Share in the States' Plan outlays

		Karnataka's Share in all States appro- ved Plan Outlay(%)	Per Capita Plan Outlay (Rs)	
			Karnataka	All States
Fifth Plan	1974-79	5.5	276	262
Annual Plan	1979-80	5.2	81	85
Sixth Plan	1980-85	4.8	614	687
Seventh Plan	1985-90	4.4	799	1026
Annual Plans	1990-92	5.4	601	609

TABLE-3

Declining Central Assistance for State Plan
Rs.Crores

	Plan Assistance from the Centre under Gadgil Formula	% share in the total assistance devolved to all States
Fifth Plan (1974-79)	381.73	4.30
Annual Plan (1979-80)	99.32	3.89
Sixth Plan (1980-85)	638.76	3.29
Seventh Plan (1985-90)	1176.00*	3.17

*including advance plan assistance of Rs.51.53 crores for 1985-86.

While the deterioration in the devolution of resources for Karnataka has put severe constraints on State finances, the State's own resource raising ability has received a serious set-back during the Seventh Plan period (under tremendous strain) as a result of three successive years of drought and the impact of the implementation of the revised pay scales to Government employees. Hydel Power generation which was anticipated to be 47632 million units in the Seventh Plan came down to 32,632 million units in reality. The impact on this reduction on the resources of the power sector was disastrous. The net internal resources generated by the Karnataka Electricity Board and K.P.C. during the Seventh Plan amounted to Rs.-529 crores

inspite of additional resource mobilisation of resources Rs.1056.64 crores from this sector. Due to overall resource shortage there has been marginal shortfall in realising Seventh plan investment in real terms.

The impact of slow growth of investment in the State has already been felt in terms of severe power shortages, near stagnancy in agriculture, growing unemployment, deterioration of various public assets like roads, building, tanks, water works, gaps and mismatches in the services such as health, education and other social sectors etc. Therefore, the Eighth Plan aims at reversing the trends of decelerating growth in investment by proposing a reasonable dose of investment of Rs.11000 crores and Rs.1810 crores for 1992-93.

Eighth Plan resources Scenerio

The resource picture for the Eighth Plan is based on a much better initial position. The State revenues have grown to a level sufficient to largely offset the impact of the 1986 pay Revision. The State Government has taken various measures to augment internal resources. Tax evasion/avoidance are being plugged. Several, both administrative and economic measures have been deployed to ensure larger resource mobilisation by way of better collection and coverage. At the same time, the Government has also adopted several stringent economy measures to check various un-productive expenditure.

IV-4

Government has revised power tariff and fares of State Transport services during 1990-92 and further revisions are under consideration. These revisions are expected to substantially reduce the negative contribution of the public sector undertaking. The outlays indicated for different sectors also accommodate large number of externally-aided projects and if these projects are implemented as per schedule, the expected flow of assistance from external agencies to Karnataka would be substantial. The outlook on this front appears to be brighter if the Government of India transfers entire project assistance received to the States.

Even in this optimistic scenario, there are a few constraints which should be noted. The Energy Sector, however presents quite a few imponderables in the form of behaviour of the monsoon, increase in fuel freight rates etc. Besides, expenditures on administrative services on the non-plan side which have been held under control during the entire Seventh Plan period may have to be stepped-up in several crucial areas. Though the assumption regarding buoyancy in tax revenues largely depends upon the over-all economic situation in the State, some of the national adverse economic situations and also the expected increase in the cost of fuel etc may have some adverse effect on the state revenue raising ability. Karnataka expects a reversal of falling share of devolutions of resources particularly under the plan in the Eighth Plan period and expects larger plan assistance by bringing about suitable modifications in the Gadgil formula to accommodate the needs and improve the resource position of the middle order States like Karnataka. With a much better hydel generation position in 1990-92 and also with substantial additional resources having been mobilised the State is in a position to embark on a larger plan with a greater degree of confidence than at any time in the Seventh Plan period. With the expected increase in central assistance for the State plan and improvement in the State resources which are in sight, Karnataka hopes to realise adequate resource to support its Eighth Plan and 1992-93 annual plan.

Chapter - V

DECENTRALISATION AND REGIONAL PLANNINGA. ZILLA PARISHAD AND MANDAL PANCHAYAT PLANS

Karnataka made a beginning in District Planning in 1978-79 when it first introduced two-tier planning process. The period from 1978-79 to 86-87 can be viewed as the first phase of District Planning when some rudimentary concepts of decentralised planning were evolved in the State. However, what was missing during this period was a plan formulating and implementing Body at District level with elected representatives of the people. Mandal Panchayats and Zilla Parishads have been constituted and have started functioning from 1st April, 1987. The major objective of establishing these institutions is to decentralise decision making process to district and mandal levels and transfer corresponding funds to meet the requirements of this process. Zilla Parishads and Mandal Panchayats are given powers to formulate development plans for their area based on potentialities and felt needs. With the constitution of Zilla Parishads and Mandal Panchayats, a new phase in the decentralised planning process was begun in Karnataka. Now, Karnataka has a three tier planning structure i.e., at the State, District and Mandal levels.

The spheres for planning at the State, Zilla Parishad and Mandal Panchayat levels have been identified. For formulating meaningful and Integrated District Development Plan, Zilla Parishads and Mandal Panchayats should have freedom to determine their priorities. Since 1978-79, for district planning purposes, various alternatives i.e., lumpsum allocation, sector-wise allocation and minor head-wise allocation under each sector have been tried. Under all these alternatives, the decisions

taken at the State Level were given weightage owing to various constraints. This procedure of imposing the plan from the State Level has been reversed under Zilla Parishads and Mandal Panchayat set up. These local government institutions have been indicated a lumpsum allocation with earmarking for MNP and other important programmes against which the plan proposals originate from the Mandal and District Levels.

LUMPSUM ALLOCATION: For formulating meaningful and Integrated Development Plan based on local resources, the Zilla Parishads and Mandal Panchayats should have freedom to determine their priorities. For this purpose, they require untied or free funds with no tie-ups.

Hence, Government have decided to assign a free outlay in the form of lumpsum allocation for Zilla Parishads and Mandal Panchayats for formulating the developmental plan.

This lumpsum allocation includes not only outlay from State Plan Schemes but also the outlay from centrally sponsored and Central Sector Schemes like IRDP, JRY, DPAP, Western Chats Development, Family Welfare etc., However, Scheme-wise allocation of funds will be resorted to only in case of State Level Schemes which do not come under the purview of either Zilla Parishads or Mandal Panchayats. The plan formulation was done against the lumpsum allocation indicated to the Zilla Parishads and Mandal Panchayats based on the functions assigned to them. The planning function at the State Level was confined to the formulation of State Level Schemes, integration of Zilla Parishad and Mandal Level Schemes with the State Level Schemes and ensuring priorities in the Zilla Parishad and Mandal Level Schemes.

It is only for purposes of Plan formulation

Lumpsum allocation is indicated. Based on the plans formulated by Zilla Parishads (which include Mandal Anchayat Plans) for this outlay and approval by the Government, the budgeting is Major Head of Account-wise in the Budget documents of the State Government. In other words, the outlay under each Major Head of Account is arrived by aggregating each sectoral plan of all Zilla Parishads and Mandal Panchayats.

There are some difficulties in allocating plan funds to Zilla Parishads and Mandal Panchayats in the form of lumpsum allocation. Firstly the norms for different schemes prescribed at the State Level are likely to undergo modifications. Further, as regards new schemes different norms may be adopted by different Zilla Parishads and Mandal Panchayats.

Whether to allow for such a variation in the norms for schemes both ongoing and new is an important issue. It has been decided to allow for changes in the norms, if any, so long as the schemes are formulated after assessing the local conditions and requirements. However, this relaxation will not apply to Centrally Sponsored and Central Sector Schemes, individual beneficiary schemes, subsidies, scholarships, nutrition programmes.

There are some important schemes like Minimum Needs Programme, which are now treated as Zilla Parishad and Mandal Level Schemes. So long as there is conformity between the lower tiers of Government and the State Government as regards the priorities for such schemes, there may not be any problem. But conflicts arise if their perspectives for such schemes differ. In order to avoid any such possible conflicts, it is necessary to earmark outlays for some of these important schemes, which the State Government thinks are to be implemented.

Hence, it has been decided to earmark outlays from the lumpsum for certain programmes which the State Government thinks are important. Planning Department will indicate this, while indicating lumpsum allocation for plan formulation. Even at the time of release of funds, earmarking will be resorted as per Planning Department's allocation. Such earmarking is also done by the National Planning Commission while approving the State Plan.

CRITERIA FOR ALLOCATION OF PLAN OUTLAY

For realising the objective of regional balance through decentralised planning government have approved the following criteria akin to Gadgil Formula for distribution of plan outlays among Zilla Parishads. As per this criteria backward regions/areas get a relatively higher share of outlay compared to developed regions.

INDICATORS AND WEIGHTAGES FOR DISTRIBUTION OF PLAN OUTLAY

Indicators	Weights (%)
1. Population	50
2. Backwardness in Agriculture as measured by the value of Agricultural output per hectare	5
3. Backwardness in Irrigation as measured by the proportion of Irrigated Area to Net Area shown	7
4. Backwardness as measured by the value of Industrial Output	5
5. Backwardness in communications as measured by Road and Railway mileage per 100 sq.km. and per lakh of population	5

Indicators	Weights (%)
6. Backwardness in Financial Infrastructure as measured by size of population served by each commercial and co-operative Bank	2
7. Backwardness in Medical and health facilities as measured by the number of hospitals per 1000 population/bed population ratio	5
8. Backwardness in Power supply as measured by the proportion of villages electrified	5
9. Problems of the Weaker Sections:	
a) as measured by the proportion of SCs/S.Ts in the population	2
b) as measured by the proportion of Landless Agricultural Labourers	2
10. Special Problems of Malnad areas and Drought Prone Areas:	
a) as measured by the area under forest	2
b) as measured by the rural population of drought prone areas	2
11. Literacy Percentage	5
12. Performance in Family Planning Programme	3
TOTAL	100

The Criteria suggested above take care of the allocation of plan funds among Zilla Parishads on an equitable basis, giving weightage to backward districts. Similar Criteria is fixed for determining the share of Mandal Panchayats. For this purpose, certain proportion of the plan funds allocated to Zilla Parishads will be earmarked for Mandal Panchayats and will be distributed amongst Mandals, Government have approved the following criteria.

Indicators	Weights (%)
1. Population	50
2. Area of Mandal	15
3. Dryland Area	15
4. Agricultural Labour Population	10
5. Per Capita resources raised	10

A 10 percent weightage to resources raised by Mandal is given keeping in view the need to encourage Mandals who perform better in mobilising the resources. Similar Indicator is not included for Zilla Parishads since they do not have taxation powers.

CALENDAR FOR PLANNING

Under the existing planning process in the country, State plan is finalised by the Planning Commission before it is budgetted. State's Draft Plan is sent to the Planning Commission usually in October/November every year. With the establishment of Zilla Parishads, they will become responsible for formulating and implementing the district and Mandal Plans. State's plan has to be built up on the basis of the plan proposals of all Zilla Parishads which would incorporate mandal plans and its own programmes formulated at the State Level before the Draft Plan is sent to the Planning

Commission. For so doing, the plan exercise at the Zilla Parishad level and Mandal Level should begin earlier than at the State Level. In order to facilitate this a tentative allocation will be intimated to each Zilla Parishad and Mandal Panchayats against which Zilla Parishads and Mandal Panchayats shall formulate their plan proposals for the next year. For this purpose Government have decided to adopt a tentative reasonable outlay for the State even before the Planning Commission holds resources discussion with the State. Unless a calendar for Planning is fixed and followed strictly, it would not be possible to formulate the State's Plan by incorporating Zilla Parishad and Mandal Plans. Hence, the Government have decided to adopt the following Calendar for Planning.

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|-------------------------------|--|
| 15th July | - Adopting the tentative size for the State's Annual Plan of the next year. |
| 25th July | - Government in the Planning Department to indicate to Zilla Parishads and Mandal Panchayats the financial ceiling within which their Annual Plan should be formulated for the next year. |
| 15th August | - Mandal Panchayats to send their Plan proposals to Zilla Parishads. |
| 20th September | - Zilla Parishads to build the Mandal proposals into the District Plan and send the Draft District Plan to the Government in the Planning Department and concerned State Heads of the Departments. |
| 28th Sept. to
25th October | - Discussion with the Zilla Parishads on their Draft District Plan by the Planning Department for achieving consistency & integration of District Sector with State Sector Schemes/Plans. |

- 10th November - Government/State Heads of Departments to consolidate these proposals and build them into the State's Draft Plan and send the same to the Planning Commission.
- 15th January - Approval of the Planning Commission to the State's Plan.
- 25th February - Finalising the State's Plan Budget in the light of Planning Commission's approval to the State Plan and finalising the District Plans of Zilla Parishads.
- 1st Week of March - Presentation of the State's Budget to the Legislature along with the link document giving Scheme-wise, sector-wise and Zilla Parishad-wise outlays.

PLANNING DEPARTMENT AS NODAL DEPARTMENT

For effectively implementing the process of decentralised planning under Zilla Parishad set-up, there is need for high degree of co-ordination, consultation, guidance, interaction and resolution of conflicts at different tiers viz Mandal Panchayat, Zilla Parishad and State Levels. Determining the size of the Zilla Parishad and Mandal Panchayat Sector outlay, distribution of the same among Zilla Parishads and Mandal Panchayats on the basis of objective criteria, earmarking of outlays for some programmes from the lumpsum fixation of physical targets, guiding the Zilla Parishads in the formulation of district plans, ensuring incorporation of the plan proposals of Zilla Parishads in the State Plan, finalisation of District Plans, communicating the approved plan of Zilla Parishads etc. are some of the important functions to be performed at the State Level. At present the Planning Department

does most of these functions. It has 7 technical divisions, viz., District and Regional Planning Division, Project Formulation Division, Manpower and Employment Division, Perspective Planning Division, Plan Monitoring and information Division, Evaluation Division and Plan Finance & Resources Division which can guide and advice on all aspects of Planning to the District Planning Team. District and Regional Planning Division is performing the functions like determining the size of district sector outlay and its distribution to districts on the basis of objective criteria, guiding the district planning units in plan formulation, co-ordinating the matters relating to district sector schemes at the State Level, finalisation of district plans and bringing out a link document to the Budget giving district-wise and scheme-wise outlays etc.

Further there are various development programmes, which get implemented at the district level by autonomous bodies like the Corporations and Boards, which function with State-wide authority. These activities will have to be brought together to get a total District Development Plan. The Centrally sponsored and Central Sector Schemes will continue to be operated by the Heads of Departments in so far as the proposals on a Zilla Parishad basis have to be sent to the Central Ministries and seek funds from the Centre towards such schemes. In short, the District Sector, (State Component of the plan) including the Zilla Parishad Plans, which in turn contain the Mandal Panchayat Plans, the State Sector Plans and the Central Sector and Centrally Sponsored Schemes are all to be brought together on a regional basis keeping the Zilla Parishad's jurisdiction in view. All this necessitates that a co-ordinating department like the Planning Department, apart from its other planning functions, will have to function as a nodal department for giving guidance and for achieving

integration in the matter of the Zilla Parishad Plans.

Hence, Government have decided to continue the Planning Department as a nodal department for giving guidance in all matters concerning planning for the development of Zilla Parishads and Mandal Panchayats.

The Zilla Parishad Act envisages functions to be carried out by Zilla Parishads and Mandal Panchayats and it is necessary to specify clearly the responsibilities entrusted to them. The High Power Committee constituted for implementation of the Act constituted a Sub-Committee to delineate, the schemes that can be transferred to Zilla Parishads and Mandal Panchayats and also frame the delegation of administrative, technical and financial powers keeping in view the functions spelt out in the Zilla Parishads Act. The said sub-committee in consultation with all Secretaries to Government and Heads of Departments recommended the schemes which may be retained at State Level and Schemes that may be transferred to Zilla Parishads and Mandal Panchayats having regard to their functions as enumerated in the Act.

The recommendations of the Sub-Committee were considered in detail by High Power Committee which recommended the transfer of some of the schemes to Zilla Parishads and Mandal Panchayats specified in the statement 1 and 2 enclosed to the Government Order No.RDP 1983 VAC 86, Bangalore dated 1.4.1987.

As per section 183 of the Zilla Parishad Act, the Zilla Parishads are responsible for formulation and execution of the District Plans. The Karnataka

model provides for planning right from the village level. The "Grama Sabha" is the village assembly where the programmes for the development of village are discussed and their implementation commented upon. The next is the Mandal Panchayat, which consists of group of villages. Each Mandal has its own sub-plans relating to local works such as water supply sanitation, rural communication etc., It also has the responsibility for planning and supervising certain works carried out by the Zilla Parishads within its jurisdiction. Mandal programmes become part of the Zilla Parishad programmes.

The Taluka Panchayat Samithy is advisory body which has power only to super-wise, review and co-ordinate the planned programmes in the Taluka.

The Zilla Parishad is the final planning and implementing authority in the district. Zilla Parishad plans including mandal plans become the composite plan of the district. This process has been desinged to ensure that in some way or the other every legal aspiration given at the village level is taken note of. The Zilla Parishad plans are discussed at the Government level and incorporated in the State's Draft Annual Plans, Five Years Plan and sent to the Planning Commission.

Constitution of the Finance Commission for Zilla Parishads and Mandal Panchayats, 1989 and their recommendations

As per the provisions contained in Section 210 of the Karnataka Zilla Parishads, Taluk Panchayat Samithi, Mandal Panchayats and Nyaya Panchayats Act, 1983 (Karnataka Act No.20 of 1985) a Finance Commission with Dr.Honnavar, Director, Institute for Financial

Management and Research, Madras as Chairman and Sri.R.K.Chandrasekaran, Member, Dy.Comptroller and Auditor General (Retd.), Sri.P.G.Puranik, Member, Secretary to Government, Rural Development and Panchayat Raj Department, as members, was constituted by the Government of Karnataka during Feb.1986 to go into the problems of income and expenditure of the various Zilla Parishads and Mandal Panchayats in Karnataka and to make recommendations regarding the pattern of assistance to be given from the Government to Zilla Parishads and Mandal Panchayats, the principles which should govern the grants-in-aid from Government to these institutions and the date from which the grants-in-aid or assistance to be given effect to. Further the commission was required to recommend to Government the principles which should govern the distribution of grants-in-aid or assistance received by the ZPs to MPs keeping in view the functions that stand transferred to ZPs and MPs. The Commission was also to assess the cost of maintenance of the services and amenities to be provided by the MPs and make suggestions for levies for such maintenance at satisfactory standards and examine the structure of taxation inherited by the MPs under repealed Karnataka Village Panchayats and Local Boards Act 1959 and to suggest modifications for improving the resources to meet the increasing demands of the rural population for improving the quality of life. Lastly the commission was to examine any other matter referred to it by the Government to secure the interests of sound finances and efficient functioning of the ZPs and MPs and make suitable recommendations. In doing this, the commission was to keep in view the resources of the State Government and the demands thereon on account of expenditure of Civil administration development, debt servicing and other committed expenditure liabilities etc., and to

make a detailed analysis of the repayment of loans and advances extended by Government from time to time and to make suitable recommendations for repayment of Government dues and also to study the possibility of adjusting these dues against future devolution of revenues from Government to these bodies .

The commission submitted its Report during March 1989. The main Recommendations with ramifications in the process of planning are as follows:

1. Based on the growth of allocations to the Zilla Parishads and Mandal Panchayats, it is recommended that 12 per cent annual compound rate of growth should be provided to these institutions during the Eighth Plan period.
2. It is desirable to give a fiscal independence to ZPs and MPs by providing a part of tax revenue. This will also limit the freedom of the State Government to adjust allocations to suite the fiscal requirements .
3. With a larger provision of funds from Central Government in areas like poverty alleviations employment generation, SC/ST welfare the State Government will be in a better position to provide more resources for preferred areas like primary education, public health, roads and bridges, water supply, animal husbandry etc.
4. The percapita grant should be raised to Rs.15/- from 1989-90 itself, of which the mandals will get Rs.10/- leaving the rest to Zilla Parishads. The smaller Zilla Parishads will have enough money to cover their administrative expenditure while the larger ones will have more untied funds to cover discretionary development activities

5. In order to enable the ZPs to settle down to development works in earnest, there is no need to give them taxation powers.
6. The departmental receipts collected in the area of the mandal panchayats should be made Over to them.
7. ZPs should be permitted to create income generating assets and set up enterprises through Bank loans guaranteed by Government as provided in the Act.
8. Adhoc grants are to be provided by Government for creating new capital assets like buildings, tools and equipments, vehicles etc., for essential services by the ZPs and MPs.

The Government is yet to take a decision on this report.

Evaluation Report on Zilla Parishads and Mandal Panchayats

In order to assess how the new Panchayat Raj system is working and what environmental/ structural factors are needed to be modified to place the Zilla Parishads on a sound footing, an Evaluation Committee under the Chairmanship of Dr. Krishna Swamy and Sri. P.S.Appu and S-ri.L.C.Jain as members and Director (Panchayat Raj), RDPR as Member Secretary was constituted by the Government of Karnataka during the year 1988. The Committee was asked to go through the

- (1) over all working of the Zilla Parishads and Mandal Panchayats in the State:

- (2) Factors which are detrimental to the working of these institutions and remedial measures thereof;

(3) Administrative arrangements-its adequacy or other-wise.

(4) Adequacy of powers, Administrative and financial to these institutions.

(5) Relationship between officers of Zilla Parishad and its committees and members;

(6) Functional relationship between Zilla Parishads and Mandal Panchayats and Zilla Parishads, Mandal Panchayats and Government-areas of friction and remedies; and

(7) Impact of Panchayat Raj system on the implementation of Developmental Programmes.

Accordingly the committee went into the above terms of reference and submitted its report to Government during March 1989. Some of the main recommendations of this Committee vis-a-vis the process of planning at the district level are as indicated below:

- 1) The performance of Zilla Parishads in the operation of schools and Health facilities, allocation of house sites/houses under various schemes, in the fields of inland fisheries, horticulture and forests is impressive. Generally developmental works are being executed speedily.
- 2) The ZPs and MPs are capable of mobilising resources.
- 3) The Women and scheduled caste members of the MP still appear to be hesitant in asserting themselves. However the calibre of men and women elected to the Offices of Zilla Parishad Adhyakshas and Upadhyakshas is high and the Mandal Pradhans command respect and have a good appreciation of their role. Irrespective of the political parties and the caste they belong there have been good amount of co-operation and mutual respect among the members of MPs.

- 4) the relationship between officials and non-officials at the district level is harmonious and the public servants are more conscious of their accountability to people. But there are attempts by some officers to interfere in the functioning of local governments. It is suggested that such attempts should be resisted absolutely at the political and official levels.
- 5) The legislators, ministers and officials of the State Government should have no mental reservations on the decentralisation of power.
- 6) The Mandal Panchayats should discharge their functions well and the Gramasabhas should appreciate the constraints on them, otherwise, people may lose interest in attending Gramasabha meetings or accepting the Mandal Panchayats as the local effective authority. Gramasabha meetings should be convened at least twice a year to avoid any partisan decision making by the Mandal Panchayats. However there have been an improvement in the selection of beneficiaries as also implementation of poverty alleviation programmes.
- 7) Many schemes now under ZP could be transferred to MPs with redeployment of existing staff and transfer of the required resources to the Mandal Account.
- 8) The State Ministers and Legislators should not interfere in the day to day administration of ZPs instead they should create a favourable environment for the ZPs and MPs to function efficiently. The practice of assigning State Ministers responsible for individual districts should be discontinued forthwith.
- 9) Panchayat Raj work should be entrusted at the Government level to a full fledged department under an officer of the rank of additional Chief Secretary (in lieu of the present nodal departments viz Panchayat Raj and plg) explicitly empowered to function as a nodal point for ZP and MP affairs.
- 10) Streamlining the administrative set up at the Mandal, Taluk and District levels, Each Mandal Panchayat should be provided with the services of more functionaries drawing a sufficient No. of village accountants from the Revenue Department, Junior Engineers job chart should be defined specifically regarding the works of the MPs & their CRs should be written by the Mandal Pradhan.

The Government is yet to take a decision on this report.

Review of Zilla Parishad Plans:- 1987-91

The Zilla Parishads had no opportunity of formulating their own plans for the year 1987-88, since they came into being on 1st of April 1987 by which time the state Heads of Departments finalised the plans. In any way, it was an opportunity for the Zilla Parishads to understand the planning process, the programmes of different sectors, procedures for implementation and firm up their priorities.

The Zilla Parishads for the first time formulated their plans for 1988-89 based on their priorities and perception. The State Annual Plan 1988-89 was built on the basis of plans formulated at Mandal Panchayat and Zilla Parishads levels.

It may be observed from Table 1 that the Zilla Parishads are getting 23 to 27 per cent of the state plan outlay during the period from 1987-88 to 1991-92. In addition, the Zilla Parishads are getting 60 to 84 per cent of the Central Plan outlay, except during 1990-91 where it was 114 percent. This is because, during 1990-91, the central share of JRY funds are directly released to the Mandals by the centre and hence, it has been included in central share of district sector outlay, but not in the central share of total state plan outlay. The district-wise and year-wise ZP outlays from 1987-88 to 1991-92 are given in Table-2

Table-1

Proportion of District Sector Outlay to State and
Central Plan Outlay 1987-88 to 1991-92

(Rs. in Crores)

Year		Total State Plan Outlay	District Sector Outlay	Proportion of district sector out- lay to total State Outlay
1987-88 (BE)	State	917.00	220.69	24.07
	Centre	215.47	144.16	66.90
	Total	1132.47	364.85	32.22
1988-89 (BE)	State	900.00	239.78	26.64
	Centre	252.00	153.13	60.63
	Total	1152.64	392.95	34.09
1989-90 (BE)	State	1040.00	265.07	25.49
	Centre	266.41	179.75	67.47
	Total	1306.41	444.82	34.05
1990-91 (BE)	State	1145.00	293.13	25.60
	Centre *	221.37	252.15	113.90
	Total	1366.37	545.28	39.91
1991-92 (BE)	State	1557.80	357.46	22.95
	Centre	378.76	317.57	83.84
	Total	1936.56	675.03	34.86

* During 1990-91, the central share of total state plan outlay is less than the central share of District Sector outlay as the central share of JRY funds were released directly to the Mandal Panchayats.

Zilla Parishads have given priority for social services followed by rural development programmes (DPAP, IRDP, 100 wells programme, DWACRA, IREP and JRY) agriculture and allied services and communication. Among social services Zilla Parishad have allocated higher outlays for primary and secondary education and rural water supply. Majority of Zilla Parishads have given priority for piped water supply schemes under rural

water supply programmes. The allocation for roads and bridges have been increased substantially.

Plan formulation by Zilla Parishad is a continuous process initiated during 1988-89 with further stream lining and strengthening. While their draft plans for 1988-89 proposed a higher outlay than what was indicated by the Government. The intending planning process by the Zilla Parishads has facilitated to follow its discipline and thereby helped in finalising their Zilla Parishad plans with marginal modifications before integrating them into State Draft Annual Plans.

Zilla Parishad Proposals for Eighth Plan:

During Eighth Plan Zilla Parishads have given priority to rural development programmes, primary and secondary education, roads and bridges, housing (Ashraya programme), rural health services and water supply. An outlay of Rs.2222 crores is proposed for Zilla Parishad sector out of the State Plan outlay of Rs.11,000 crores which works out to be 20.20 per cent. For 1992-93, the District Sector Plan outlay proposed is Rs.376.11 crores out of the total State Plan outlay of Rs.1800 crores, which works out to about 21 per cent of the total State Plan Outlay.

The composition of Zilla Parishad Sector outlay by Major Head of Developments is given in Table 3. The sector-wise outlay of Zilla Parishad are shown in Table 4. The district-wise outlay proposed for Zilla Parishads for Eighth Plan is indicated in Table 5.

TABLE - 2

Zilla Parishad Sector Outlay By District: 1987-88, 1988-89, & 1991-92

Rs. Crores .

District	1987-88			1988-89			1989-90			1990-91			1991-92		
	State	Centre	Total	State	Centre	Total	State	Centre	Total	State	Centre	Total	State	Centre	Total
1. Bangalore	5.11	3.84	8.95	4.99	3.65	8.65	5.18	4.38	9.56	5.93	6.78	12.71	7.38	8.95	16.33
2. Bangalore Rural	10.69	6.49	17.18	10.74	6.20	16.94	12.23	8.22	20.45	13.58	10.86	24.44	16.49	13.22	29.71
3. Chitradurga	11.50	7.31	18.81	11.97	7.56	19.53	13.19	9.47	22.66	15.44	14.97	30.41	19.28	19.45	38.73
4. Kolar	13.48	8.06	21.54	13.46	8.49	21.95	14.97	10.90	25.87	16.36	14.83	31.19	20.46	20.40	40.86
5. Shimoga	9.52	6.86	16.38	11.32	7.28	18.60	12.73	9.33	22.06	13.38	12.39	25.77	16.51	15.12	31.63
6. Tumkur	13.42	7.35	20.77	14.05	8.03	22.08	15.56	10.35	25.91	17.26	15.67	32.93	21.57	19.53	41.10
7. Mysore	16.61	10.17	26.78	16.93	11.31	28.24	18.28	13.02	31.30	19.55	18.59	38.14	24.00	24.42	48.43
8. Chickamagalur	8.06	4.52	12.58	7.93	5.16	13.09	8.92	6.19	15.11	10.47	8.75	19.22	12.32	11.69	24.01
9. Dakshina Kannada	12.04	8.42	20.45	12.08	9.85	21.93	13.35	10.69	24.04	15.37	13.08	28.45	18.44	16.75	35.19
10. Hassan	9.98	5.54	15.52	10.75	6.13	16.88	11.83	7.50	19.33	12.22	10.99	23.21	14.82	14.54	29.36
11. Kodagu	4.41	3.02	7.43	4.41	3.40	7.81	5.21	3.84	9.05	5.84	5.39	10.23	6.75	6.27	13.02
12. Mandya	9.85	5.43	15.28	9.93	5.20	15.13	10.64	6.36	17.00	12.34	8.73	21.07	14.98	10.88	25.86
13. Belgaum	14.66	12.32	26.98	16.80	12.96	29.76	18.97	13.38	32.25	20.77	17.12	37.89	25.49	21.27	46.76
14. Bijapur	15.02	10.34	25.36	16.78	10.48	27.26	18.32	11.61	29.93	21.25	17.21	38.46	25.37	20.10	45.47
15. Dharwad	16.46	11.83	28.34	17.34	12.40	29.74	19.39	14.02	33.41	20.47	18.35	38.82	25.11	20.97	46.08
16. Uttara Kannada	8.22	5.54	13.76	9.49	5.87	15.36	9.95	6.73	16.68	10.65	7.30	17.95	12.99	10.67	23.66
17. Gulbarga	14.28	8.93	23.21	16.85	9.82	26.68	18.99	11.18	30.17	20.22	18.41	38.63	24.05	22.61	46.66
18. Bellary	9.19	6.06	15.25	10.59	6.35	16.94	11.85	7.47	19.32	12.59	11.05	23.64	15.53	13.17	28.70
19. Bidar	6.98	4.75	11.73	8.78	5.12	13.90	9.97	5.89	15.66	11.73	7.97	19.70	14.62	9.66	24.28
20. Raichur	11.21	7.33	18.54	14.58	7.90	22.48	15.64	9.42	25.06	17.71	14.71	32.42	21.30	17.90	39.20
Total(20 Districts)	220.69	144.16	364.85	239.78	153.17	392.95	265.07	179.75	444.82	293.13	252.15	545.28	357.46	317.57	675.03

TABLE 3.

Zilla Parishad Sector outlay by Major Heads of Development:
Eighth plan and Annual Plan 1992-93

Sl. No.	Major Heads of Development	Eighth plan proposal	1992-93 proposal
A. <u>ECONOMIC SERVICES</u>			
1.	Agriculture & Allied Services (including Co-operation)	220.60	42.65
2.	*Rural Development	544.70	89.94
3.	Special Area Programme	-	-
4.	Irrigation and Flood Control	122.58	21.00
5.	Energy	2.50	0.50
6.	Industry and Minerals	71.50	13.50
7.	Transport	221.15	39.50
8.	Science, Technology & Environment	-	-
9.	General Economic Services	21.70	4.72
Total A: ECONOMIC SERVICES		1214.73	211.81
B. <u>SOCIAL SERVICES</u>			
10.	Education, Sports, Art and Culture	318.50	46.33
11.	Health	174.50	31.45
12.	Water Supply, Housing & Urban Development	347.60	56.90
13.	Information & Publicity	-	-
14.	Welfare of SC/STs and other Backward Classes	96.00	16.80
15.	Labour and Labour Welfare	-	-
16.	Social Welfare and Nutrition	71.10	12.82
Total B: SOCIAL SERVICES		1007.70	164.30
C. <u>GENERAL SERVICES</u>			
GRAND TOTAL (A+B+C)		2222.43	376.11

*Rural Development Programmes include DPAP, IRDP, JRY, 100 Wells Programme, DWACRA & IREP

Table - 4
Zilla Parishad Sector Outlay for Eighth Plan
and 1992-93

		Rs. in lakhs	
Sl. No.	Sectors	VIII Plan (proposed Outlay)	1992-93 (proposed outlay)
1.	Pry. & Secy. Education	28900	4075
2.	Adult Education	1750	320
3.	Youth Services & Sports	1200	238
4.	Rural Health Services	16000	2880
5.	Indian System of Medicine	550	100
6.	Family Welfare	900	165
7.	Rural Water Supply	19760	3490
8.	Housing	15000	2200
9.	Welfare of SCs & STs (Social Welfare)	4500	825
10.	Welfare of BCM	5100	855
11.	Welfare of Women and Children	1500	290
12.	Nutrition	5610	992
13.	Agriculture	5000	620
14.	Horticulture	2000	380
15.	Soil & Water Conservation	1000	200
16.	Animal Husbandry	5100	1275
17.	Fisheries	1460	290
18.	Forest (including Soil Conservation)	6500	1300
19.	Co-operation	1000	200
20.	Labour & Employment	-	-
21.	RDPR Programmes	55720	9044
22.	Minor Irrigation	12258	2100
23.	Village & Small Scale Industries	2650	500
24.	Sericulture	4500	850
25.	Roads and Bridges	22115	3950
26.	Secretariat Economic Services - District Planning Unit	140	27
27.	District Sub-Plan	2030	445
Total - All Sectors		2,22,243	37611

TABLE 5

DISTRICTWISE OUTLAYS UNDER ZILLA PARISHAD SECTOR-EIGHTH PLAN
AND 1992-93

District	(Rs. Lakhs)	
	Proposed outlay for Eighth Plan	1992-93 Proposed Outlay
1	2	3
1. Bangalore	4591	777
2. Bangalore(R)	10252	1735
3. Chitradurga	11989	2029
4. Kolar	12716	2152
5. Shimoga	10276	1739
6. Tumkur	13408	2269
7. Mysore	14897	2521
8. Chickmagalur	7658	1296
9. Dakshina Kannada	11463	1940
10. Hassan	9212	1559
11. Kodagu	4195	710
12. Mandya	9318	1577
13. Belgaum	15848	2682
14. Bijapur	15777	2670
15. Dharwar	15612	2642
16. Uttara Kannda	8078	1367
17. Gulbarga	14956	2531
18. Bellary	9661	1635
19. Bidar	9088	1538
20. Raichur	13248	2242
Total (20 Districts)	222243	37611

EMPLOYMENT

The phenomenon of growing unemployment has emerged as a major problem and therefore expansion of employment opportunities has to be central objective of the plan. An accelerated expansion of employment opportunities is necessary both for poverty alleviation and effective utilisation of human resources for economic and social development. For formulation of programme for adequate employment generation, it is necessary to have an idea of the magnitude of the problem, strategy formulated and programmes developed for achieving the objective.

Based on the preliminary information of 1991 Census an analysis of the work participation rates of main workers and marginal workers reveals that between 1981 and 1991 the work participation rate varied from 36.76% to 38.48% in case of main workers and from 3.49% to 3.35% for marginal workers. A comparison between the labour force participation rate of the principal usual status category of 43rd round National Sample Survey on employment and unemployment (1987-88) and the participation rates of main workers in 1991 Census (Preliminary) also shows that there was a decline from 40.29% to 38.48 per-cent in 1991. Thus, we do not find substantial changes in the work force participation rates between 1981-1991 and 1987 to 1991.

With no significant change in the work force participation, unemployment has been on the increase. The number of registrants in the employment Exchanges in April 1991 were 13.27 lakhs. Applying correction factor for registrants who are already employed but who are seeking jobs to improve their position (as revealed by the Survey Results of D.G.E.T. 1988) the

number of registrants who are unemployed would come to 5.79 lakhs.

An analysis of the educated stock of manpower namely employed and unemployed shows that at the end of the 8th plan period the share of the stock of Arts, Science, Commerce Graduates and Post-Graduates would account for 65.02% of the total stock which is substantial. But the employment opportunities for these groups of manpower are limited. Unless adequate employment opportunities are created for these groups, it is difficult to reduce unemployment. It is therefore necessary to develop vocational courses suitably for them to improve their skills. Wherever possible enterprisership Development Programme have to be organised to this group of manpower and after training, provide them support with finance, supply of raw-materials and marketing facilities to enable them to become self-employed. Therefore, the employment strategy for the 8th Five Year Plan is one of building-up employment content into the programmes formulated in different sectors and reliance is not on formulation of special employment programme alone. In this context the changes in the strategy adopted towards employment generation either in the formulation of plan programmes or decision taken to influence Private investment in favour of more employment generation are worth noting.

As a large part of net-cropped area is unirrigated the adoption of Dryland technology and Watershed Management can double yields with an appropriate investment on conservation storage and recycling of Monsoon rains particularly in situmisture conservation through contourbunding and ploughing as well as

use of short duration varieties of water saving crops. This leads to increase in the production as well as yields boosting the ^{incomes} ~~income~~ of both Farmers as well as the landless labourers. Consequently employment under such projects gets enhanced. Research studies conducted show that Karnataka District Watershed Programme is the most comprehensive and appropriate for replication in all other rainfed areas in India. The cost per manday generated indicates that it is very low-cost one. If the indirect additional employment generated from increase of production of various commodities as a result of this programme is added the employment generation would be much more.

As about 20 per-cent of the land under cultivation enjoys the benefit of assured flow of water the integrated watershed development strategy shall be used to increase the land under cultivation.

The emphasis of Planning at the level of Agro-climatic Regions will lead to priority to cropping system which generate more labour demand as also on emphasis on non-crop based activities like Animal Husbandry, Forestry and Fisheries which are labour intensive, improved Agro processing techniques including marketing and distribution have high Direct and Indirect Labour demand and the scheme of Planning for Agro-climatic Region do provide these features. Therefore, Agro-climatic Regional Planning constitute the base on which programmes for various activities will be formulated and integrated. Zonal Profile, are being developed focusing on resources, inventory agricultural development performance indicators, development status of allied activities such as Animal Husbandry, Forestry and Fishery and Agro-based industries intensifying the

use of new technical in-put, implements and infrastructure facilities. The consideration given for soil types, rain-fall pattern, cropping pattern and geographical contiguity criterion aims to achieve productivity led improvements in production. It improves crop planning and in-puts management. This increases the generation of employment opportunities substantially.

Minor Irrigation works are numerous and are very widely distributed leading to their neglect. As an integral part of the local development and Rural Employment Programme the implementation of local works to improve the inlet channels repair their main structures and correct the deficiencies in the distribution net work in their Ayacuts would generate employment and raise productivity. As the scope for construction of new minor irrigation tanks in Karnataka has reduced considerably and the existing minor irrigation tanks have been found to be in need of desilting, as most of the tanks are silted-up and performance of these tanks has been reduced considerably, a major programme for desilting of tanks for stabilising existing Achkat which enhances the availability of employment opportunities is taken up.

Energy is a core sector and the investment made in this sector generate direct employment as well as indirect continuous employment potential in all the spheres. During the construction of power projects, the direct employment generation is of the order of 1000 mandays per every lakh of rupee invested in the energy sector. After construction that is during operation and maintenance phase this generates direct continuous employment. Apart from this, indirect continuous employment is generated in agriculture, industrial and other sectors by supplying power to them.

The poverty alleviation programmes like Jawhar Rozgar Yojana, integrated rural development programme, 100 wells programme, development of Women and Children in Rural Areas, aims at supplementing the income of people below the poverty line increase the number of mandays of employment generation through wage employment.

The programme of training of rural youth for self-employment is directed towards providing technical skills to rural youths from families below poverty line to enable them to take-up self-employment in the broad fields of agriculture and allied activities, industries, services and business activities under TRYSEM Programme. The link between training and self-employment is found to be weak under this programme. It is proposed to strengthen this with a view to ensure that all those who are trained are subsequently and invariably help to obtain self-employment. It is proposed to identify institutions at various levels for discharging this responsibility. It is also proposed to identify a few trades with high employment potential for purpose providing training under TRYSEM and to diversify the training programme in the non-farm sector particularly in the field of Electronics, Computer etc.,

With the twin objectives of generation and alleviation of poverty rural industrialisation as a strategy has been adopted. For this continuous rural productive employment programme (VISHWA) has been formulated. It provides continuous and productive employment to a large segment of population mainly in rural areas. It provides strong marketing support for the goods and services produced in the Rural Sector assuring quality of the products and

reasonable returns to the producer. Enlargement of activities of employment promotion in the sectors like weaving (handloom), handicrafts, leather and coir sector, silk, animal husbandry and fisheries, horticulture, food processing housing and building materials is planned. It is proposed to provide institutional support for training, procurement of raw-materials and finance to ensure that the activities result in generation of sustainable levels of income of at least Rs.700/- to Rs.800/- per month for each beneficiaries. The programme aims at better utilisation of processable and export potential and revival and strengthening of sick tiny scale units already established.

Thus the VIII Plan strategy for employment generation aims at increasing the employment opportunities improving the employability of the persons for who are under-going training through special vocational education projects like the skill development project of the Industrial Training Institutes where special emphasis is on improvement of the available infrastructure, equipment and expansion of capacity, particularly to help the weaker sections of the society namely women and physically handicapped. In the field of technical education a similar approach is followed to improve the employability of the trainees in different educational institutions. Intensive Industrial Training Programme for a period of two years after S.S.L.C., has been started in Engineering Colleges, Polytechnics, Industrial Training Institutes. In the First Year of the course the candidates will undergo specially structured curriculum of theory-cum-intensive practical training in one of the technical institutions i.e.,

VI. 7.

Engineering Colleges, Polytechnics and Industrial Training Institutes identified.' In the second year the candidates will be attached to one of the Industries, factories, workshops to work in the real situation for mastering the trade he or she has chosen.

The implementation of various programmes during the VIII Plan and 1992-93 Annual Plan is expected to generate substantial direct and indirect employment both in jobs and mandays.' The number of mandays to be generated in different programmes have been ^{given} in respective sectoral write-up.' The number of mandays to be generated are substantial in sectors like rural development, major and medium irrigation, roads and bridges and construction of buildings. The number of jobs to be created through plan programmes implementation is a limited one. This is more in social services sector. The details of number of jobs to be created during the VIII Plan and 1992-93 Annual Plan are given in Annexure-I.'

VII - AGRICULTURE AND ALLIED SERVICESVII- A. APPROACH

Agriculture and allied services continue to be a dominant sector, accounting for nearly 65% of work force in the State. The overall growth performance in the State has been quite sensitive to the growth performance in this sector. In the last three decades, share of this sector in the State Domestic Product has come down from 65% to 37%, while its share in work force has declined marginally. This disparity in structural change is getting reflected in the level of income per worker (at 1970-71 prices). Between 1970-71 and 1986-87, while income per worker increased from Rs.1397 to Rs.1493 (i.e., by 7% only) in the Primary Sector, it increased from Rs.3452 to Rs.5103 (i.e., by 48%) in the Secondary Sector and from Rs.2429 to Rs.4080 (i.e., by 68%) in the Tertiary Sector. Relatively low levels of efficiency in the Primary Sector, which is supporting a large work force may be one of the important factors accounting for the problem of poverty. Despite massive investment effort on irrigation and for the timely and adequate supply of inputs, the agriculture sector has been characterised by considerable instability. These realities, coupled with the approach to Eighth Plan underscoring the income, production and recognition aspects of employment and the ultimate goal of improving quality of life, point to the need for improvements in efficiencies in various activities in the Primary Sector, by better exploitation and utilization of resources, including assets created so far.

Towards this end, Eighth Plan proposes certain

significant departures in the strategy for the development of agriculture and allied activities.

They are:

- i) Development strategy based on agro-climatic parameters;
- ii) Integrated Watershed Development;
- iii) Minimising time gap between creation of fresh irrigation potential and its actual utilization;
- iv) Conjunctive use of surface and ground water;
- v) Exploiting State's comparative advantage;
- vi) Strengthening of Infrastructural facilities linked with the objective of efficiency improvement, in addition to better utilisation of existing facilities;
- vii) Ensuring adequate quantities of inputs needed for productivity improvement; and
- viii) Protection of environment and ecology through programmes for reserved forests, degraded forests and for meeting specific consumer needs.

Agro-climatic regional planning constitutes the base on which programmes for various activities will be formulated and integrated. Efforts have been made to develop zonal profile, focussing on resource inventory, agricultural development performance indicators, development status of allied activities such as animal husbandry, forestry, fishery and agro-based industries, intensity in the use of new technical inputs, implements and infrastructure facilities.

Karnataka State falls in Zone 10, comprising of Southern Plateau and Hilly Area, Various districts fall in sub-regions 1,2 and 5; this is based on agro-climatic features such as soil types, rainfall pattern, cropping pattern and geographical contiguity criterion.

VII - A.3

Development strategy follows from the technological, institutional and economic constraints identified. The suggested strategy for the development of agriculture and allied sectors places emphasis mainly on land development, irrigation and water management, crop husbandry with an emphasis on lead crops, supplementary crops and high value crops, livestock and fodder development, development of fisheries and other supportive strategies for supporting the generation and sustenance of essentials and accelerators required for the development of agriculture and allied sectors.

VII - B. AGRICULTUREPresent Status:

In Karnataka, more than 70% of the population live in rural areas and 65% of the work-force depend on agriculture and allied activities. Of the total geographical area of 190.50 lakh hectares, 19.82 lakh hectares is not available for cultivation and 18.70 lakh hectares consists of uncultivated land excluding fallows. Cultivable land is about 120 lakh hectares. Of this, area under current fallows is about 16.00 lakh hectares, accounting for 13% of the cultivable area.

In spite of large investments on irrigation, 75% of cropped area continues to depend upon rainfall. Hence, performance in agriculture is determined primarily by the performance in rainfed areas.

Review of the VII Plan and Annual Plans, 1990-91 and 1991-92:

The main thrust of agricultural programmes has been to increase agricultural productivity in general and that of oil seeds and pulses in particular through the following components:

- i) An efficient and enlarged arrangement of inputs supply;
- ii) Implementation of thrust programmes like Special Foodgrains Production Programmes (SFPP), National Oilseeds Development/Oilseeds Production Thrust Programme (NODP and OTP) and National Pulses Development Programme (NPDP);

VII-B.2

- iii) Spreading dry farming technology, appropriate to the agro-climatic situations;
- iv) Special Programme to increase productivity in 20 identified low productivity talukas, one in each District;
- v) Special Programmes for weaker sections like small and marginal farmers and SCs and STs;
- vi) Training programmes for farm women and youth through DANIDA assisted project (WYTEP); and
- v) Increasing intensity of cropping in command areas by drawing up and implementing distributory-wise cropping programmes.

Physical progress achieved during the period under reference is given below:

	1984-85	End of VII Plan 1989-90 (FRE)	1990-91 HPC Estimates	1992-92 (Anticipated)	National Level 1989-90
A. Food Crops:					
1. Cereals	P. 61.81	68.22	57.40	71.51	1580.11
	Y. 1114	1160	1095	1298	1530
2. Pulses	P. 6.03	5.76	6.35	7.18	926.15
	Y. 385	349	403	376	543
Total Foodgrains	P. 67.84	73.98	63.75	78.69	1706.26
	Y. 954	983	935	1067	1349
B. Commercial Crops:					
1. Oilseeds	P. 13.69	13.32	13.96	19.62	167.49
	Y. 730	644	569	683	729
2. Cotton	P. 7.13	9.77	6.40	9.00	114.14
	Y. 153	228	186	240	265
3. Sugar-cane	P. 133.53	190.00	244.05	200.00	2226.27
	Y. 82	84	88	84	65
4. Tobacco	P. 9.31	0.35	0.30	0.41	5.64
	Y. 678	723	644	845	1340

Note to the table on Page VII.B.2:

P: Production in lakh tonnes for all crops except for cotton, which is expressed in lakh bales of 170 Kgs lint.

Y: Yield in Kgs. per hectare except for sugarcane which is expressed in tonnes per hectare.

During the Seventh Plan period, as against the budget provision of Rs.64.63 crores, actual expenditure was Rs.61.34 crores. During 1990-91, the corresponding figures were Rs.17.64 crores and Rs.17.62 crores; for 1991-92, the budget provision was Rs.22.62 crores.

As already stated, in as much as the major cropped area is under dry farming, Seventh Plan period suffered due to erratic weather conditions. Annual Plan periods have been normal years.

Constraints:

Agricultural sector is facing several constraints, constraints which are coming in the way of economic improvement of dependent on it and also of labour productivity.

In addition to major area being under rainfed condition, agricultural economy is facing the following major constraints:

- i) Absence of break-through in technology for evolving suitable high yielding/hybrid varieties which are resistant/tolerant, in major crops like rice, jowar, major pulses and oilseed crops;
- ii) Inadequate extension support to transfer appropriate technology, depending upon agro-climatic situation;

VII-B.4

- iii) Non-adooption of appropriate soil and moisture conservation measures in rainfed areas;
- iv) Lack of proper water management practices in the irrigation commands resulting in excessive usage of water beyond the optimum level;
- v) Inadequate, untimely, unbalanced levels of fertiliser application;
- vi) Non-availability/inadequacy of quality seeds;
- vii) Fragmentation of land resulting in creation of small holdings which cannot be deployed for technologically and economically viable operations;
- viii) Failure to achieve break-through in financially feasible technologies for agricultural implements; and
- ix) Unremunerative market prices and hence, returns to farmers.

Eighth Plan Strategy:

The focus of the Eighth Plan will be on stepping up production and productivity in rainfed areas through Dryland Development Programme on watershed basis. Through this approach, Eighth Plan aims at increasing foodgrains production from the current level of around 80.00 lakh tonnes to 108.00 lakh tonnes by the end of Eighth Plan.

In respect of irrigated areas, specific attention would be paid to reduce the area under high water intensive crops and utilise this land for semi-irrigated crops. In addition to this

change in the pattern, all-out efforts would be made to ensure that optimum use of water is made in the irrigated areas through dissemination of knowledge.

In addition to these specific strategies for rainfed and irrigated areas, Eighth Plan will give special thrust to the problems of the small and marginal farmers who are not operating technologically non-viable holdings. Further, the Plan will continue to give attention to the problems of Scheduled Caste and Scheduled Tribe farmers.

In respect of inputs, Eighth Plan will give priority to ensure timely supply of quality seeds by strengthening seed production and distribution system. Organisational strengthening will continue in order to ensure timely and adequate supplies of inputs like fertilisers and pesticides. Eighth Plan proposes to introduce a break-through in extension and training methodology by introducing electronic media to spread knowledge regarding package of practices. In terms of crops, emphasis will be on pulses and oilseeds.

EIGHTH PLAN PROGRAMME1. Direction and Administration:1.1. National Agricultural Extension Project-II
(Agricultural Extension)

The II phase of Agricultural Extension Project was started with World Bank assistance during 1985 for a period of five years and extended by two years. Provision is made for incremental staff salaries under certain areas like Soil and Water Management, Farm Management and Input Management etc., besides, strengthening infrastructure.

Outlay:	Rs.in lakhs	State	1992-97	2356.00
		only.	1992-93	535.00

1.2. C.S.S. Special sub-project for communication
support to Agricultural Extension:
(Communication Support)

This scheme attracts, 50% Central assistance. Provision is made to strengthen communication support to extension activities like production of A.V.aids, (Slides), Video tapes for screening through Dooradharshan and in villages through VCR provided under NAEP.

		State	Centre	Total
Outlay				
Rs.in lakhs	1992-97	75.00	75.00	150.00
	1992-93	17.00	17.00	34.00

VII-B.7

1.3. Computer Centre at Directorate of Agriculture

The computer Centre has been established at the Directorate with a view to computerise data of various programmes/activities of the department for speedy analysis to take quicker decisions.

Outlay	State	1992-97	75.00
(Rs.in lakhs)	only	1992-93	20.00

1.4. Capital outlay on Buildings:

Provision is for construction of Administrative Buildings and buildings not covered under NAEP-II.

Outlay	State	1992-97	100.00
(Rs.lakhs)	only	1992-93	30.00

2. Seeds:

2.1. Seed Farms and Seed Processing Units.
(Development of Agricultural Seed Farms)

Certain developmental works viz., construction of buildings, fencing, purchase of bullocks, providing irrigation wells/bore-wells etc., are to be taken up in the departmental seed farms to ensure production of quality seeds, besides increasing productivity for which this provision is made.

Outlay	State	1992-97	25.00
Rs.lakhs	only	1992-93	10.00

2.2. K.S.S.C. - Subsidy on Buffer stock of seeds:

The Karnataka State Seeds Corporation (KSSC) maintains buffer stock of quality seeds to meet any sudden demand that may arise due to adverse agro-climatic conditions/natural calamities. The provision is for subsidising K.S.S.C. to maintain buffer stock of seeds.

Outlay	State	1992-97	25.00
Rs.lakhs	only	1992-93	5.00

**2.3. Investment in State Seed Project:
(State Seed Project NSP-III)**

The objective is to provide infrastructure for foundation seed production on the departmental farms under farm development component and to strengthen the seed testing laboratories under quality control component.

Outlay	State	1992-97	2.50
Rs.lakhs	only	1992-93	0.50

2.4. Building under Seeds:

Provision is for repairs and renovation of buildings under the State Seed Farms.

Outlay	State	1992-97	-
Rs.lakhs	only	1992-93	-

3.0 Agricultural Farms:3.1. Strengthening of Development works in
Agricultural Development Centres: (ADC)

is
The provision/to strengthen the development activities in A.D.Cs like land development works, fencing, purchase of tractor/farm machinaries, sprinklers etc., to provide a good base for production of certified seeds required in the concerned areas.

Outlay Rs.lakhs	State only	1992-97 50.00	1992-93 10.00
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3.2. Minikit programme for Rice including
propagation of New Technology:

The objective of this 100% centrally assisted programme is to increase Rice production through propagation of newly released varieties.

Outlay Rs.lakhs	Centre only	1992-97 50.00	1992-93 10.00
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4.0 Manures & Fertilisers:4.1. Transport subsidy to Karnataka compost
Development Corporation:
(Assistance to KCDC)

The objective of this programme is to support K.C.D.C. to prepare quality compost out of city waste for supply to farmers on cost basis by payment of transport subsidy.

Outlay Rs.lakhs	State only	1992-97 20.00	1992-93 15.00
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4.2. Popularisation of Bio-fertilizers.
(Research and Dev.in bio-fertilizers by State UAS).

The scheme aims at production of Rhizobium cultures for different crops for production on commercial basis and also to maintain the standards by the two State Universities of Agriculture. Sciences.

Outlay	State	1992-97	25.00
Rs.lakhs	only	1992-93	5.00

4.3. Fertiliser control lab at Mangalore(FCL)
(Development of Fertilizer control laboratories)

The objective of the Fertiliser control lab. at Mangalore is to check the quality of fertilizers available in the market including imported fertilizers arriving at Mangalore Port.

Outlay	State	1992-97	32.00
Rs.lakhs	only	1992-93	4.00

4.4. Strengthening of programmes in Soil Health Centres
(Development of soil health centres)(S.H.C.)

Provision is for modernising the Soil Health Centres by equipping them with latest equipments, besides post bags and post cards for speedy analysis and communication of the results of such analysis to the farmers.

Outlay	State	1992-97	195.00
Rs.lakhs	only	1992-93	30.00

4.5. Establishment Micro-nutrient lab.at Bellary:

Provision is made for providing laboratory equipments to test micro-nutrient levels in the soils and communicate the same to the farmers for rectification.

Outlay	State	1992-97	25.00
Rs.lakhs	only	1992-93	10.00

5.0. Plant Protection:**5.1. Insecticide Control Laboratory, Bellary
(Development of State Pesticides Laboratories)**

The objective of this scheme is to ensure availability of quality pesticides through checks by analysing samples drawn from various pesticide outlets in the northern districts of Karnataka.

Outlay	State	1992-97	75.00
Rs.lakhs	only	1992-93	45.00

5.2. Integrated pest Management:

This is a broad new ecological approach to control pests utilising all available methods and techniques such as biological and chemical in a compatible manner with an aim to maximise production at minimum cost with due importance for safety to ecosystem and environment.

The provision for establishing IPM centres in the state includes establishment cost

VII.B.12

Purchase of vehicle and equipments, besides training of officers/field level extension personnel and farmers in IPM programme. This scheme attracts 50% central assistance.

		State	Centre	Total
Outlay	1992-97	247.60	247.60	495.20
Rs.lakhs	1992-93	41.25	41.25	82.50

5.3. Buildings under Plant Protection:

The provision is for renovation, repairs and extension of the existing buildings under plant protection.

Outlay	state	1992-97	-
Rs.lakhs	only	1992-93	-

6.0 Commercial crops

6.1. CSS Intensive cotton Development programme

This scheme attracts 50% Central assistance. The provision is for meeting the salaries etc., of Kappas grading centres.

		State	Centre	Total
Outlay	1992-97	12.50	12.50	25.00
Rs.lakhs	1992-93	2.50	2.50	5.00

6.2. Inter-cropping soyabean in sugarcane fields

This scheme aims at additional production of soyabean without using additional land besides increasing soil fertility. Under this scheme farmers will be given incentives in the form of seeds at free of cost @ Rs.250/-per hect.

Outlay	State	1992-97	50.00
Rs.lakhs	only	1992-93	15.00

6.3. Crop Insurance scheme:

The objective of this scheme is to provide financial support to farmers in the event of loss incurred by them due to natural calamities like drought, floods etc., The provision is for creating a Crop Insurance Fund for payment of compensation to cultivators if any claims arise.

Outlay	State	1992-97	275.00
Rs.lakhs	only	1992-93	55.00

6.4. Subsidy on premium to small and marginal farmers under crop insurance scheme.

Small and marginal farmers are eligible for subsidy against the payment of premium at the rate of 50% of the premium charges.

Outlay	State	1992-97	25.00
Rs.lakhs	only	1992-93	5.00

7.00 Extension and Training

7.1. Farm Information Unit:

The main objective of this scheme is to disseminate the latest technologies evolved to farmers through various media with a view to increase agricultural production. The provision is therefore made to meet the expenditure on printing and publication of extension literatures for free supply among farmers/extension personnels.

Outlay	State	1992-97	40.00
Rs.lakhs	only	1992-93	10.00

7.2 Agricultural Training for Farm Women and Youth under DANIDA.

This scheme is being implemented with DANIDA assistance in all the districts excepts Bidar in the State with a view to prepare farm women and youth to become motivators adoptor of new Agril. technologies. The provision is made to meet the establishment charges of the staff borne under this project besides purchase of vehicle and equipments.

Outlay	State	1992-97	910.00
Rs.lakhs	only	1992-93	213.00

7.3. Buildings - Farmers Education:

Provision is for renovation and repairs under farmers education.

Outlay	State	1992-97	10.00
Rs.lakhs	only	1992-93	4.00

8. OTHERS

8.1. Grant-in-aid to Agril.Technologists.

The provision proposed under this scheme is to provide grant-in-aid to the Institution of Agril. technologists which is aiming at the development in the field of Agriculture by way ^{of} organising workshops, seminars, symposium etc.,

Outlay	State	1992-97	10.00
Rs.lakhs	only	1992-93	5.00

8.2. Grant-in-aid to farmers forum and other Agril.Unions.

Under this scheme also financial assistance

will be provided to the institutions which are engaged in promoting agricultural activities for the benefit of farming community in the State.

Outlay	State	1992-97	15.00
Rs.lakhs	only	1992-93	5.00

8.3. CLUMP.

The concept of this new approach is for projectisation of land use policy for implementation on a pilot basis in one Mandal panchayat in each of fifty one taluks comprised in the five district of the state.

Outlay	State	1992-97	543.00
Rs.lakhs	only	1992-93	240.00

New schemesA-CROP HUSBANDRY

1. Assistance to Karnataka Agro-Industries Corporation (KAIC) for commercial production of Bio-fertilizers.

Provision is towards assistance to KAIC for commercial production and distribution of bio-fertilisers out of the cultures released by State Universities of Agricultural Sciences.

Outlay	State	1992-97	25.00
Rs.lakhs	only	1992-93	10.00

2. Development of fertiliser control laboratories:

The provision is for updating the fertiliser control laboratories with sophisticated and modern equipments for speedy and correct analysis of fertilisers etc., in order to control the quality by checks.

Outlay	State	1992-97	30.00
Rs.lakhs	only	1992-93	15.00

3. Pests and diseases surveillance by Remote sensing

Certain data on insect pests and diseases is available by remote sensing. This data is required to be interpreted and passed on to farmers so that precautionary measures are adopted by them

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to check spread of pest/diseases. The provision is towards the expenses of the assessing agencies namely N.R.S.A., ISRO.

Outlay	State	1992-97	25.00
Rs.lakhs	only	1992-93	15.00

4. Development of State pesticide Laboratory

The provision is to strengthen the existing pesticides laboratories with modern sophisticated equipments to enable quicker and accurate analysis of pesticides and maintain their quality. It is also proposed to open two more pesticides testing laboratories in the State.

		State	Centre	Total
Outlay	1992-97	110.00	110.00	220.00
Rs.lakhs	1992-93	92.50	92.50	185.00

5. Estimate of area and production by remote sensing.

Certain data on cropping intensity, crop growth, moisture stress, crop production etc., are available through Remote sensing by IRS, IB, This data requires to be interpreted and analysed for estimation of area and production of crops in advance of the harvest. The provision is towards the expenses of the assessing agency viz. IBRD.

Outlay	State	1992-97	50.00
Rs.lakhs	only	1992-93	10.00

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6. Human Resource Development of personnel in the Department of Agriculture.

The objective is to up-grade and up-date the technical competency of extension personnel by deputing them to graduate and post graduate studies in Agriculture, under the two State Agricultural Universities in the State. The Provision is to meet the expenses to-wards tution fee etc.,

Outlay	State	1992-97	20.00
Rs.lakhs	only.	1992-93	3.00

7. Training in Broad basing of Agriculture extension:

The provision is made to meet the training expenditure of inservice personnel on Broad based Agriculture extension.

Outlay	State	1992-97	15.00
Rs.lakhs	only	1992-93	3.00

VII-C. SOIL CONSERVATIONPresent Status:

Karnataka is predominantly a dry farming State. Over 75% of the cultivable area lies mostly in the rain shadow region, making it susceptible to droughts. Further, with increased pressure on land, marginal lands in steep slopes have been brought under unscientific cultivation. The erosion of soil coupled with drought, have affected adversely a large majority of farmers.

Karnataka being an upland State in the western part of the Deccan Plateau, suffers from certain specific handicaps. While it receives ample rainfall in the coastal districts and the western hill ranges, large areas of its eastern plains receive uncertain rainfall during the South-West monsoon, which is the major source of production of dryland crops.

Large scale efforts are required in applying soil and moisture conservation measures, improved agronomic practices and in restoring vegetative cover on watershed basis.

Review of Seventh Plan and Annual Plans, 1990-91 and 1991-92:

During the Seventh Plan, as against the budget provision of Rs.46.39 crores, actual expenditure was Rs.41.42 crores. Soil conservation is accounting for about 40% of the total Plan expenditure on agriculture crop husbandry and soil conservation together.

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About 68.00 lakh hectares of cultivable area in the State need soil conservation measures. As against this, about 36.00 lakh hectares have been treated. The total area covered under dryland development during the Seventh Plan period is placed at 13.56 lakh hectares.

The major programmes under implementation are the World Bank aided Rainfed Dry Farming Project, Watershed Development Programmes carried out by four Dryland Development Boards, Centrally Sponsored Scheme for National Watershed Development Programme and Soil Conservation works in the catchment of River Valley Projects.

Eighth Plan Strategy:

Eighth Plan proposes to concentrate its efforts on the integrated watershed development strategy, with the following components:

- i) Using land on the basis of its capabilities;
- ii) Adoption of in-situ moisture and soil conservation practices in all the lands;
- iii) Increasing productivity of dryland through the introduction of watershed management and awareness programmes; and
- iv) Involving the farmers in the entire process of delineation and treatment, maintenance of assets created and management of inputs like seeds, fertilisers, credit, etc.

Eighth Plan Programmes:1. C.S.S. National Watershed Development Project for Rainfed
Agriculture.

This scheme which was being operated since 1986-87 with 50% central share has been modified and re-structured with 100% central assistance comprising 75 % central share and 25% long term loan to the State.

The main objectives of the scheme are sustainable production of bio-mass and restoration of ecological balance in vast tracts of rainfed areas.

Outlay	Centre	1992-97	8135.00
Rs.lakhs	only	1992-93	3000.00

2. C.S.S. of soil conservation on catchment of
River Vally projects:

The aim of the scheme is to make concerted efforts for prevention of catchment degradation and to check to minimise silt in flow in-to reservoirs.

Outlay	Centre	1992-97	3230.00
Rs.lakhs	only	1992-93	450.00

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3. C.S.S. Reclamation of saline, Alkaline and waterlogged areas:

The object of this scheme is to identify and locate severally affected soils and their reclamation to bring them under crop production.

Outlay	centre	1992-97	38.00
Rs.lakhs	only	1992-93	7.00

4. Rainfed dryfarming project with World Bank assistance.

The objective of the scheme is to improve the soil status of the drylands and prevent erosion of soil and conserve soil moisture.

Outlay	State	1992-97	1758.32
Rs.lakhs	only	1992-93	917.44

5. Karnataka Watershed Development Project (DANIDA assisted).

This scheme is implemented in 14 watersheds of the districts of Belgaum, Dharwar and Uttara Kannada. The main objective is to develop an appropriate land use system through soil and moisture conservation activity for stabilised agricultural production and to improve the living condition of land less labourers and small

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farmers with an emphasis on rural women and youth.

Outlay	State	1992-97	638.00
Rs.lakhs	only	1992-93	280.00

6. CLUMP

The concept of this scheme is adoption of new approach of projectisation of land use policy for implementation on a pilot basis in one mandal panchayat in each of the 51 taluks of 5 districts in the State.

Outlay	State	1992-97	6582.00
Rs.lakhs	only	1992-93	715.00

VII-D. HORTICULTURE

Present Status:

Karnataka is one of the States which is capable of growing various kinds of fruits and vegetables temperate, sub-tropical and tropical the year round. There is good scope for development of horticulture. Horticulture crops are being grown on 11.6 lakh hectares, that is about eleven per cent of the total net cultivated area. Unlike Agriculture, the benefits from Horticulture sector are yet to reach the grass-root level. It is generally known that horticulture crops can earn 20 to 25 times higher foreign exchange per unit area than the Cereals which occupy a larger portion of our land.

Review of Seventh Five Year Plan:

During Seventh Five Year Plan period, as against budget provision for State Plan of Rs.15.4 crores, actual expenditure is placed at Rs.13.5 crores. The physical achievement during Seventh Plan period in respect of production of major horticultural crops was better than that experienced during Sixth Plan. While achievement was 90% of the target fixed during the Seventh Plan, the corresponding figure for the Sixth Plan was 80%.

Some of the important schemes implemented by the Horticulture Department during the Seventh Plan period were as follows:

- 1) Production and distribution of quality planting materials of fruits and vegetable crops;

- 2) Demonstration on improved horticultural technology and extension and training to farmers;
- 3) Development of botanical, ornamental and public gardens in the State;
- 4) Development and maintenance of hill stations at Mandi and Kemmannugundi;
- 5) Coconut development including seed procurement;
- 6) Spices and Cashew development;
- 7) Preservation, processing and marketing of fruits and vegetables and other horticultural produce;
- 8) Expansion of area under different horticultural crops; and
- 9) Oil palm cultivation (during the end of Seventh Plan).

During 1990-91, as against budget provision of Rs.437.18 lakhs under State Plan, expenditure was Rs.399.51 lakhs. For 1991-92, provision is Rs.659.71 lakhs.

During 1990-91, physical targets were achieved in the scheme for oil palm demonstration project, regional centres for Floriculture, departmental laboratories and production of quality planting materials. In the District Sector, physical progress was satisfactorily achieved for schemes like assistance to farmers for installation of pumpsets, procurement of seed coconuts, training to farmers, production of planting materials and plant protection measures. Achievement under Special Component Plan and Tribal Sub-plan has been satisfactory.

During 1991-92, performance is anticipated to be satisfactory.

The achievement and shortcomings of the programmes undertaken during Seventh Plan and 1990-91 and 1991-92 are broadly dealt with for different horticultural crops. However, one general problem is that Horticulture has suffered on account of inadequate supply of quality seeds, planting materials and post harvest management. Further, due to lack of loss prevention orientation, huge losses in handling and processing have occurred. Appropriate research and extension in the field of dryland horticulture and integrated development of marketing system have not been given due importance.

a) Fruits:

In the Seventh Plan, initially, there were multiplicity of schemes under operation with similar objectives for the development of fruits, production and distribution of planting materials through adaptive schemes. Though the schemes were operative from 1987, the expected level of progress could not be achieved due to this. Efforts were made at the end of Seventh Plan to overcome this by merging several schemes with similar objectives, with an aim at producing planting materials suitable to agro-climatic zones. In this programme, it is the prime responsibility of the Horticulture Department to produce good quality planting materials in large numbers and distribute the same to the farmers, while adopting proper methods of propagation.

b) Vegetables:

The main drawback was the improper linkage between vegetable seeds multiplication and their distribution. Emphasis was not given to produce such

varieties of seeds which are of commercial importance. Other constraints experienced were inadequacy of personnel, training and infrastructure facilities.

c) Flowers:

As regards flowers, significant results could not be achieved to make the production commercially viable. This was due to defects in the contents of the programmes implemented all these years. The activity suffers on account of constraints like inadequacy of trained personnel, infrastructure facilities, marketing system, credit facilities, transport services and technical know-how.

d) Plantation and Spices:

Despite good potential, plantation activity in general is facing constraints like inadequacy of planting materials, methods of controlling pests and diseases and infrastructure facilities and absence of a clearly spelt out long term export policy.

e) Marketing:

As far as marketing is concerned it is inadequate and unorganised. The efforts made by HOPCOMS, although significant, are not in a position to cope up with demand for organised marketing. Necessity is felt to organise marketing societies in the pattern of HOPCOMS in important parts of the State. There is need to strengthen the existing district horticulture societies to enable them to increase horticulture marketing activities.

f) Cold Storage and processing:

It is estimated that nearly 25 per cent of the horticulture produce is going a waste for want of proper cold storage and processing system. The present cold storage facilities established by the Department are mostly single commodity cold storages and are inadequate. As regards processing, there are no concrete efforts to encourage processing component.

Eighth Plan Strategy:

The thrust of the Eighth Plan will be on increasing the overall productivity from around 15 tonnes per ha. to about 18 tonnes per ha., so as to meet the nutritional requirement of the population at the rate of 250 gms. per day per person of vegetables and 280 gms. per day of fruits; expansion of area will also receive due attention.

Eighth Plan aims at the following:

- i) Bringing additional area of 5.00 lakh hectares under horticultural crops during VIII plan period;
- ii) Increase productivity per unit area;
- iii) Diversify horticultural production; and
- iv) Encourage processing and marketing of horticultural produce.

The additional area proposed to be brought under horticultural crops would be as follows:-

Fruits	-	1.50 lakh hectares
Vegetables	-	2.00 lakh hectares
Plantation crops & spices	-	1.25 lakh ha.
Flowers	-	0.25 lakh hectares.

The planting material required for the above said area expansion will be produced in horticultural farms under both State and District Sectors. Tissue cultured plants will also be utilised. However, due to resource constraint, it will not be possible to cater to the requirement of entire area expansion programme. Therefore, supply of planting materials from the private nurseries also will be considered for purposes of area expansion.

The trust will be given on selected varieties of Horticultural crops.

Extension activities like propoganda, publicity, etc., will be strengthened. The horticultural training centers will be equipped with necessary teaching aids to facilitate better training to farmers. This will help in achieving both area expansion and increase in productivity of horticultural crops.

Eighth Plan Programmes:

1. Centrally Sponsored Scheme for Prontline Demonstration on Oil Palm Cultivation

It is programmes to plant oil palm seedlings in an area of 150 acres in Horticultural Farm Viz., Bheemana-kolli, Heggadadevenakote Taluk, Mysore district to conduct study on water requirement, irrigation systems, nutritional requirement, intercrops, pest management, harvesting techniques and indigenously fabricated unit of one M.T.per hour. Crushing capacity is also to be established.

The scheme is sanctioned on 75:25 basis between Government of India and Government of Karnataka.

	(Rs.in lakhs)	
	<u>92-97</u>	<u>92-93</u>
Total Outlay	20.00	4.00
State Share	5.00	2.00
Central Share	15.00	2.00

2. Centrally Sponsored Scheme for Pre-project Nursery Activity - Bhadra Project Area

It is programmed to raise 3.4 lakh oil palm seedlings to cover 2,000 hectares in Bhadra Command Area.

	(Rs.in lakhs)	
	<u>92-97</u>	<u>92-93</u>
Total Outlay	108.00	20.00
State Share	27.00	5.00
Central Share	81.00	15.00

3. Centrally Sponsored Scheme for Oil Palm Demonstration Project

An area of 1,100 hectares has been developed in farmer's fields with oil palm. The programme includes maintenance of the area till bearing.

	(Rs. in lakhs)	
	<u>92-97</u>	<u>92-93</u>
Total Outlay	60.00	60.00
State Share	30.00	30.00
Central Share	30.00	30.00

4. Development of Mushroom

Two laboratories, one at Bangalore, another at Belgaum will continue their activities for production of spawn (mushroom seeds). Training will be given to interested cultivators, housewives and others in mushroom cultivation.

Total Outlay: 92-97: Rs.25.00 lakhs
 92-93: Rs. 5.00 lakhs

5. Extension and Training including equipping Horticultural Training Centres - Propaganda and Information Unit.

The Information Unit in the Directorate will standardise the extension materials on all Horticultural crops. The publicity materials will be printed and given to district for reproduction and further use. Twenty Horticultural Training Centres will be strengthened to provide for better training to Departmental staff and also farmers.

Total Outlay: 92-97: Rs.75.00 lakhs
 92-93: Rs.15.00 lakhs

6. Regional Centre for Vegetable Seed Production

Foundation seeds will be produced and given to K.S.S.C., for multiplication to certified seeds.

Total outlay: 92-97: 50.00 lakhs
 92-93: 10.00 lakhs

7. Production and Distribution of quality Planting materials for area expansion

Quality planting materials will be produced in Horticultural Farms under State and District Sectors. The selected crops for area expansion are as follows:-

- a) Fruits: Mango, Sapota, Guava, Grapes, Ber, Banana, Pomegranate and Citrus.
- b) Plantation crops and spices: Pepper, Cardamom, Chillies, Ginger, Turmeric, Cashewnut, Coconut and Onions.
- c) Vegetables: Potato, Tomato, Brinjal, Colecrops, Beans, Bhendi.
- d) Flowers: Rose, Chrysanthemum, Tube-rose, Auster, Jasmine, Merry-gold and Crossandra.

Total Outlay: 92-97: Rs.250.00 lakhs
 92-93: Rs.50.00 lakhs

8. Development of Departmental Laboratories:

The Departmental Laboratories for plant nutrition, Tissue Culture and Plant Protection are to be developed for rendering services like soil testing, tissues culture plants and microbiological trials.

Total Outlay: 92-97: Rs.45.00 lakhs
92-93: Rs.10.00 lakhs

9. Lalbagh Botanical Garden

Improvements like new lawns, irrigation facilities and identification of plants are proposed.

Total Outlay: 92-97: Rs.25.00 lakhs
92-93: Rs.10.00 lakhs

10. Maintenance and Development of Hill Stations

Development of Green House for propagation, and improving amenities for visitors are envisaged.

Total outlay: 92-97: Rs.40.00 lakhs
92-93: Rs.10.00 lakhs

11. Development of Botanical and other Ornamental Gardens

Maintenance of gardens in the premises of K.M.C., Hubli (15 acres) and development of Kaveri Vana at Mandya in an area of 10 acres are envisaged.

Total Outlay: 92-97: Rs.40.00 lakhs
92-93: Rs.20.00 lakhs

12. Capital Outlay

Development of infrastructure like farm house, fencing in the horticultural farms etc., are envisaged.

Total Outlay: 92-97: Rs.100.00 lakhs
92-93 Rs. 30.00 lakhs

13. Centrally Sponsored Scheme for Development of Pepper

The Scheme is intended to popularise pepper as intercrop with coconut and arecanut in the non-traditional area (Maidan area).

	(Rs. in lakhs)	
	<u>92-97</u>	<u>92-93</u>
Total Outlay	20.00	10.00
State share	10.00	5.00
Central share	10.00	5.00

14. Centrally Sponsored Scheme for Development of Chillies

Object of the Scheme is to popularise use of sprinkler irrigation for Byadgi in Dharwar district.

	(Rs. in lakhs)	
	<u>92-97</u>	<u>92-93</u>
Total Outlay	20.00	10.00
State Share	10.00	5.00
Central Share	10.00	5.00

15. Regional Centre for Floriculture

The scheme proposes to produce materials and seeds of commercial flowers to popularise flowers cultivation among the farmers.

92-97: Rs. 40.00 lakhs
Total Outlay: 92-93: Rs. 15.00 lakhs

16. Central Sector Scheme for Integrated Development of Spices

Production of rooted pepper cuttings, supply of inputs and minikits, raising and distribution of seedlings of tree spices are the programme elements.

Total Outlay: 92-97: Rs.125.00 lakhs
92-93: Rs. 25.00 lakhs

17. Central Sector Scheme for Development of Cocoa

Providing subsidy for development of irrigation facilities in Cocoa Gardens and also for scientific cultivation of Cocoa are programme elements.

Total Outlay: 92-97: Rs.45.00 lakhs
92-93: Rs.10.00 lakhs

18. Central Sector Scheme for Development of Tropical Arid Zone Fruits

The Scheme intends to popularise cultivation of tropical arid zone through demonstration.

Total Outlay: 92-97: Rs.45.00 lakhs
92-93: Rs.10.00 lakhs

19. Central Sector Scheme for Development of Cashew

Production and supply of epicotil grafts of cashew for area expansion and supply of plant protection

chemicals, fertilizers, minikits to such farmers are the components of the scheme.

Total outlay: 92-97: Rs.40.00 lakhs
 92-93: Rs.10.00 lakhs

Above mentioned schemes are in the State Sector. Schematic details under District Sector are yet to be formulated by the Zilla Parishats.

VII.E ANIMAL HUSBANDRY AND VETERINARY SERVICES

PRESENT STATUS:

Livestock rearing plays a very vital role in rural economy in supplementing family income and providing employment. Vast majority of rural poor population, particularly the small and marginal farmers and agricultural labourers, bank upon animal husbandry activities to utilise agricultural by-products and crop residues to convert them into animal products with good returns.

The present status of livestock population in the State as reflected in the 14th Census (latest available) and increase over the years are depicted below:

Livestock	1983	1990	(No. in Million)
			%age increase (+)/Decrease (-)
1. Cattle	11.30	10.18	- 10
2. Buffaloes	3.65	4.37	+ 20
3. Sheep	4.79	4.73	- 1
4. Goats	4.35	3.89	- 15
5. Pigs	0.32	0.30	- 6
6. Poultry	12.10	15.07	+ 25

Review of the Seventh Five Year Plan and Annual Plans, 1990-91 and 1991-1992.

For the Seventh Plan, approved outlay was Rs. 1928.62 lakhs and expenditure was Rs. 1828.37 lakhs. Substantial portion of expenditure was incurred on the following major schemes.

A sum of Rs. 905.30 lakhs and Rs. 1164.90 lakhs was provided for the Annual Plans 1990-91 and 1991-92 respectively. During 1990-91, expenditure was Rs. 905.30 lakhs.

1. Opening of Rural Veterinary Dispensaries and Upgradation of Rural Veterinary Dispensaries to Taluka Type.

Seventh Plan Outlay	.. Rs. 438.24 lakhs
Expenditure	.. Rs. 274.53 lakhs
Seventh Plan Targets	.. 500 Rural Veterinary Dispensaries.
	.. 275 Upgradation of Rural Vety. Dispensaries to Taluka type.
Achievement:	.. 150 Rural Veterinary Dispensaries.
	.. 50 Upgradation of Rural Vety. Dispensaries of Taluka type.

2. Mobile Veterinary Clinics:

Seventh Plan Outlay	.. Rs. 394.96 lakhs
Expenditure	.. Rs. 395.67 lakhs
Seventh Plan Target	.. Maintenance of 90 Mobile Veterinary Clinics
	60 New Mobile Vety. Clinics.

Achievement : 74 New Mobile Veterinary Clinics were established.

3. Special Livestock Breeding Programme :

Seventh Plan Outlay	.. Rs. 155.64 lakhs
State	.. Rs. 77.82 lakhs
Central	.. Rs. 77.82 lakhs
Expenditure	.. Rs. 119.08 lakhs
State	.. Rs. 59.54 lakhs
Central	.. Rs. 59.54 lakhs
Achievement	.. 4410 beneficiaries

Small and Marginal Farmers and Agricultural Labourers are assisted under this programme.

4. Tribal Area Sub-Plan:

Seventh Plan Outlay	.. Rs. 134.75 lakhs
State	.. Rs. 98.21 lakhs
Special Central Assistance	.. Rs. 36.04 lakhs
Expenditure	.. Rs. 107.64 lakhs
State	.. Rs. 84.20 lakhs
Special Central Assistance	.. Rs. 23.44 lakhs

Target	.. 1689 Beneficiaries
Achievement	.. 1179 beneficiaries

Scheduled Tribes living in the Five Intensive Tribal Development Project areas were assisted under this programme by supplying Livestock units.

5. Special Component Plan:

Seventh Plan Outlay	.. Rs. 301.88 lakhs
State	.. Rs. 143.28 lakhs
Central Assistance	.. Rs. 158.60 lakhs
Expenditure	.. Rs. 390.00 lakhs
State	.. Rs. 255.54 lakhs
Central Assistance	.. Rs. 134.46 lakhs
Target	.. 6468 beneficiaries
Achievement	.. 6807 beneficiaries.

Scheduled Castes and Scheduled Tribes are assisted under this programme by supplying Livestock units.

Despite the progress achieved, certain critical needs are identified which are indicated below:

a) There are 1236 Veterinary Institutions comprising of 33 Veterinary Hospitals, 495 Veterinary Dispensaries, 653 Primary Veterinary Centres, 55 Veterinary Aid Centres; there are 159 Mobile Veterinary Clinics. As at present, 12,336 heads of cattle are covered by each institution. This coverage is required to be intensified to achieve 7500 cattle units per institution. Hence, 775 institutions are to be established.,

b) State is a pioneer in introducing artificial insemination techniques. Over the years, this programme has been strengthened. At present, out of 1350 centres, 1250 have adopted Frozen Semen Technology. During the Seventh Five Year Plan period, the number of artificial inseminations has been raised from 11 lakhs to 15 lakhs per annum.

Taking into consideration total breedable population in the State of Karnataka, the present coverage by artificial insemination is 10 per cent by the Department and 7 per cent by the Karnataka Milk Federation.

This programme has to be further strengthened to increase the coverage. And also, new technology such as Embryo Transfer Technology will have to be introduced.

Indigenous breeds such as Mallikar, Amrithmahal, Khillar, Krishna Valley, Deoni have also been improved by selective breeding. These programmes will have to be further strengthened in order to provide enough draught power for the agricultural operations and transport.

c) There are 3000 Poultry Farms, producing 1000 million eggs and 12 million Kgs. of poultry meat, of which 60 per cent is produced from the Urban Agglomeration of Bangalore, Mysore, Belgaum, Hubli-Dharwad, Mangalore and Bellary. The per capita availability of eggs is 26 and the poultry meat is 250 gms. per annum. This is against the requirement of 180 eggs and 9 Kgs of Poultry meat per annum. There is, therefore, a large gap to bridge as far as nutrition is concerned and a great potential to exploit as far as the poultry production is concerned.

EIGHTH PLAN STRATEGY :

The major elements of the strategy for livestock development during the Eighth Plan are:

- a) Genetic improvement of important livestock breeds by selective breeding and upgradation of low producing non-descript stock and conservation of important indigenous breeds for draught purpose;
- b) improvement in productivity of pasture land by introducing improved fodder seeds and increased use of waste lands for fodder production;

- c) optimising use of crop residues through provision of appropriate supplement and conservation of dry fodder through densification baling and pelletisation, etc.
- d) increasing the coverage of breedable population through artificial insemination by supply of inputs;
- e) development of adequate animal health services like protection of livestock with special emphasis on Rinderpest and Foot and Mouth Disease Control;
- f) Popularisation of rural backyard rearing of small animals like poultry, rabbits etc., as a means of raising income levels of the rural poor; and
- g) improvement of the data base in respect of livestock and livestock products.

EIGHTH PLAN PROGRAMMES :

1. Direction and Administration:

Provision is proposed for staff component.

VIII Plan Outlay-Rs. 20.00 lakhs

1992-93 Plan out lay Rs. 3.00 lakhs

2. Eradication of Rinderpest in Border Areas:

It is only staff component. VIII Plan Outlay Rs. 30 lakhs.

1992-93 Plan Outlay Rs. 5.00 lakhs

3. C.S.S. of systematic control of Livestock Disease of National importance; and

C.S.S. of Surveillance of Disease of animals.

The main object of the two programmes is to control the contagious bovines Pleuro, Pneumonia, Canine Rabies Pullorum and Marek's disease and collection, compilation, and analysis of data on prevalence of various epidemiological disease of State and to reduce mortality rate and monitoring of epidemiological data.

<u>VIII Plan Outlay:</u>	Rs. 100.00 lakhs	- Systematic control of Livestock Disease of National importance.
	Rs. 50.00 lakhs	- Surveillance Disease of animals.
Total :	Rs. 150.00 lakhs	
State	Rs. 75.00 lakhs	
Central	Rs. 75.00 lakhs	

PHYSICAL TARGET:

- a) Vaccination against Rabies .. 35,000
b) Pullorum control .. 105,000

ANNUAL PLAN 1992-93	- Rs. 20.00 lakhs	for Systematic Control livestock diseases of National Importance
	Rs. 4.00 lakhs	for Surveillance diseases of animals
Total:	Rs. 24.00 lakhs	
State	Rs. 12.00 lakhs	
Central	Rs. 12.00 lakhs	

Physical Target:

- a) Vaccination against Rabies .. 7,000
b) Pullorum control .. 20,000

4. DISEASE FREE ZONE :

This project is undertaken by National Dairy Development Board for the establishment of disease free zone on Foot and Mouth. The area covered under this programme is only five districts viz., Mysore, Mandya, Kodagu, Dakshina Kannada and Hassan. The Department is reimbursing the expenses on Foot and Mouth vaccinations carried out by the N.D.D.B.

Eighth Plan outlay	..	Rs. 100.00 lakhs
Annual Outlay for 1992-93	..	Rs. 10.00 lakhs

5. Assistance to establish Private Veterinary Clinics Diagnostic Laboratories (100% N C D C) :

This is a new scheme proposed to be taken up during Eighth Plan to assist the local unemployed graduates by extending loan facilities from the financial institutions

to set up Veterinary Clinics/Diagnostic Laboratories for the benefit of livestock in the remote corner of the area.

Eighth Plan outlay .. Rs. 30.00 lakhs
Annual Plan outlay 1992-93 .. Rs. 2.00 lakhs

6. Buildings under Veterinary Services and Animal Health :

It is proposed to construct a building to store medical drugs at Hebbal/^{and} staff quarters in the Civil Station Veterinary Hospital at Bangalore.

Eighth Plan Outlay .. Rs. 75.00 lakhs capital outlay
.. Rs. 60.00 lakhs Revenue account
Annual Outlay 1992-93 .. Rs. 6.00 lakhs Capital outlay
Rs. 10.00 lakhs Revenue account.

7. Composite Livestock Farm, Ulvarthy :

Provision is for the maintenance of the farm and training centre:

Eighth Plan outlay .. Rs. 40.00 lakhs
.. 500 calves production
.. 100 Mt fodder production
Annual Plan outlay 1992-93 .. Rs. 8.00 lakhs
Target .. 50 calves production
.. 200 MT fodder production

8. Cross Breeding of Cattle with exotic Dairy breed and Improvement of Buffaloes using Frozen Semen Technique :

In order to meet the growing demand of frozen semen at all the institutions in the State, which have adopted this technology, it is proposed to continue the scheme. The nomenclature may be changed as "STRENGTHENING OF EXISTING SEMEN BANK."

Eighth Plan out lay .. Rs. 50.00 lakhs
Target .. 50.00 lakhs semen straws
Annual Plan outlay .. Rs. 10.00 lakhs
Target .. 10.00 lakhs semen straws.

9. Centrally Sponsored Scheme of assistance to Small/Marginal Farmers and Agricultural Labourers for rearing of Cross-bred Heifers:

The object of this scheme is to monitor the implementation of special livestock breeding programme by Zilla Parishads. The outlay is provided for staff component at Directorate level.

Eighth Plan outlay	Rs .. 20.00 lakhs
State	Rs .. 10.00 lakhs
Central	Rs .. 10.00 lakhs
Annual plan outlay 1992-93	Rs .. 5.00 lakhs
State	Rs .. 2.50 lakhs
Central	Rs .. 2.50 lakhs

10. Centrally Sponsored Scheme of Indigenous breeds of Cattle and buffaloes Improvement to Ajjampur Farm.

The Central assistance is for the infrastructure development at the Ajjampur farm and the assistance from Government of India was made available in the middle of the Seventh Five Year Plan. It is proposed to take up infrastructure development in other two farms of the Department.

Eighth Plan outlay	Rs. 40.00 lakhs
State	Rs. 20.00 "
Central	Rs. 20.00 "
Annual Plan outlay 1992-93	Rs. 2.00 "
State	Rs. 1.00 "
Central	Rs. 1.00 "

11. Embryo Transfer Technology :

In order to bring about rapid improvement in quality of Cattle and Buffaloes, it is proposed to set up the Centre for adoption of Embryo transfer Technology.

Eighth Plan outlay	Rs. 10.00 lakhs
Annual Plan outlay 1992-93	Rs. 2.00 lakhs

12. Import of highly proven/Pedigreed Embryo and Frozen

Semen Straws :

of

Import/highly proven and pedigree embryo is one of the important Programmes proposed to be taken up during Eighth Five Year Plan.

Eighth Plan outlay	.. Rs. 10.00 Lakhs
Physical Target	500 Embryo 5000 Frozen Semen Straws.
Annual Plan outlay 1992-93	Rs. 2.30 lakhs
Physical Target	50 Embryo 300 Frozen Semen Straws.

The above two schemes may be clubbed into one Scheme viz. Embryo Transfer Technology and Import of highly proven pedigree and Frozen Semen Straws.

13. Buildings under Cattle and Buffalo Development.

- a) Provision is for the maintainance and repairs of the existing buildings in the Livestock Farms.

Eighth Plan outlay	Rs. 100.00 lakhs
Annual Plan outlay 1992-93	Rs. 10.00 "

- b) Due to increase in the strength of Livestock at the farms in the State, additional buildings are required for the proper maintenance of livestock.

Eighth Plan outlay	Rs. 150.00 lakhs
Annual Plan outlay 1992-93	Rs. 8.00 "

14. Comprehensive Land use management Programme:

Under this programme, it is proposed to strengthen frozen semen Bank at Munirebad and to Establish liquid Nitrogen Plant in five districts viz. Raichur, Bellary, Dharwar, Chitradurga and Hassan covering 15 Mandals. Besides this, placing of dairy production Centres like Milk collection Centres, Breeding, Managemental practices and Animal Health coverage, and also setting up of community Cattle sheds (staff feeding) with Bio-gas plants (Making use of dung and urine) and to increase fodder production will also be covered.

Eighth Plan Outlay .1992-97 Rs.4067.00 lakhs

Annual Plan outlay 1992-93 Rs,1064.00 lakhs

15. Registration of Hatcheries:

The scheme envisages to ensure the production of quality chicks produced by the Private Hatcheries. To achieve this objective, the Government has already enforced the Essential Commodities Act in the State.

Eighth Plan outlay Rs. 20.00 lakhs

Annual Plan outlay 1992-93 Rs. 3.50 lakhs

16. E.S.O. of Egg Marketing Board:

It is mooted to establish Poultry Corporation/ Federation in the State. The Government Of India will assist this Board for construction of buildings, purchase of furniture and equipments etc., besides marketing of Poultry products.

Eighth Plan outlay Rs.150.00 lakhs

State Rs. 75.00 "

Central Rs. 75.00 "

Annual Plan outlay 1992-93 Rs. 5.00 "

State Rs. 2.50 "

Central Rs. 2.50 1 "

17. Assistance to Poultry Co-operative Societies

(100% NCDC assistance) :

This scheme was taken up during 1987-88. The main objective is to assist the Poultry Co-operative Societies in infrastructure development and to create marketing facilities. This scheme attracts reimbursement from the National Co-operative Development Corporation.

Eighth Plan outlay 10.00 lakhs

Target 5 Societies

Annual Plan outlay 1992-93 2.00 lakhs

Target 1 Society

18. Strengthening of State Poultry Farms :

It is proposed to equip and modernise the existing hatcheries in Poultry farms of the Department.

Eighth Plan outlay Rs. 50.00 lakhs
Annual Plan outlay 1992-93 Rs. 3.00 lakhs

19. Buildings under Poultry Development :

a) Provision is for infrastructure development in the existing poultry farms of the Department.

Eighth Plan outlay Rs. 15.00 lakhs
Annual Plan outlay 1992-93 Rs. 1.50 lakhs

b) The provision is for the maintenance and repairs of the existing buildings of the farms.

Eighth Plan outlay Rs. 10.00 lakhs
Annual Plan outlay 1992-93 Rs. 1.00 lakh.

20. C.S.S. of Sheep Breeding Development Farms :

The provision is for infrastructure development at Challakere Sheep Breeding Farm.

Eighth Plan outlay Rs. 80.00 lakhs
State Rs. 40.00 "
Central Rs. 40.00 "
Annual pPlan outlay 1992-93 Rs. 4.00 "
State Rs. 2.00 "
Central Rs. 2.00 "

21. Up-gradation of Non-descript Goat:

The State is having goat population of about 44 lakhs and mostly non-descriptive type. Their production level is not comparable with the improved breed. Therefore, it is felt necessary to upgrade the local goat flock by introducing Jamnapuri Buck which is pure breed of high milk yeild.

Eighth Plan outlay Rs. 20.00 lakhs
Annual Plan outlay 1992-93 Rs. 2.00 "

22. Sheep Development Project with World Bank Assistance :

A massive Project for Sheep and Sheep Product Development has been drawn up. The State Government has cleared the project and at present, it is with the Government of India for placing it before the Indo-Australian bi-lateral assistance. The project envisage sheep and sheep products development in nine districts for the State. A token provision has been made.

Eighth Plan outlay	Rs. 100.00 lakhs
Annual Plan outlay 1992-93	Rs. 0.10 "

23. Development of Bannur Sheep

Bannur Sheep is known for its meat quality. The objective of the scheme is to encourage women folk, who are below the poverty line to take up this activity. Under this scheme, each woman will be assisted by provision of 10 Ewes & one Ram.

Eighth Plan outlay	Rs. 20.00 lakhs
Annual Plan outlay 1992-93	Rs. 2.00 "

24. C.S.S. for Organisation of Wool Board:

The provision is for infrastructure development to the existing Wool Board.

Eighth Plan outlay	Rs. 200.00 lakhs
State	Rs. 100.00 "
Central	Rs. 100.00 "
Annual Plan outlay 1992-93	Rs. 5.00 "
State	Rs. 2.50 "
Central	Rs. 2.50 "

The "C.S.S. under Sl.No. 22 and 26 may be clubbed into one scheme viz. "C.S.S. for organisation of Wool Board and development of Sheep Farms".

25. Assistance to Sheep Board for Development :

In order to popularise woollen articles, it is necessary to introduce modern equipments and machinery at the existing Sheep Farms. It is also proposed to provide infrastructure for training at Sheep Farm Surthi and Anegawadi.

Eighth Plan outlay	Rs. 55.00 lakhs
Annual Plan outlay	Rs. 6.00 "

6. Buildings under Sheep Development :

a) The provision is for additional construction to the existing sheep farms.

Eighth Plan outlay	Rs. 10.00 lakhs
Annual Plan outlay 1992-93	Rs. 0.50 "

b) Provision is also made for the maintenance of existing building in the Sheep Farm of the Department.

Eighth Plan outlay	Rs. 20.00 lakhs
Annual Plan outlay 1992-93	Rs. 2.00 "

27. Establishment of Bacon Factory:

It is proposed to establish a medium scale Semi-automatic Bacon factory with a capacity of 30 animals per day to meet the increased demand for processed pork and bacon products.

Eighth Plan outlay	Rs. 20.00 lakhs
Annual Plan outlay 1992-93	Rs. 2.00 "

28. Assistance to Piggery Co-operative Societies with NCDC.:

Some organisations which have started farming societies for rearing of pigs in the State will be assisted financially through NCDC.

Eighth Plan outlay	Rs. 5.00 lakhs
Annual Plan outlay 1992-93	Rs. 1.00 "

29. Range Land Revegetation Project with Swiss Aid :

The project is envisaged to develop Amzithmahal Kaval Lands as demonstration for large scale grass land revegetation. A token provision has been made.

Eighth Plan outlay	Rs. 25.00 lakhs
Annual Plan outlay 1992-93	Rs. 0.10 "

30. C.S.S. of Strengthening of Fodder Seed Production Programme:

There is a dearth of good quality fodder seeds of grass and legumes and fodder crops in the State. It is, therefore, proposed to strengthen the existing fodder seed farms at Composite Livestock Farms and Research Station, Hesaraghatta, Combined Sheep and Cattle Farm, Kuzikuppi and Red Dane Project, Hesaraghatta.

Eighth Plan outlay	Rs. 100.00 lakhs
State share	Rs. 50.00 "
Central share	Rs. 50.00 "
Target 300 Hactares	3000 M.T. of fodder seeds.
Annual Plan outlay 1992-93	Rs. 10.00 lakhs
State	Rs. 5.00 "
Central	Rs. 5.00 "
Target	25 Hactares 250 M.T. of fodder seeds.

31. Distribution of Fodder Minikits :

The minikit demonstration programme was organised by Government of India during Seventh Five Year Plan and it is proposed to continue this under the State Plan.

Eighth Plan outlay	Rs. 10.00 lakhs
Target 7000,000 beneficiaries.	
Annual Plan outlay 1992-93	Rs. 1.00 "
Target 50,000 beneficiar ies.	

32. Establishment of Fodder Banks:

It is p roposed to establish four fodder banks, one in each Division to store dry fodder to meet the requirements.

Eighth Plan outlay	Rs. 25.00 lakhs
Annual Plan outlay 1992-93	Rs. 1.00 "

33. Enrichment of Fodder Demonstration Programme:

Since farmers feed the cattle with poor quality of roughages like jowar, maize, kadabi, paddy straw, etc., which are of poor quality and fibrous in nature, it is

desirable to treat and enrich this fodder with urea mollasses treatment, or Ammonia treatment for better utilisation of these fodder resources. This programme, envisages purchase of vehicle and equipment for conducting demonstration in rural areas.

Eighth Plan outlay	Rs. 30.00 lakhs
Annual Plan outlay 1992-93	Rs. 1.00 "

34. Establishment of Fodder tree nursery:

In order to popularise planting of fodder tree seedlings by the farmers in their fields, it is felt necessary to establish fodder tree nurseries like Subbenia, Kamara, Dalbarga etc., in Government Livestock Farms and to distribute during planting seasons in large scale so that farmers can avail the benefits.

Eighth Plan outlay	Rs. 20.00 lakhs.
Target	50 Seedlings
Annual Plan outlay 1992-93	Rs. 1.00 lakh
Target	50 seedlings

The Schemes under Sl.No. 33 to 36 are proposed to be clubbed into one Scheme viz. Fodder Development Programme minikits, establishment of Fodder Banks and fodder tree nursery.

35. Veterinary Education and Training:

This is only staff Component.

Eighth plan outlay	Rs. 10.00 lakhs
Annual Plan outlay 1992-93	Rs. 2.50 lakhs

36. Deputation of In-service Personnel for Training:

Eighth Plan outlay	Rs. 10.00 lakhs
Annual Plan outlay 1992-93	Rs. 1.00 "

The Schemes under Sl.No. 35 and 36 are proposed to be clubbed into one Scheme viz. Veterinary Education and Deputation of In service personnel for training.

37. Animal Husbandry Statistics and Livestock Census:

This is only staff component.

Eighth Plan outlay Rs. 7.50 lakhs

Annual Plan outlay 1992-93 Rs. 0.50 "

38. C.S.S. for Sample Survey Scheme for milk, egg, wool.

This is a Centrally Sponsored Scheme, which envisaged to conduct sample survey of production of milk, egg and wool in the State. The provision is to meet the salary component.

Eighth Plan outlay Rs. 10.00 lakhs

State Rs. 5.00 "

Central Rs. 5.00 "

Annual Plan 1992-93 Rs. 3.00 "

State Rs. 1.50 "

Central Rs. 1.50 "

39. Propaganda and Monitoring:

Outlay is for maintaining various plan programmes of the Department and to educate the farmers about the Animal Health care and for introducing milk production and fodder communication through films.

Eighth Plan outlay Rs. 5.00 lakhs

Annual Plan 1992-93 Rs. 0.50 "

40. Establishment of Rabbit Farms:

Provision is for the maintenance of Rabbit breeding Centres established at Livestock Farm, Hesaraghatta. Farmers will be trained to take up rearing of rabbit.

Eighth Plan outlay Rs. 5.00 lakhs

Annual Plan 1992-93 Rs. 1.00 "

41. C.S.S. Small/Marginal Farmers and Agrl. Labourers to assist for Piggery, Poultry and Sheep Production

Programme:-

The provision is for salary component.

Eighth Plan outlay	Rs. 15.00 lakhs
State	Rs. 7.50 "
Central	Rs. 7.50 "
Annual Plan outlay 1992-93	Rs. 3.00 "
State	Rs. 1.50 "
Central	Rs. 1.50 "

The schematic details for the district sector have not been worked out as they will be forwarded by the Zilla Parishads.

VII.F KARNATAKA COOPERATIVE MILK PRODUCERS FEDERATION
LIMITED

Present Status:-

Karnataka Cooperative Milk Producers Federation Limited (KMF) has been designated as implementing agency for Operation Flood-III project in Karnataka, with an outlay of Rs.100.76 crores. Financial assistance for capital investments in the District Milk Unions flows from National Dairy Development Board. The main objective of KMF is coordination of various phases in production of milk and milk products like procurement, processing marketing and distribution. The ultimate objectives are to ensure remunerative prices to producers and supply processed milk to the consumers at reasonable rate, thereby achieve the Social objectives.

Review of Seventh Plan and Annual Plan, 1990-91 and 1991-92.

During the Seventh plan period, KMF implemented five plan schemes with total expenditure of Rs.1208 lakhs; targets and achievements during the period are furnished below:

	financial		Physical **	
	Outlay	Expendi- ture	Target	Achieve- ment
	(Rs.in lakhs)			
1) Union Operating expenses (milk procurement lakh in lakh M.T)**	857.80	815.80	11.62	13.94

	Financial		Physical	
	Outlay	Expenditure	Target	Achievement
(Rs. in lakhs)				
2) Milk enhancement programme (cattle feed sold in lakh M.T.)**	218.00	218.00	1.84	2.01
3) Training and Extension (No. of trainees trained)**	115.00	115.00	11656	11296
4) Expansion of miltone project	40.00	40.00	-	-
5) "298 Cooperation" Grants to DCSs (No. of DCSs assisted)**	19.00	19.00	12.50	1341

Expenditure and achievement during 1990-91 and 1991-92 are given below:

Item	Expenditure (Rs. in lakhs)	
	1990-91	1991-92
1. Animal Health care	180.00*	160.00
2. Training & Extension	20.00	38.00
3. Milk Enhancement Programme	40.00	40.00
4. Infrastructure facilities	40.00	60.00
5. Special Component Plan	-	25.00
6. Tribal Sub-plan	-	5.00
7. Support to Dairy Cooperatives	-	10.00
8. All Women DCSs.	-	12.00
Total	280.00	350.00

*Includes Rs.21.00 lakhs for SCP & Rs.5.00 lakhs for TSP

Item	Achievement	
	1990-91	1991-92 (Anticipated)
1. a) Milk Procurement (lakhs M.T.)	3.34	3.68
b) Semen doses (No. of doses in lakhs)	6.63	8.72
2. No. of persons Trained	7025	8340
3. a) Cattlefeed Sales(MT)	46253	57800
b) LN2 Production (in lakh litres.)	1.19	2.64
4. All Women Dairy Coopera- tive Society (No.)	-	40
5. Special Component Plan	250	298
6. Tribal Sub-Plan	60	60
7. Support to Cooperatives	-	500

Eighth Plan Programmes:-

The proposed outlay during the Eighth Plan is Rs.3021.00 lakhs of which Rs.1271.00 lakhs is earmarked for CLUMP. The balance amount of Rs.1750.00 lakhs is for Karnataka Milk Federation activities.

The following schemes are proposed for the Eighth Five Year Plan and main objectives and strategies of the schemes are furnished below:-

- 1) Animal Health care
- 2) Training & Expansion
- 3) Milk Enhancement programme
- 4) Infrastructure facilities
- 5) Special component plan
- 6) Tribal Sub-plan
- 7) All Women Dairy Cooperative Societies.

Schemewise Strategies :

1) Animal Health care:-

Animal Health coverage.— It is expected that about 35 lakh female calves will be born by way of Artificial Insemination activities during Eighth Five Pla period. At the end of Eighth Plan, about 15 lakh farmer members in the Dairy Cooperative Societies are expected to be covered and Milk procurement will be about 16 lakh kgs per day.

VIII Plan Outlay : Rs.800.00 lakhs

1992-93 Plan Outlay : Rs.160.00 lakhs

2) Training & Extension:-

The main objective is to impart training to the farmer members of Dairy Co-operative Societies.

VIII Plan Outlay : Rs.133.00 lakhs

1992-93 Plan Outlay : Rs.30.00 lakhs.

3) Milk Enhancement Programme:

It is estimated to produce 90,000 M.T. of nutritive cattlefeed from all three cattle feed plants of KMF, so as to provide the feed to farmer members at uniform reasonable rates.

VIII Plan Outlay : Rs.300.00 lakhs

1992-93 Plan Outlay: Rs. 69.00 lakhs.

4) Infrastructure facilities:-

The Government of Karnataka have agreed to provide land, water & electricity and land development cost

for establishment of New dairies under Operation Flood-III. Accordingly, the cost of these facilities is being met from Grants. The major share of new Dairies will be in the Northern Karnataka.

VIII Plan Outlay : Rs.200.00 lakhs
1992-93 Plan Outlay : Rs.60.00 lakhs.

5) Special Component Plan:-

The main objective of the scheme is to uplift the schedule caste families above the poverty line by way of providing Animals to schedule caste families at 60% of the cost of the Animal as subsidy.

VIII Plan Outlay : Rs.181.00 lakhs
1992-93 Plan Outlay : Rs.21.00 lakhs.

6) Tribal Sub-Plan:-

The scheme is implemented on the lines of Special Component Plan for the benefit of tribal families.

VIII Plan Outlay : Rs.26.00 lakhs
1992-93 Plan Outlay : Rs.5.00 lakhs.

7) All Women Dairy Cooperative Societies:-

The objective is to provide basic facilities to All Women Dairy Cooperative Societies so as to encourage the women folk to form exclusive Women DCSS in the village level.

VIII Plan Outlay : Rs.60.00 lakhs
1992-93 Plan Outlay ; Rs.12.00 lakhs.

VII G. INSTITUTE OF ANIMAL HEALTH AND VETERINARY
BIOLOGICALS

Present Status :

The Institute of Animal Health and Veterinary Biologicals is an autonomous body, receiving grant-in-aid from the Government of Karnataka. It is entrusted with the responsibility of supplying the Veterinary Biologicals required by the Department of Animal Husbandry and Veterinary Services, extending Diagnostic facilities and carrying out research on animal diseases.

Review of the Seventh Plan:

During the Seventh Plan period, an outlay of Rs.150.00 lakhs was provided. As against this, expenditure incurred was Rs.145.91 lakhs. Highlights of achievement under various programmes are presented below.

1. Construction of Modern Laboratory Complex and Establishment at Hebbal:

During the Seventh Plan period, Rs.130.24 lakhs was utilised for completion of Modern Laboratory at Hebbal. All the civil works were completed. The building was partly equipped and embellished. The vaccine production laboratories were occupied. During Seventh Plan period, emphasis was laid on the production of Rinderpest and Sheep Pox Cell culture vaccines. In addition, importance was given for the production of Antigen for the diagnosis of disease viz., Salmonellosis and Brucellosis. Efforts were made for enhanced production of bacterial vaccines. During the period, a total of 445.36 lakh doses of bacterial vaccine, 881.52 lakh doses of viral vaccines, 99.22 lakh ml. of diluents, and 13.19 lakh ml antigens were produced.

2. I.C.A.R. Sponsored Schemes :

(a) AICRP for the Epidemiological Studies on FMD:

The Unit of All India Co-ordinated Research Project for Epidemiological Studies on Foot and Mouth Disease was continued during the Seventh Plan Period as an on-going scheme. This is funded by Indian Council of Agricultural Research (I.C.A.R) and Government of Karnataka on 75:25 basis. The unit was upgraded to that of a Regional Centre in this Plan Period. With the up-gradation, Foot and Mouth disease Virus Typing facility was established. This has facilitated quick diagnosis of the disease and helped in FMD containment programme in the State.

In all, a total of 380 outbreaks were investigated during the Seventh Plan Period.

Rs.3.70 lakhs was spent on this programme, as State Share :

b) All India Co-ordinated Research Project on Development of a System of Monitoring, Surveillance and Forecasting of Important Animal Diseases :

AICRP on Development of a system for Monitoring, Surveillance and Forecasting of important Animal Diseases was initiated during the Seventh Plan Period. Expenditure on this project is shared on 75:25 basis by the Indian Council of Agricultural Research and Government of Karnataka. The project work was undertaken in selected villages of Devanahalli and Doddabalapur Taluks. 2% of the households of the project area were randomly chosen for continuous monitoring and surveillance. The data and samples collected were analysed. Seromonitoring was also undertaken.

Expenditure on State account was Rs.5.72 lakhs.

C) Centrally Sponsored Scheme for Production of Cell Culture Viral Vaccines and Diagnostic Antigens:

During the Plan period, Cell Culture Sheep Pox Vaccine was developed and produced. In addition to this, diagnostic antigens required by the State were also produced and supplied. The laboratory was equipped according to requirement. State share in the expenditure is 50%, the actual expenditure being Rs.6.25 lakhs. The programme has concluded.

Due to inadequacy of funds during the Seventh Plan, bacterial vaccine production sections were not equipped to the required extent for adopting the latest techniques in the production of vaccines. Even in the viral vaccines, the production fell short of the demand to an extent of 35% to 40%. This was mainly due to want of sufficient number of Freeze Dryer units. Further, all the facilities required for screening of the biologicals as stipulated by the Drugs and Cosmetic Act could not be created.

Strategy for the Eighth Plan:

The existing equipments and machinery are old and have limited capacity. They are required to be replaced with modern equipments with higher capacity. There is need to switch over to technology like fermentation, cell culture technology and employment of breeze dryers. Eighth Plan Programmes are formulated to bridge these gaps.

Programmes for the Eighth Plan:

A provision of Rs.250.00 lakhs has been made to the Institute for taking up various developmental activities, detailed below.

a) On-going Schemes:

1) AICRP for Epidemiological Studies on Foot and Mouth Disease Regional Centre(25:75)

The Epidemiological study on Foot and Mouth Disease in Karnataka is an on-going ICAR co-ordinated research project to study the Epidemiological aspects of FMD and identification of strains of Foot and Mouth Disease since 1976.

VIII Plan Outlay : Rs.14.70 lakhs.

1992-Plan Outlay : Rs.2.84 lakhs.

2) AICRP on Development of a System of Monitoring Surveillance & Forecasting of Important Animal Disease (ICAR) (25:75)

This project was initiated during the middle of Seventh Plan period, for establishment of intensive study areas and installation of meteorological monitoring equipments in the selected cluster villages, for developing a system for Monitoring, Surveillance and Forecasting of Important Animal Diseases.

VIII Plan Outlay : Rs.15.55 lakhs

1992-93 Plan Outlay;Rs. 5.55 lakhs

b.) New Projects:

1) Strengthening of Biological Production Unit for Production of New Biologicals and Diagnostic Antigens:

The present Biological production techniques used are traditional, costly and more labour oriented. In order to replace them, the Institute is planning to procure fermentors for increasing the production of bacterial vaccines and suspension culture in viral vaccine production and introduce new biologicals.

VIII Plan Outlay: Rs.96.00 lakhs.

1992-93 Plan Outlay: Rs.4.00 lakhs.

2) Strengthening of Central Disease Investigation Unit and Four Regional Disease Investigation and Research Units:

The existing disease investigation and diagnostic facilities available at the Central Unit in Bangalore and the four regional Research units of the Institute located at Bellary, Gulbarga and Mangalore are grossly inadequate to meet the rising demand of services of the farmers. In the Eighth plan, strengthening and expansion of these facilities is proposed. These additional facilities will enable the Institute to provide prompt diagnostic services, using new technology, not only for the existing diseases, but also to identify and control emerging and exotic diseases which affect rural economy.

VIII Plan Outlay: Rs.73.37 lakhs.

1992-93 Plan Outlay: Rs.13.35 lakhs.

3) Strengthening of Existing Quality Control Unit:

The existing facilities for Quality Control at the Institute have been found to be inadequate as stipulated by the Drugs and Cosmetics Act of Government of India. In the Eighth Plan, high disease security and vaccine testing facilities are proposed for better containment of disease causing agents used for quality testing purposes.

VIII Plan Outlay: Rs.50.38 lakhs

1992-93 plan Outlay: Rs.4.26 lakhs

VII-H.FISHERIES

Present Status:

Karnataka State is endowed with 4.57 lakh hectares of Inland Fishery resources, consisting of 2.35 lakh ha. of tanks and ponds and 2.22 lakh ha. of reservoirs. Further it has 6,000 Kms. of rivers, 8,000 ha. of brackish water area, rich continental shelf of 25,000 sq. Kms. and 300 Kms. of coastline.

Presently, an area of 5,000 sq. Kms. of continental shelf is being exploited by small mechanised boats. State's mechanised fishing fleet has 1964 trawlers, 395 purse-seiners and 884 mechanised gillnet units, in addition to 12,000 traditional boats intensively operating in the inshore waters. The marine fish catches fluctuated between 1.30 lakh tonnes and 2.00 lakh tonnes during the Seventh Plan period; the average marine fish catch was 1.66 lakh tonnes. Fisheries play a very important role in the economy of coastal districts of the State. Nearly 45,000 fishermen are engaged in the industry in the coastal districts.

Inland Fisheries play an important role in the economy of the State for augmenting food supply, generating employment and raising nutritional value. Less than half of the existing inland fishery potential is being utilised for fish production, mainly on account of shortage of fish seed. Efforts have been made in the successive Plan periods to increase the fish seed production; fish seed production at the end of the Seventh Plan was around 140 million fry and average inland fish production was around 50,000 tonnes.

The State has 8,000 hectare brackish water resources, out of which about 4,200 hectare are identified as suitable for prawn farming, about 2,500 hectares of Kharland and 1000 hectares of salt pans can be utilised for raising one crop of prawns by stocking and

artificial feeding to produce about 500 to 600 Kgs. of prawn as against 100 Kgs of Prawn and 200 Kgs of fish per hectare of brackish water traditional method. Brackish Water Fish Farmers' Development Agency with Central Assistance has been established at Karwar with jurisdiction over two coastal districts for the upgradation of technology for prawn and fish farming.

Review of Seventh Plan and Annual Plans 1990-91 and 1991-92:

Seventh Plan agreed outlay for Fisheries was Rs.2,000.00 lakhs of which Rs.1051.00 lakhs was in the State Sector and Rs.949.00 lakhs in the District Sector. Actual expenditure was Rs.1478.42 lakhs. Annual Plan outlays for the year 1990-91 and 1991-92 was Rs.474.31 lakhs and Rs.629.52 lakhs respectively.

a) Inland Fisheries:

Seventh Plan laid emphasis on augmentation of fish seed production and fish culture. Fish seed production at the beginning of the Seventh Plan was 77.50 million fry; it reached a level of 138.00 million fry at the end of the Plan. Eighteen fish farms which were transferred to Karnataka Inland Fisheries Development Corporation to manage the seed farms on commercial lines and increase production have been taken over by the Department due to the closure of KIFDC during 1991-92. During 1990-91, fish seed production was 135 million fry and fish production was 53,000 million tonnes. The target for 1991-92 are 200 million fry and 65000 million tonnes of inland fish production. The reasons for not realising Seventh Plan targets of 80,000 million tonnes of fish production and 165 million fry are untimely rains and drought conditions.

Under the Centrally Sponsored National Fish Seed Production Programme, construction of a 10 hectare fish farm with Chinese hatchery taken up at total cost of Rs.52.00 lakhs at B.R.Project is almost completed and seed production is already in progress. The anticipated production of this farm is 25 million fish seed in terms of fry.

In order to accelerate development of Inland Fisheries in the State, N.C.D.C. Reservoir Fisheries Project at a cost of Rs.473.80 lakhs has been taken up for implementation in Mysore District, through the newly established Karnataka Inland Fisheries Federation. Two fish seed farms of 10 hectares each, with hatchery, will be established at Kabini and Gundal to produce additional 50 million fry for stocking the project tanks in Mysore District.

The Centrally Sponsored Fish Farmers' Development Agencies are functioning in eight districts and three State Fish Farmers' Development Agencies have been satisfactory progress in the implementation of intensive fish culture programmes. During Seventh Plan Period, 2910 fish farmers have been trained in intensive fish culture practices; 7,747 hectares of water area has been brought under improved fish culture and 3,646 tonnes of fish was produced by these Agencies. During 1990-91, 534 candidates were trained in fish culture practices and 1280 hectares of water area was brought under fish culture by stocking 87 lakhs of fish fseed (fingerlings).

Inland fish production as at the end of Sixth Plan was 40,000 million tonnes and reached a level of 55,000 million tonnes by the end of Seventh Plan. Increase in inland fish production is marginal, due to non-utilisation of inland resources to the maximum extent for want

of sufficient quantity of quality fish seed. There is need to increase fish seed production by expansion of existing fish farms and construction of new fish farms under different schemes. The new subsidy scheme which provides assistance to private sector for fish seed production and rearing farms will boost fish seed and fish production.

b) Marine Fisheries:

The State has endeavoured to develop marine fisheries by diversifying fishing methods through improved infrastructural facilities, especially fishing harbours and by improving distribution and marketing of marine fish catches. Emphasis is also laid on improving socio-economic condition of fishermen.

Major developmental activities consisted of construction of Mangalore harbour, improvement and maintenance of existing fishing harbours, implementation of the DANIDA assisted Indo-Danish Fisheries Project, Tadri, motorisation of traditional fishing crafts, financial assistance to traditional fishing, improvement of infrastructural facilities in coastal villages; in addition, socio-economic programmes were also implemented for the welfare of fishermen.

A Brackish Water Fish Farmers' Development Agency at Karwar was established during May 1987 to develop the Brackish Water areas for prawn farming. The Scheme provides for imparting training to entrepreneurs and providing inputs and technical know-how about scientific prawn farming. The agency has so far trained 65 Prawn farmers and prepared feasibility reports for development of 16.17 hectare brackish water area for prawn farming. The Agency has conducted survey of 300 hectare of brackish water area and the jurisdiction of the agency

has been extended to Dakshina Kannada district during 1989-90. The progress under Brackish water area development is slow for want of technical persons for survey and preparation of feasibility reports, besides non-finalisation of the leasing policy to lease Government owned lands to prawn culturists. However, now the policy has been finalised.

The Agency has taken up construction of prawn hatchery at an estimated cost of Rs.33.25 lakhs. This is expected to be completed shortly.

Eighth Plan Strategy:

The Eighth Plan aims at increasing the utilisation of State's potential in fisheries and thereby, augment supply of nutritional food and improve economic condition of population dependent on fishing activity.

In Inland Fisheries, the Plan lays emphasis on the following:

- i) conservation measures, restricting indiscriminate fishing during breeding season;
- ii) expansion of area under fish farms;
- iii) setting up new fish seed rearing centres near selected reservoirs, besides encouraging entrepreneurs to take up fish seed production;
- iv) development of reservoir fisheries;
- v) desilting of tanks, thereby creating more water area; and
- vi) development of infrastructural facilities, more specifically, transport and marketing.

For the Marine Fisheries, the thrust areas of the Plan will be:

- i) construction of II Stage Malpe Fishing Harbour for deep sea fishing vessels, implementation of Phase II of the Indo-Danish

Fisheries Project, construction of minor fishing harbours in order to provide landing and berthing facilities to small boats and country crafts, which are facing problems in major fishing harbours;

- ii) Annual maintenance of fishing harbours through dredging and other activities;
- iii) emphasis on off-shore and deep sea fishing, in view of in-shore fisheries exploitation reaching saturation point;
- iv) rehabilitation of people affected by the Naval Base;
- v) training and extension programmes by strengthening existing training centres;
- vi) augmenting the needed infrastructural facilities; and
- vii) implementation of Marine Fishing Regulation Act, for conservation and proper management of Marine Fishing for the benefit of fishermen.

Eighth Plan Programmes:

1. Direction and Administration:

Provision is made to meet the expenditure on the proposed re-organisation of the Department by restructuring streamlining the machinery.

Outlay:- 1992-97	Rs.10.00 lakhs
1992-93	Rs. 1.00 lakhs

2. Fish Seed Production, Rearing and Distribution:-

Provision is made to meet the expenditure on maintenance of 18 fish farms, which are taken back from the Karnataka Inland Fisheries Development Corporation and on procurement of fish seed from the private entrepreneurs, who have been assisted in fish seed production and also towards fish seed transport vehicles and departmental vehicles. It is also envisaged to develop

strategic river portions of Cauvery, Krishna and Tungabhadra by stocking fish fingerlings of commercially important fishes. Provision is also made for pollution studies in the river stretch of Tungabhadra near Davanagere and Harihar taluks.

Outlay:-	1992-97	Rs.170.00 lakhs
	1992-93	Rs. 45.00 lakhs

3. Reservoir Fisheries Development:-

Under the Scheme, 16 Reservoirs with a water spread area of 45,000 ha. will be developed by stocking them annually with about 100 lakhs of standard fingerlings. Anticipated production is about 1000 M.T. by the end of the Eighth Plan. Provision has been made to meet the expenditure on salary component and equipments for rearing fish seed.

Outlay:-	1992-97	Rs. 50.00 lakhs
	1992-93	Rs. 10.00 lakhs

4. National Fish Seed Programme:-

The spill-over works of National Fish Seed Farm at B.R. Project will be completed and it is proposed to construct staff quarters to group 'C' and 'D' employees and provision is also made for purchase of farm equipments. The farm will produce 25 million fish seed(fry) annually.

Outlay:-	1992-97	Rs.20.00 lakhs
	1992-93	Rs. 5.00 lakhs

5. N.C.D.C. Sponsored Reservoir Project in Mysore District:-

The project formulated for intensive fisheries development in Mysore district will be continued. Provision is made to meet State's share and also for the

maintenance of Kabini, Nagu and Gundal Farms transferred to the Inland Fisheries Federation.

Outlay:-	1992-97	Rs.50.00 lakhs
	1992-93	Rs.20.00 lakhs

6. Assistance to Fish Seed Production in Private Sector:

The State is facing acute shortage of fish seed, which is borne out by the fact that as against the potential requirement of 80 crores of fingerlings for optimum development of inland fisheries, the present production is at 6 to 7 crores per annum. In order to supplement the efforts of the State Government, a new scheme, namely, "Assistance to fish seed production in Private Sector" was sanctioned during 1990-91. The scheme provides for sanction of 25% subsidy subject to maximum of Rs.1.00 lakh for construction of one ha. of fish seed production farm and Rs.0.75 lakh for construction of fish seed rearing ponds.

Outlay:-	1992-97	Rs.60.00 lakhs
Physical Target:	60 entrepreneurs	
	1992-93	Rs. 6.00 lakhs
Physical Target:	6 entrepreneurs.	

7. E.E.C. Aided Inland Fisheries Development Project:

Provision is made to meet NCDG sponsored Inland Fisheries Development Project, Phase-II. It is likely to commence during 1992-93. The scheme envisages construction of fish seed farm and development of tanks and reservoirs through Fisheries Co-operatives in Shimoga, Raichur and Dharwar districts.

Outlay:-	1992-97	Rs.50.00 lakhs
	1992-93	Rs. 5.00 lakhs

8. Estuarine/Brackish Water Fisheries: C.S.S.
Strengthening of Technical Wing (50:50)

Government of India have introduced the scheme to strengthen the Technical Wing of the Directorate to enable the State Government to take up investigation of project sites and formulate viable prawn farming projects in the coastal district.

	(Rs. in lakhs)	
	<u>1992-97</u>	<u>1992-93</u>
Total outlay	20.00	4.00
State	10.00	2.00
Central	10.00	2.00

9. Marine Fisheries: C.S.S. Motorisation of Traditional Fishing Crafts (50:50):

It is an on-going scheme which will be continued in the Eighth Plan. The Scheme provides for motorisation of traditional crafts with out-board motors at a cost of Rs.20,000/- per boat. The Government of India and the State Government would bear 50% of the cost, on a sharing pattern of 50:50, while remaining cost would be met by raising loans from the financial institutions. It is proposed to motorise 400 Traditional Crafts during VIII Plan and 80 traditional crafts in 1992-93.

	(Rs. in lakhs)	
	<u>1992-97</u>	<u>1992-93</u>
Total outlay	40.00	8.00
State	20.00	4.00
Central	20.00	4.00

10. Indo-Danish Fisheries Project:

The Indo-Danish Fisheries Project Phase - I, will come to an end, in March 1992 and it is proposed to take up the Second Phase of the Project during

the Eighth Plan period. The estimated cost of the Second Phase is Rs.375.00 lakhs (DANIDA component of Rs.278.00 lakhs and State's share of Rs.97.00 lakhs).

Outlay - 1992-97 -Rs.375.00 lakhs
 1992-93 -Rs.100.00 lakhs

11. C.S.S. Fishing Harbours:

Provision is for maintenance of existing fishing harbours and for taking up construction of Malpe Second Stage fishing harbour. The Mangalore Fishing Harbour will be completed.

	(Rs. in lakhs)	
	<u>1992-97</u>	<u>1992-93</u>
Total outlay	600.00	134.00
State	350.00	74.00
Central	250.00	60.00

12. Dredging of Fishing Harbours:

Heavy siltation in all minor and major harbours is a periodic occurrence, obstructing the operation and berthing of fishing vessels. It is essential to dredge all fishing harbours in a phased manner. The dredging work will be entrusted to State Post Department.

Outlay - 1992-97 - Rs.84.00 lakhs
 1992-93 - Rs.15.00 lakhs

13. Marine Fisheries Regulation Act:

This was enacted in the year 1986 and rules framed in 1987. But this Act could not be enforced for want of suitable staff, speed boats, etc. Government of India will be providing 50% assistance to implement this Act.

Outlay - 1992-97 - Rs.50.00 lakhs
 1992-93 - Rs.10.00 lakhs

14. Processing, Preservation and Marketing: Loans to Local Bodies for Construction of Fish Markets:

The Scheme of providing loan-cum-subsidy to local bodies for construction of fish markets will be continued.

Outlay:	1992-97	-Rs.10.00 lakhs
	1992-93	-Rs. 2.50 lakhs

15. Extension and Training:

Under the scheme, it is intended to train rural youths in the Departmental Training Centres at K.R. Sagar and Bethamangala. Training will also be imparted to the Pradhan and Members of Mandal Panchayats, besides training of officers and officials of the Department. The scheme also envisages extension work in the purchase of extension equipments and publication of literature on fisheries development activities. Separate scheme of Fisheries Extension is dropped.

Outlay:	1992-97	-Rs.25.00 lakhs
	1992-93	-Rs. 5.00 lakhs

16. Exhibition:

The expenditure towards participation of the Department in the State level Exhibition and in the Dasara Exhibition at Mysore will be met under the scheme.

Outlay:	1992-97	-Rs.10.00 lakhs
	1992-93	-Rs. 2.00 lakhs

17. Assistance to Public Sector Undertakings: Karnataka Fisheries Development Corporation and Karnataka Inland Fisheries Development Corporation:

Ice-cum-Freezing complex of the Indo-Danish Fisheries Project was handed over to Karnataka Fisheries

Development Corporation for maintenance during 1989-90. To enable its maintenance and operation and to assist the Karnataka Fisheries Development Corporation, provision has been made towards share capital. Even though the Karnataka Inland Fisheries Development Corporation has been wound up, expenditure has to be incurred on minimum skeleton staff to finalise the accounts, etc., for which provision of Rs.1.00 lakh is made for 1992-93 only.

Outlay:	1992-97	Rs.40.00 lakhs
	1992-93	Rs. 6.00 lakhs

18. Fishermen Welfare Schemes:

a) C.S.S. Group Accident Insurance Scheme:

Under the on-going scheme, Insurance Coverage is extended to the fishermen, who are exposed to the hazards of natural calamities while fishing. The insurance premium of Rs.10.84 lakhs is provided by both the State and Centre on 50:50 basis and released every year to the National Federation of Fishermen Co-operatives 65,000 fishermen are proposed to be insured annually.

	(Rs.in lakhs)	
	<u>1992-97</u>	<u>1992-93</u>
Total outlay	36.00	7.00
State share	18.00	3.50
Central Share	18.00	3.50

b) C.S.S. National Welfare Fund to Fishermen:

The on-going scheme provides for construction of 100 houses for the fishermen, with other civic

amenities like community hall, water supply, etc. The scheme attracts 50% Central assistance. It is proposed to construct 500 houses under the scheme during the Plan period. The on-going works of the previous Plan periods will be completed.

	(Rs. in lakhs)	
	<u>1992-97</u>	<u>1992-93</u>
Total outlay	100.00	40.00
State Share	50.00	20.00
Central Share	50.00	20.00

19. Setting up of Aquaria:

Under the on-going scheme, Aquaria will be established in most of the district headquarters not only to educate people, especially children, about fish and fisheries but also to exhibit colourful and rare varieties of fish as an attraction. Works taken up during previous Plan periods will also be completed.

Outlay	1992-97	Rs. 40.00 lakhs
	1992-93	Rs. 7.00 lakhs

20. Special Component Plan (State Sector):

Under the scheme the Training Centre at B.R. Project and the monitoring Cell created under Special Component Plan at the Directorate of Fisheries will be continued.

It is proposed to train 900 Scheduled Caste Youth for a period of three months in fish culture practices and trained candidates will be given tanks on lease basis, besides providing them fish seed, fishery equipments on 60% subsidy basis to take up fish culture as an

avocation. 110 S.C. beneficiaries trained under Fish Farmers Development Agencies scheme will be assisted by providing fishery equipments; fish seed worth Rs.2,000/- each on 100% subsidy. Provision is also made to assist 750 professional Scheduled Caste fishermen by providing fishery requisites worth Rs.3,000/- to a group of two beneficiaries, each on 60% subsidy. 1500 unemployes Scheduled Caste women will be assisted for purchase of baskets, insulated boxes, ice, balance and other marketing equipments by granting 60% subsidy on unit cost of Rs.5,000/- for marketing of fish.

Outlay:	1992-97	Rs.91.00 lakhs
	1992-93	Rs.17.00 lakhs

21. Tribal Sub-Plan:

Under the scheme, training in fish culture practices will be imparted to 250 Tribal candidates for a period of three months. The Tribal Training Centre at Kabini in Mysore district will be continued and trained candidates will be assisted to take up fish culture as an avocation.

Outlay:	1992-97	Rs.40.00 lakhs
	1992-93	Rs. 7.00 lakhs

22. Remission of Central Excise on HSD used by mechanised fishing boats:

Government of India have sanctioned the Centrally Sponsored Scheme of reimbursement of Central Excise duty on H.S.D. oil used by the mechanised fishing boats of size below 20 meters with 80% Government of India assistance and the remaining 20% have to be met by the State Government. It is proposed to assist 1000 mechanised boats, each year.

Outlay:	1992-97	Rs.50.00 lakhs
	1992-93	Rs.10.00 lakhs

23. Fisheries Development under CLUMP:

The Project aims at employing 570 rural youths by imparting training in fish cultural practices and giving them fishery requisites. Further, selected tanks with an effective water spread area of 1000 ha. will be developed by stocking 20 lakh fingerlings, besides expansion of fish farm.

Outlay:	1992-97	Rs.64.00 lakhs
	1992-93	Rs.35.00 lakhs

24. Inland Fisheries-Roads:

Under this scheme, provision is made for the construction of fishery link road in Kollegal Taluk in Mysore district for easy transportation of fish from production centre to market place.

Outlay:	1992-97	Rs.2.00 lakhs
	1992-93	Rs.2.00 lakhs

Above mentioned 24 schemes are in the State Sector. Details in respect of District Sector are yet to be formulated by the Zilla Parishads.

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VII - I. FORESTPresent Status

Though 20% of the land area is classified as forests with 3.8 million hectares under forest in the State, only about 11% is well wooded. The remaining area is degraded and barren. Even 20% that is declared as being under forest falls well below the Government's policy of 1952 which stipulated a minimum of 33% to be under closed forests in the country.

The State is facing shortage of fuelwood, fodder and timber, as the demand has increased considerably due to the increase in human and bovine population. Increase in demand has imposed strain on the forest economy and has contributed to over-exploitation, thus eating into the capital stock. Hence, the development programmes have to be geared to meet the rural and urban needs of forest products like fuelwood, fodder, minor forest produce, timber and the needs of industries, more particularly of cottage industries. There is also the need to implement conservation measures, thereby tackle the problem of demand-supply gap through demand management.

Review of Seventh Plan and Annual Plans, 1990-91 and 1991-92:

In order to set right the imbalance in the availability of forest products, several developmental programmes have been implemented in the State during the Seventh Plan period, also Annual Plans. There were two major developments, namely, national effort of greening wastelands and decentralisation of developmental activities through Panchayat Raj Institutions/Zilla Parishads/Mandal Panchayats in the State. As against the actual allocation of Rs.79.83 crores for the Forestry and Wild Life Sector, the actual expenditure incurred was Rs.91.75 crores

inclusive of expenditure on Soil Conservation in the Seventh Plan period through State Plan funds. During this period, the plantation raised was 2.30 lakh hectares through various programmes. There was a sizeable investment in the Social Forestry Programme which was started during 1983-84 and was also continued in the Seventh Plan and with two years' extension, is coming to an end during 1991-92. The bulk of investment has gone to ODA/IDA aided Social Forestry Schemes for which nearly 75% of the total Seventh Plan expenditure has been incurred. In the Seventh Plan, the major areas of thrust were farm forestry and people's participation in the afforestation effort. Several new schemes including those for wild-life conservation were also launched by the Government of India/National Wasteland Development Board and the State Government contributed matching grants towards these schemes. Considerable portion of rural development allocation was earmarked for Social Forestry activities in the State. Thus, apart from creating forest plantation by converting the wasteland and degraded forest lands into productive assets, job opportunities have been provided to the rural population. A new approach to wasteland development was successfully tried by implementing dry land development programmes wherein forestry constituted an important component. Many Centrally Sponsored Schemes such as decentralised people's nursery programmes, development of silvipasture, development of minor forest produce, aerial seeding scheme, prevention of biotic interference, rural fuelwood plantation programme and seed development programme were implemented in the State during the Seventh Plan period. A new activity, namely, development of school nurseries was started with the aim of inculcating tree consciousness in the young minds of school children; it also included drilling of borewells in the school premises.

However, there was a shortfall in the physical achievement in certain schemes like Externally Aided Social Forestry Project, Soil Conservation and Sandal Regeneration Schemes. This was due to lack of adequate staff in the beginning in the Social Forestry Project and lack of sufficient funds for works in the other two schemes. One of the major drawbacks of the Seventh Plan allocation was meagre investment for development of Reserved Forest. This resulted in the set back in the development of Reserved Forest, which constitutes about 20 per cent of the land area and sustains millions of people and bovine population.

During 1990-91, as against a budget provision of Rs.18.70 crores, actual expenditure was Rs.19.84 crores. There has been a sizeable step-up in the Plan allocation through State Plan funds for this sector during 1991-92 with a budget provision of Rs.44.00 crores. This step-up is intended to accommodate two Externally Aided Projects, namely, Social Forestry Project Phase-I and Western Ghats Development Project, in addition to providing complementing funds for the Centrally Sponsored Schemes. On an average, around 25,000 hectares has been brought under plantation during each of these Annual Plan years.

Eighth Plan Strategy

The Eighth Plan envisages development of wasteland and degraded forest lands, conservation, protection and development of fragile eco-system of Western Ghats, environmental protection, restoration of ecological balance and area development programmes for fuel/fodder production, with focus on meeting rural needs. It is proposed to invest about 60% of the State Plan resources on the development and protection of Reserved forests. While the

World Bank assisted Social Forestry Project, Phase-I is coming to an end during 1991-92, it is necessary to provide for staff and maintenance of plantations through Plan resources. One major Externally Aided Project which would be implemented during the Eighth Plan is the Western Ghats Development Project with assistance from O.D.A.

An outlay of Rs.162.30 crores is proposed for the Eighth Five Year Plan. Out of this, Rs.97.30 crores is for the State Sector and Rs.65.00 crores is for the Zilla Parishad Sector. Major portion of the allocation to the Zilla Parishad Sector is required to maintain activities under Social Forestry Project, Phase-I.

Eighth Plan Programmes:

(1) Externally Aided Social Forestry Project(Phase-I)

The First Phase of the Project is coming to an end during 1991-92. However, provision has been made for maintenance of staff and plantations raised under this project.

Outlay (Rs. Lakhs)

1992-97:

State Sector: 250.00

District Sector: 5250.00

1992-93:

State Sector: 200.00

District Sector: 1050.00

(2) Western Ghats Forestry & Environment Project(ODA):

This is a new project which will be implemented

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during the Eighth Five Year Plan. It mainly concentrates on protecting the fragile but rich forests in the Western Ghats, Development of semi-degraded forests through natural regeneration coupled with gap planting and of degraded forests through artificial regeneration, research, training and establishment of GIS-MIS system form the important activities, besides enlisting people's participation in the project.

Outlay (Rs.lakhs):

1992-97 : 5478.00
1992-93 : 729.00

Physical target:

	Eighth Plan	1992-93 Plan
Advance Work	41250 Ha.	8250 Ha.
Planting	10765 Ha.	2153 Ha.

(3) Wildlife Development Schemes: Research/Training

There are 22 schemes which cover development of five National Parks (Bandipur, Nagarhole, Bannerghatta, Anshi and Kudremukh), 18 Wildlife sanctuaries and a Zoo-cum-Safari park at Bannerghatta. The programme also contains schemes involving control of poaching, breeding of endangered species and nature education. Centrally Sponsored Schemes will also be implemented wherein the State will be required to provide funds towards the matching contribution.

	Outlay (Rs.lakhs)	
	1992-97	1992-93
State:	1200.00	237.00
Centre:	1245.00	248.00
Total :	<u>2445.00</u>	<u>485.00</u>

(4) Capital Outlay:

The programme envisages construction of about 300

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buildings for both residential as well as office accommodation, particularly for lower officials and making provision for share capital contributions to the three Government Undertakings namely Karnataka Forest Development Corporation, Karnataka Cashew Development Corporation and Karnataka State Forest Industries Corporation.

Outlay (Rs.lakhs)

1992-97	1992-93
162.00	62.00

(5) Development of Degraded Forests:

To focus attention on the much neglected degraded forests of the State, the scheme which was discontinued earlier will be renewed in the Eighth Plan.

Outlay (Rs.lakhs)

	1992-97	1992-93
State	200.00	50.00
Centre	200.00	50.00
Total	400.00	100.00

Eighth Plan

1992-93
Plan

Physical Target.

Advance Works:	2200 Ha.	440 Ha.
Planting	720 Ha.	154 Ha.

(6) Special Component Plan (State):

During the Eighth Plan, the State allocation will be used for raising Social Security Plantations, support for the manufacture of Agarbathi sticks, Mats etc. by

the Scheduled caste people and for distribution of improved chullas.

Outlay (Rs.lakhs)

1992-97 : 65.00

1992-93 : 65.00

(7) Village Forest Committee:

This is a new scheme under State sector. An entirely new approach for protection and management of forests bordering thickly populated villages will be attempted by establishing Village Forest Committees in these areas. These committees are expected to protect fringe forests in return for share in usufructs.

Outlay (Rs.lakhs):

1992-97 : 20.00

1992-93 : 20.00

(8) Centrally Sponsored Scheme for Development of Infrastructure for protection of forests from Biotic Interference:

Under this scheme, it is proposed to purchase vehicles, wireless sets and guns, dig cattle proof trenches, erect barbed wire fencing and watch towers and carry out fire protection.

Outlay (Rs.lakhs):

1992-97 : 150.00

1992-93 : 35.00

(9) Area Oriented Fuel and Fodder Project:

This is a new scheme started by the Government of India during 1991-92. The scheme envisages raising of

fuel/fodder plantations on Government lands and providing support to the efforts in the private lands. This is a Centrally sponsored scheme with 50% assistance from Government of India:

Outlay (Rs.lakhs)		
	1992-97	1992-93
State	1250.00	375.00
Centre	1250.00	375.00
Total	2500.00	750.00
	Eighth Plan	1992-93 Plan

Physical target:

Advance Works	19300 Ha.	3860 Ha.
Planting	40215 Ha.	8043 Ha.

(10) Integrated Wasteland Development Project

This scheme envisages development of wastelands, including degraded forest lands and management of ecologically fragile areas like Western Ghats. Extension of technologies for treatment of problem lands (Alkaline-saline, etc) is also a major component. Funding will be for projects based on Village Level Plans with watershed as unit. Supplementary measures like supply of improved chullas, fuel efficient bath room water heating chullas and biogas units will also form part of the project. The scheme aims at integrated treatment of wastelands on project basis and includes afforestation, soil and water conservation, treatment of problem lands, etc. All kinds of wastelands will be taken up under the scheme for development. The scheme is 100% Centrally Sponsored.

Outlay (Rs. lakhs)		
	1992-97	1992-93
Centre	2260.00	452.00
	Eighth Plan	1992-93 Plan
Physical Target:		
Advance Works:	12645 Ha.	2529 Ha.

(11) C.S.S. of Seed Development:

Good seed areas are few and far between. Collection and processing of quality seeds is an important step in increasing the efficiency of the wasteland development programme. The scheme is 100% Centrally assisted and proposes to create infrastructure for production, testing and certification of quality seeds.

Outlay (Rs.lakhs):

	1992-97	1992-93
Centre	200.00	40.00

(12) C.S.S. of Minor Forest Produce:

The scheme benefits tribals and others dependent on Minor Forest Produce. It is a part of the effort to regenerate forests and improve its bio-diversity. It aims at raising minor forest produce, including medicinal plants on forest and non-forest public lands. It is 100% Centrally sponsored.

Outlay (Rs.lakhs):

	1992-97	1992-93
Centre	250.00	50.00

(13) C.S.S. of Aerial Seeding:

A 100% Centrally Sponsored Scheme for seeding difficult and inaccessible areas, where the biotic interference is minimum.

Outlay (Rs.lakhs)

	1992-97	1992-93
Centre	60.00	12.00

	Eighth Plan	1992-93 Plan
Physical Target:	5500 Ha.	1100 Ha.

(14) Creation of Protection Force and Re-organisation of State Forest Department for Protection:

It is a new scheme sponsored by the Government of India during 1991-92. It is proposed to protect 24,000 Square Kilometers of forest area by constituting 80 Forest Mobile Squads. It is also proposed to augment the protection staff and purchase the required vehicles and equipment.

Outlay (Rs.lakhs):

	1992-97	1992-93
Centre	600.00	120.00

(15) Greening of Urban Areas:

This is a new scheme intended to take up planting in city areas.

Outlay (Rs. lakhs)

	1992-97	1992-93
	200.00	100.00

Above mentioned schemes come under State Sector. Schematic details are yet to be worked out by Zilla Parishads.

Present Status:

Agricultural education and research has been one of the important infrastructural support services provided to agriculture and related activities. The State has two Agricultural Universities, one at Bangalore and another at Dharwad. Dharwad University was established during the Seventh Plan period. Both the Universities are playing an important role not only in supplying technical manpower but also in providing extension services and research inputs needed in the implementation of development programmes of the Departments. While the University at Bangalore has a jurisdiction of twelve Districts, Dharwad University covers eight Districts. In terms of area, the latter covers 52% of the geographical area and 64% of the total cultivated area of the State. The important activities of these two Agricultural Universities are given below.

I. University of Agricultural Sciences (UAS), Bangalore

Review of Seventh Plan and Annual Plans.

During the Seventh Five Year Plan, as against a provision of Rs. 701.45 lakhs, the UAS, Bangalore has spent Rs.876.60 lakhs. Expenditure on Agriculture Research was Rs.251.91 lakhs, on Education Rs.607.69 lakhs and Rs.17.00 lakhs towards granting loans to the staff for house building and conveyance. Under Agricultural Education, major expenditure was towards starting of Under Graduate Courses in sericulture and forestry; establishment of new Agricultural College at Raichur and Veterinary College at Bidar; construction of hostels, staff quarters and laboratories; purchase of equipments, etc. In addition, three new Agricultural Research Stations were also established.

During the Annual Plan 1990-91, the allocation for UAS, Bangalore was Rs.220.00 lakhs, of which Rs.180.00 lakhs is for

Agricultural Education and Rs.40.00 lakhs for Research.

This amount has been spent for establishment of new Agricultural College at Shimoga; strengthening the existing teaching, research and extension education department and for construction of buildings.

The amount provided for the year 1991-92 is Rs.380.00 lakhs, of which Rs.327.00 lakhs for Agricultural Education, Rs.48.00 lakhs for Research and Rs.5.00 lakhs for Establishment of Bio-technology Institute. During this year, the newly established Agricultural College at Shimoga has been given priority besides continuing the on-going programmes.

Eighth Plan Strategy

During the Eighth Plan, emphasis would be on consolidation of existing facilities, providing of additional facilities in priority areas, bringing about qualitative improvement in teaching and strengthening of the newly started Agricultural Colleges and Horticultural College to generate additional agricultural scientists. Besides, the programmes envisaged under NARP-I and II, NAEP, ICAR Co-ordinated Research Projects, etc., will be continued. An amount of Rs.2250.00 lakhs is provided.

During the Eighth Plan, it is also proposed to establish Applied Biotechnology Research Institute with Japanese aid. Thrust areas of this Institute are tissue culture, improvement of nitrogen fixing capacity and improving methane fermentation. An amount of Rs.2207.00 lakhs has been earmarked for this purpose.

For the year 1992-93, an outlay of Rs.505.00 lakhs is provided for UAS, Bangalore. Out of this, Rs.360.00 lakhs is towards Agriculture Education, Rs.45.00 lakhs for Research and Rs.100.00 lakhs for Biotechnology Institute.

The amount provided under Agricultural Research is being utilized towards the 25% State share of ICAR Co-ordinated Research Projects.

II. University of Agricultural Sciences (UAS), Dharwad

Review of Seventh Plan and Annual Plans

During the Seventh Five Year Plan period, the UAS, Dharwad was established and started functioning from 1st October 1986. Being a new University, it has been saddled with responsibilities of creating infrastructural facilities to bring it to the status of a University. During Seventh Plan, against a provision of Rs.558.55 lakhs, the University has spent Rs.602.05 lakhs. The expenditure towards Agricultural Research and Education was Rs.142.00 lakhs, and Rs.446.05 lakhs respectively. A sum of Rs.14.00 lakhs was provided for sanctioning loans to the staff for houses building and conveyance. The University has made significant achievement in the field of Research, Education and Extension. Some of the major contributions of the University are: (i) development of desi hybrid DDH-2 for the first time in South India (ii) RCR-1 in pomagranate and Fig and (iii) integrated management of white-fly in cotton. A notable contribution has been the release of bollworm tolerant resistant cotton variety viz., Abhadhita which has been a boon to cotton growers in the transitional zone under minimum protection.

During the Annual Plan 1990-91, an amount of Rs.230.00 lakhs was provided to the UAS, Dharwad. During this year, the work of main building for Agricultural College at Raicour, additional class rooms at Agricultural college at Dharwad and hostel building for forestry Degree students at Sirsi were taken up as on-going works. Some infrastructure in the form of furniture, communication and transport facilities was created for newly established Offices of the

University, besides meeting expenditure towards pay and allowances of the personnel.

During the Annual Plan 1991-92, the UAS, Dharwad has given priority to build up infrastructure in the form of main administrative building for UAS, campus; Veterinary College building; building for Agricultural College at Bijapur and hostel building at Bijapur; and completion of spill-over works. The amount allocated during the year 1991-92 was Rs.425.00 lakhs, comprising of Rs.38.00 lakhs for Agricultural Research and Rs.377.00 lakhs for Agricultural Education and Rs.10.00 lakhs for loans to sanction House Building and other Advances.

Eighth Plan Strategy

During the Eighth Plan period, emphasis will be given to solve the problems, namely, inadequacy of essential infrastructural facilities, personnel input, inadequacy of funds for development of farms and up-gradation of facilities, faced during Seventh Plan period. Out of the allocation of Rs.2750.00 lakhs provided for Eighth Plan, Rs.1280.00 lakhs is the capital content. The capital content is mainly provided for the works such as, hostel and college buildings; laboratories at Bidar, Raichur and Bijapur; Forestry Degree programme at Sirsi; main Administrative building for UAS, Dharwad. The new Education and Research Programmes already formulated, that is, PG programme in Clothing and Textiles, Home and Farm Management, will be implemented. New Research Programmes are intended to be taken up under Crop Ecology, Watershed Management, Recycling of Agricultural Waste, Non-conventional Energy Sources, Tissue Culture, Bio-technology, etc. The animal science research is also programmed to be

strengthened. With a view to make available the results of agricultural research to the farming community, extension education units are also programmed to be strengthened.

The Annual Plan for 1992-93 consists of the following breakup.

1. Agricultural Education	...	Rs. 455.00 lakhs
2. Agricultural Research	...	Rs. 40.00 "

Total:		Rs. 495.00 "

Out of Rs.455.00 lakhs for agricultural education, Rs.197.00 lakhs is the capital content. The construction works proposed to be taken up are as follows:

1. The main administrative building of the University at Dharwad;
2. Residential quarters and guest house at the main campus at Dharwad;
3. Construction of main buildings at Agricultural College, Bijapur and Raichur, Veterinary College at Bidar, Forestry Degree Programme at Sirsi;
4. Creating laboratory, workshop facilities at Agricultural Engineering College, Raichur; and
5. Construction of library building at Dharwad campus.

There are 44 ICAR projects under progress at this University and the amount provided under Agricultural Research is being utilized for meeting the 25% State share on these research projects.

K.MARKETING AND QUALITY CONTROLPresent Status of the Sector :

In Karnataka 116 main markets and 299 sub-markets. (Primary) have been established so far. Among them 90 main markets and 43 sub-markets have developed market yards of their own and shifted their trade to the developed market yards. Among the rest of the markets, 23 main markets and 99 sub-markets have acquired land for formation of market yard and infrastructural facilities are still to be provided. The remaining markets have still to acquire land for their market yards. In order to safeguard the interests of the growers-sellers, provisions of KAPM(R) Act, 1966 and Rules 1968 are enforced in all the markets.

As many as 89 main markets have notified fruits and vegetables for regulation and only financially sound markets can afford to provide the required cold storage facilities because of the heavy investments involved in their installations. Among them, only Belgaum market has the cold storage facility and of late Bangalore and Hassan markets have moved their proposals for installation of Cold Storage.

The basic essential facilities such as internal roads, godowns, office building, drinking water, sanitary arrangement, street lights, canteen, auction platforms and farmers' rest house are to be provided in market yards. Providing other facilities such as Post Office, Staff Quarters, Hospital, Police Outpost, Fire Fighting equipments (in Cotton Markets) depend

upon the availability of funds and land. The Government of India too provides grants for the development of market yards. So far, 87 main markets and 114 sub-markets have availed central grant for the development of market yards and the others are yet to avail this benefit. So far, the Department has established six grading laboratories.

In recent years, production of farm produce and marketable surplus have increased due to adoption of improved methods of farming. The percentage of the notified agricultural commodities passing through the Regulated Markets, though, on increasing trend over the years (at a compound growth rate of 12 percent per annum between 1983-84 to 1987-88) 60 percent of the marketable surplus is yet to avail the benefits of regulatory measures for better marketing. It is therefore proposed to achieve a target of 5% of compound growth rate per annum in the quantum of transactions of notified commodities in the Regulated Markets in the State during the Eighth Five Year Plan Period.

Development in agriculture cannot be achieved without giving due priority for agricultural marketing which enables the producers-sellers to secure remunerative and competitive prices for the produce they grow on their farms and this has an impact on improving their individual economic conditions. Establishment of regulated markets is an institutional arrangement made for efficient marketing of agricultural produce. The regulated markets serve in procuring better returns to the agriculturists in marketing of their produce. The Agricultural Marketing

Department has been striving hard to activate the regulated markets and to improve the Agricultural Marketing system in the State.

Broad Thrust During the Eighth Plan :

To achieve this objective of 5% annual growth in Agricultural Marketing, the Eighth Plan envisages to provide weighing and grading equipments in the regulated markets, installation of computers in main market offices, providing transportation facilities etc., Various legal and regulatory measures aiming at elimination of malpractices are implemented in regulated markets to safeguard the interests of farmers and consumers. So a Legal Cell in the Department is proposed to be created. It is also proposed to improve information & communication system.

Progress during Seventh Plan (1985-90) :

During the Seventh Plan, as against a total plan outlay of Rs.30 lakhs under State Plan and Rs.200 lakhs under Central Sector, an expenditure of Rs.22.67 lakhs under State Plan and Rs.183.28 lakhs under Central Sector has been incurred. During the Seventh Plan, with the cent percent Central Assistance to 11 Secondary Market Yards and 26 Sub-Market Yards were developed. As annual outlays over the years were restricted in budget provisions from time to time, the total envisaged Seventh Plan outlay could not be fully utilised. The details of expenditure as against outlays of schemes implemented during the Seventh Plan Period are presented in Table-1.

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TABLE - 1

SECTOR: MARKETING AND QUALITY CONTROLOutlays and Expenditure during Seventh Plan(1985-90)

(Rs. lakhs)

Schemes	Appro- ved Seventh Plan Outlay (1985-90)	Expenditure during					Expr. Seve- nth Plan 1985- 90
		1985- 86	1986- 87	1987- 88	1988- 89	1989- 90	
I. STATE PLAN SCHEMES							
A. State Sector Schemes							
Scheme for Grading of Ghee, Butter, Edible Oils, Agril. commodities and Betelnuts.	4.80	-	0.59	1.00	1.15	1.28	4.02
Scheme for acquisition of land.	6.00	-	-	-	0.50	2.14	2.64
B. District Sector Schemes							
Schemes for Grading of Ghee, Butter, Edible Oils, Agril. commodities and Betelnuts.	4.59	0.49	0.61	1.14	1.33	1.62	5.19
Scheme for providing Expertise on Marketing in IAAP/ IADP Districts and other intensive production programmes.	6.73	1.09	1.29	1.77	1.79	2.13	8.07
Strengthening of District Offices at Belgaum and Dharwad.	7.88	-	0.32	0.82	0.67	0.94	2.75
(A+B) I. Total:	30.00	1.58	2.81	4.73	5.44	8.11	22.67
II. CENTRAL SECTOR SCHEMES (100% Central Grants)							
Scheme for development of Secondary Markets.	-	-	-	-	-	16.125	16.125
Scheme for development of Primary Rural Markets.	-	-	-	-	-	32.00	32.00
Scheme for development of Regulated Markets.	100.00	25.00	28.75	16.80	6.00	4.00	80.55
Scheme for development of Rural Markets.	100.00	24.50	19.11	4.50	3.50	3.00	54.61
II. Total:	200.00	49.50	47.86	21.30	9.50	55.125	183.285
Grand Total (I+II) :	230.00	51.08	50.67	26.03	14.94	63.235	205.955

Review of Annual Plans : 1990-91 & 1991-92 (Anticipated)

During 1990-91, the budgetted outlay of Rs.9 lakhs was almost spent on the implementation of the five approved schemes. In addition, the two Central Sector Schemes with 100 percent Central Assistance namely, Scheme for development of Secondary Markets and Scheme for development of Primary Rural Markets under which the Government of India provides grants for development of market yards were implemented with an outlay of Rs.84.50 lakhs. With this assistance as many as 21 Primary Rural Markets and one Secondary Market are being developed with basic facilities identified by Government of India.

During 1991-92, the budgetted outlay of Rs.10 lakhs earmarked for implementation of three new schemes and one On-going scheme in the State Sector is anticipated to be fully spent. In addition, the two Central Sector Schemes with an outlay of Rs.160 lakhs earmarked are anticipated to be implemented for the development of 6 Secondary Markets and 32 Primary Rural Markets.

Proposals for Eighth Plan : 1992-97 .

To achieve the target of 5 percent annual growth rate in the quantum of transactions of notified commodities in regulated markets in the State during the Eighth Plan Period 1992-97, an outlay of Rs.150 lakhs under State Sector is proposed to be spent on 5 schemes out of which Rs.90 lakhs is on CLUMP Programmes and the rest on On-going Schemes. Under Central Sector, two schemes which attract cent percent grants from Government of India with

an outlay of Rs.856 lakhs is proposed for implementation during the Eighth Plan Period for the development of Primary Rural Markets and Secondary Markets. So, totally a provision of Rs.1,006 lakhs comprising Rs.150 lakhs under State Plan and Rs.856 lakhs (100 percent Central Share) in Central Sector is proposed for the Eighth Plan. Under Central Sector, as many as 185 Primary Rural Markets and 29 Secondary Markets would be developed during the Eighth Plan Period.

Proposals for Annual Plan : 1992-93.

During 1992-93, it is proposed to earmark Rs.45 lakhs under State Sector Plan of which Rs.10 lakhs would be on the four On-going Schemes and Rs.35 lakhs on one scheme under the CLUMP programme. Under Central Sector, the two schemes attracting 100 percent of Central Share would be implemented with a proposed outlay of Rs.160 lakhs for the development of 30 Primary Rural Markets and 10 Secondary Markets during 1992-93 in the State.

The policies and programmes proposed for implementation during the Eighth Plan 1992-97 and during Annual Plan 1992-93 are described in the following paragraphs. The list of schemes and the corresponding outlays proposed for the Eighth Plan 1992-97 and Annual Plan 1992-93 are presented in TABLE -2.

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TABLE-2

Proposed outlays by Scheme under Marketing & Quality
Control during Eighth Plan and Annual Plan 1992-93.

Schemes	(Rs.lakhs)	
	Eighth Plan Outlay 1992-97	Annual Plan Outlay 1992-93
I. STATE PLAN SCHEMES: (A) State Sector		
1. Creation of legal cell in the Dept. to offer legal advice on matters under the KAFM(R) Act, 1966 & others governing the Departmental activities.	9.00	1.70
2. Scheme for establishment of additional 5 Grading Laboratories in the State.	22.00	4.00
3. Providing Electronic Weighing Scales to financially weak Regulated Markets.	12.50	1.80
4. Scheme for acquisition of land.	16.50	2.50
5. Development of Sub-Market Yards under CLUMP Programme.	90.00	35.00
	Total:	45.00
II. CENTRAL SECTOR SCHEMES: (100% Central Sector grants)		
1. Scheme for development of Secondary Markets.	116.00	50.00
2. Scheme for development of Primary Rural Markets.	740.00	120.00
	Total:	170.00
	Grand Total :	215.00

1. Creation of Legal Cell :

As many as 227 cases relating to the Department are pending in various Courts of law involving matters of establishment, regulatory measures and the developmental works of markets.

It is keenly felt that the Department should have a separate legal cell to help the Government in appraising the Courts for decision. It may be mentioned here that the Agricultural Produce Market Committees contribute about 50 percent of their income by way of market fee and licence fee to the State Exchequer and this is estimated to be around Rs.10 crores per annum. Any adverse Court's decisions on the legal matters will have adverse impact on the contributions to the Government by the Market Committees. Therefore, to obviate this difficulty, a legal cell consisting of one Legal Adviser in the rank of a Civil Judge supported by Legal Assistant, Stenographer and Typist is proposed to be created in the Department. For this purpose an outlay of Rs.9 lakhs for the Eighth Plan and Rs. 1.70 lakhs for Annual Plan 1992-93 has been proposed.

2. Establishment of 5 Grading Laboratories:

At present 6 Grading Laboratories are functioning to cater to the needs of grading of Ghee, Butter, Edible Oils, Spices and other important commodities coming under 'AGMARK' specifications prescribed by the Government of India. The existing centres are inadequate considering the growing

demand for grading under 'AGMARK' and the dairy products produced by the Karnataka Milk Federation. So, during the Eighth Plan it is proposed to set up 5 additional Grading Laboratories (at an average cost of Rs.4.50 lakhs each) with a provision of Rs.22 lakhs to help the consumer to get quality dairy and other products such as Ghee, Butter, Honey, Oil and Spices and to control the growing adulteration. During 1992-93 Annual Plan a provision of Rs.4 lakhs is proposed to set up one Grading Laboratory with equipments.

3. Providing Electronic Weighing Scales to AFMCs:

Sellers usually fall prey to deceitful methods of weightment. Of late there are a number of complaints about fraudulent weightment. To counter check the weightments done in the premises of commission agents, separate weighing instruments are not provided in markets. Providing Electronic Weighing Scales in Fruits and Vegetable Markets will go a long way in ensuring correct weightment. It is proposed to offer financial assistance to financially weak Agricultural Produce Market Committees in the form of grant for the installations of Electronic Weighing Scale in their market yards. During the Eighth Plan, a provision of Rs.12.50 lakhs is proposed to provide Electronic Weighing Scales to 25 financially weak Agricultural Produce Market Committees at the rate of Rs.50,000 per scale. During 1992-93, a provision of Rs.1.80 lakhs is proposed to provide four Electronic Weighing Scales at the rate of one to each financially weak markets.

4. Providing financial assistance to Markets for acquisition of land.

The markets which are in possession of the requisite extent of land alone are qualified for central grants for development of their market yards (such grant vary from Rs.4 lakhs to Rs.20 lakhs per market). Financially weak Agricultural Produce Market Committees find it extremely difficult to meet the growing cost of acquisition of land for formation of their yards. So, just to partially meet this expenditure, it is proposed to offer financial assistance as grants to such markets. For this purpose an outlay of Rs.16.50 lakhs is proposed in the Eighth Plan for this On-going Scheme. During 1992-93, a provision of Rs.2.50 lakhs has been proposed.

5. Development of Sub-Market Yards under Comprehensive Land Use Management Project:

With a view to create adequate marketing facilities for increased marketable surplus likely to be created by the increase in food production on account of improved Water Management in the 15 Mandals in the Five selected districts under the Comprehensive Land Use Management Project Area, (CLUMP) an outlay of Rs.90 lakhs has been earmarked for purchase of land and construction of necessary sub-market yard infrastructure for better marketing of farm produce in the 13 Mandals of CLUMP area during the project period. The 13 Mandals where land has to be purchased and sub-market yard infrastructure facilities to be provided would be Harkhanhal, Krishnanagar, Morigere

in Bellary District, Anugodu, Chickyemiganur, Suragondanahalli Mandals in Chitradurga District Abbigere, Yamanur Mandals in Dharwad District, Ballenahalli, Halekote Mandals in Hassan District and Hitnal, Idapnur and Nagalapur Mandals in Raichur District. In the other two Mandals Viz., Akki-Alur and Chickabasur in Dharwad District land has been purchased already and the outlay would be utilised for creation of requisite infrastructure barring the existing ones.

The basic infrastructural facilities proposed to be provided in each of the 15 mandals are:

Compound wall/barbed wire fencing, Office-Cum-Godown, Auction Platform, Water and Sanitary arrangements, Canteen Building (Tea Stalls), Street lights, Sundry shops, Formation of Roads.

During the project period, it is proposed to develop the above 15 Mandals with marketing facilities with an outlay of Rs.90 lakhs and excess, if any would be met from out of the resources of the Agricultural Produce Market Committees concerned. During 1992-93, a provision of Rs.35 lakhs is earmarked for this programme.

II. CENTRAL SECTOR SCHEMES:

The Government of India provides grant ranging from Rs.4 lakhs to Rs.20 lakhs depending upon the quantum of arrivals for providing specific infrastructural facilities in main and sub-market yards under the two schemes Viz., Scheme

for development of Secondary Markets and Scheme for development of Rural Primary Markets. The State gets considerable grant from Government of India every year for the purpose mentioned above. These schemes are proposed to be continued during Eighth Five Year Plan Period.

(i) Scheme for development of Secondary Markets:

Main markets fulfilling the norms prescribed by Government of India are eligible for assistance under this scheme. The quantum of grant varies from Rs.4 lakhs to Rs.20 lakhs depending upon the quantum of arrival. During Eighth Five Year Plan Period an outlay of Rs.116 lakhs is proposed to provide grants to 29 markets. During 1992-93, a sum of Rs.50 lakhs is provided under the scheme to provide ten markets.

(ii) Scheme for development of Primary Rural Markets:

This is a scheme under which Government of India provides grants to an extent of Rs.4 lakhs for providing specific infrastructural facilities in Primary Rural Markets called Haats, Shandies, Painths etc. Live stock markets too are eligible for grant under this scheme. During the ensuing Eighth Five Year Plan Period an outlay of Rs.740 lakhs is proposed to provide grants to 185 Primary Rural Markets for the purpose. During 1992-93, a sum of Rs.120 lakhs is provided to extend assistance to 30 Primary Rural Markets.

I. FOOD STORAGE AND WAREHOUSING

The Karnataka State Warehousing Corporation provides scientific storage facilities through a network of warehouses spread all over the State, particularly at Taluk and District places. Agriculturists, co-operatives, Government and private agencies, Traders are among those who utilise the storage facilities for storing various kinds of agricultural produces and inputs and other commodities. KSWC also undertakes disinfection and fumigation of stocks of the above classes of customers in their godowns, in case they want such services at their door-steps. Besides, such services are also extended to rice and flour mills, bakeries, hotels etc. A number of institutions such as Karnataka Forest Development Corporation Ltd., Karnataka Cashew Development Corporation Ltd., Tobacco Board, Coffee Board are among these who also utilise the technical services of KSWC in various ways. Aerial spraying of cashew and Rubber Plantations from Helicopters, Fumigation of containers for export of coffee and fumigation of Coffee stocks, fumigation of soil for nursery beds of Tobacco, cardamom and other commercial crops for control of nematodes, weeds and fungi to improve the quality and yield of such crops are services being made available by KSWC to the above respective institutions in various ways. Moreover, KSWC is the only organisation which is undertaking such extensive soil fumigation.

(a) Seventh Plan Progress (1985-90)

There were cuts in the annual budget plans on account of consecutive drought conditions during the first three years and therefore as against an approved outlay of Rs 300 lakhs, the amount released was only Rs 78.52 lakhs. On the physical side, the storage capacity targeted to be added was 1,57,300 MT which included 87,300 MT under General Scheme and 70,000 MT under NGRG Scheme and the corresponding achievement was 54,300 MT under General Scheme and 44,000 MT under NGRG Scheme. The cumulative storage capacity reached by the end of the Seventh Five Year Plan was of the order of 2,14,500 MT.

VII. B-2

The yearwise details of financial progress as against outlays and physical targets and achievements are presented in Table 1 and, 2.

Abstract	Capacity in MTs		
	General	NGRG	Total
i) Storage capacity available as at the end of 1984-85	100700	15500	116200
ii) Storage capacity created from 1985-86 to 1989-90	54300	44000	98300
To the Cumulative capacity available as at the end of 1989-90	155000	59500	214500

TABLE - 1

SECTOR: FOOD STORAGE AND WAREHOUSING
Yearwise outlay and Expenditure, subsidy etc during the
Seventh Plan 1985-90

Sl. No.	Particulars	1985-86	1986-87	1987-88	1988-89	1989-90	Total
1	Approved Share Capital Budgeted	13.52	20.00	15.00	20.00	10.00	78.52
2	Actual Expenditure	13.52	20.00	15.00	20.00	10.00	78.52
3	Matching Share Capital by Central Warehousing Corpn.	13.52	20.00	15.00	20.00	10.00	78.52
4	Total Funds provided for creation of Storage Capacity	27.04	40.00	30.00	40.00	20.00	157.04
5	Subsidy under NGRG Scheme released by:						
	a) Govt. of India	11.33	8.52	8.75	17.50	25.50	71.60
	b) Govt. of Karnataka	5.00	5.00	10.54	17.50	18.75	56.79
	TOTAL:	16.33	13.52	19.29	35.00	44.25	128.39

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TABLE - 2

SECTOR: FOOD STORAGE AND WAREHOUSINGTarget & Achievement of Storage Capacity by the
end of Seventh Plan 1985-90

Components of Storage Capacity	1985-86	1986-87	1987-88	1988-89	1989-90	Overall Total
TARGET						
i) Under Gen.Scheme	42300	30000	6000	3000	6000	87300
ii) Under NGRG	27500	10500	10000	12000	10000	70000
Total	69800	40500	16000	15000	16000	157300
Cumulative Position existed at the end of 1984-85						
i) Under Gen.Scheme	--	--	--	--	--	100700
ii) Under NGRG	--	--	--	--	--	15500
Total	--	--	--	--	--	116200
Achievement during 1985-90						
i) Under Gen.Schemes	1500	3000	30800	10000	9000	54300
ii) Under NGRG	15000	7500	5000	7500	9000	44000
Total	16500	10500	35800	17500	18000	98300
Cumulative Position at the end of 1989-90						
i) Under Gen.Scheme	102200	105200	136000	146000	155000	155000
ii) Under NGRG	30500	38000	43000	50500	59500	59500
Total	132700	143200	179000	196500	214500	214500

b) Review of Annual Plans 1990-91 and 1991-92

The outlay of Rs 12 lakhs provided for the Annual Plan 1990-91 and Rs 15 lakhs provided for the Annual Plan 1991-92 are anticipated to be fully utilised by the end of 1991-92, along with the equal matching share contribution from the Central Warehousing Corporation.

The storage capacity created as against targets fixed during these two years under review is as noted below:

Storage Capacity created during the years
1990-91 and 1991-92(anticipated)
(In Metric Tonnes)

Schemes	1990-91			1991-92(anticipated)		
	Target	Achievement		Target	Achievement	
		During the Yr	Upto the Yr. (cum)		During the Yr.	Upto the Yr. (cum)
1.Under Gen. Schemes	12000	--	155000	16000	--	155000
2.Under NGRG	10000	--	59500	10000	6000	65500
Total	22000	--	214500	26000	6000	221500
3.Hired Capacity at the end of the year	--	--	118000	--	--	130000
Total	22000	--	332500	--	--	351500

Execution of works with regard to construction of godowns has been entrusted to two agencies, viz. Karnataka Land Army Corporation Ltd., and Karnataka State Construction Corporation Ltd., Since the construction agencies have not adhered to the time-schedule there is delay in progress and shortfall in achievement. However, though the anticipated achievement is 6000 MT during 1991-92 the balance works are nearing completion or there is a progress of about 75% among the balance works.

(c) Proposals for Eighth Plan (1992-97)

An outlay of Rs 100 lakhs is proposed for the sector under the Eighth Plan, 1992-97 with the equal matching share contribution by Central Warehousing Corporation, the total outlay would be Rs 200 lakhs out of this outlay, a storage capacity of about 21000 MT is expected to be created by the end of the Eighth Plan. In addition to this a back log of 16000 MT of storage capacity is also expected to be created during the Eighth Plan.

Under the NGRG "Central Sector Scheme" about 30000 MT of storage capacity including the backlog is expected to be created during the Eighth Plan.

Thus totally about 67000 MT of storage capacity is expected to be created during the Eighth Plan.

(d) Proposals for Annual Plan 1992-93

An outlay of Rs 20 lakhs is proposed for the sector under the Annual Plan 1992-93 with the matching contribution of Rs 20 lakhs from Central Warehousing Corporation the total outlay would be Rs 40 lakhs. Out of this outlay it is proposed to create a storage capacity of 5000 MT during 1992-93. In addition to this, a backlog of 16000 MT would also be created during 1992-93.

Likewise it is also proposed to create storage capacity of 15000 MT including the backlog under the NGRG scheme during the year 1992-93.

Physical Targets set for the Eighth Plan 1992-97 and Annual Plan 1992-93 are noted below:

Scheme	Proposed Targets for (MTs)	
	Eighth Plan 1992-97	Annual Plan 1992-93
i) Gen. Scheme with the financial support of the State Govt. (50%) and matching contribution by Central Warehousing Corpn. (50%)	37000	21000*
ii) NGRG Scheme with the State and Central assistance	30000	15000°
TOTAL	67000	36000

*includes backlog of 6000 MTs and °includes backlog of 4000 MTs

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The Creation of Storage capacity during the Eighth Plan and Annual Plan 1992-93 would result in generation of Employment as given below:

Category of Employment	Generation of Employment during	
	Eighth Plan 1992-97	Annual Plan 1992-93
a) Generation of on-site employment(000' mandays)	732	391
b) No.of additional posts likely to be created	239	126
c) Generation of indirect off-site employment(ooo' mandays)	488	260
d) No.of beneficiaries likely to be benefited indirected	1706	925

M. INVESTMENT IN AGRICULTURAL FINANCIAL INSTITUTIONSStatus of the Sector

The long term credit for the agricultural development flown through the banking institutions in the Co-operative fold Particularly through 13 Regional Rural Banks and their 1133 branches spread over in all the districts of the State and KSCARD Bank having the affiliation of 177 PCARD Banks spread over in each of the taluks in general. The State Government in order to Promote institutional lending supports the flow of these advances for the development of agriculture through the share-capital Provided to the Apex Institutions.

The RRBs have deposits of Rs. 174 crores and have advanced about Rs. 315 crores of loans to the rural community with a credit deposit ratio of 156 Per cent at the end of the Seventh Plan.

The main activities of PCARD Banks and the KSCARD Bank is to advance long term loans for agricultural development under (a) Normal Programme and (b) Special Development Programme depending upon the main sources of investment and recently these banks have also spread their activities to the non-farm areas. The main source of funds of those banks are their share capital, reserves and floatation of debentures supported by Government over the years under plan funds.

(a) Under the ordinary debentures floated through their normal Programmes, financial requirements are raised meeting requirements of traditional items of land intended for sinking/repairs and deepening of irrigation wells, installation of irrigation Pumpsets, levelling and bunding of agricultural lands and such other land improvement.

(b) The special debentures are intended to the lending schemes with the support of the state Government in the recent years and these development Programmes are to advance loans to the agricultural community for the following purposes:-

- (i) Development of horticultural crops such as raising coconut, areca, cocoa, grapes, cashew, Pineapple, guava, sapota, cardamom and such other plantations;
- (ii) Land-levelling, bunding and fencing of agricultural land;
- (iii) Sinking of irrigation wells, installation of IP sets, Sprinkler irrigation system etc.
- (iv) Purchase of Tractors and Power Tillers;
- (v) "Diversified activities", such as Purchase of bullocks and bullock carts, installation of Gobar- Gas Plants, Dairy Farming, Piggery Sheep Husbandary, Poultry development, Sericulture etc.

Progress during Seventh Plan: 1985-90 and Annual Plans 1990-91 and 1991-92

Under the Seventh Plan and Annual Plans 1990-91 and 1991-92 the details of the Share Capital provided to the KSCARD Bank and the RRBs by years are Presented in the Table-I below.

TABLE -I

Share Capital provided under " Investment in Agricultural Financial Institutions" during the Seventh Plan 1986-90 and Annual Plans 1990-91 & 1991-92.

Rs. lakhs

Year	Budgetted Outlay			Share capital provided to		
	KSCARD BANK	RRBs	Total	KSCARD BANK	RRBs	Total
1985-86	216.56	15.00	231.56	263.03	3.75	266.78
1986-87	217.00	10.00	227.00	261.85	11.25	273.10
1987-88	220.00	20.00	240.00	226.46	-	226.46
1988-89	220.00	10.00	230.00	465.37	10.00	475.37
1989-90	220.00	20.00	240.00	502.35	20.00	522.35
Seventh Plan 1985-90	1093.56	75.00	1168.56	1719.06	45.00	1764.06
1990-91	500.00	16.00	516.00	500.00	16.00	516.00
1991-92	500.00	18.00	518.00	500.00 [@]	18.00 [@]	18.00 [@]

@ anticipated.

Eighth Five Year Plan Proposals: 1992-97(a) Regional Rural Banks

Out of the total share capital of the RRBs issued, 15 per cent is contributed by the State Government (Rs. 3.75 lakhs) as against 35 per cent by the sponsored banks and 50 per cent by the Government of India under Section 6(3) of the Regional Rural Banks Act, 1976. The Government of India may increase the issued share capital of the RRBs and wherever the additional share capital is so increased, the State Government has to subscribe to an extent of 15 Per cent of total corresponding additional share capital.

Upto the end of 1989-90, the State Government has released the share capital and additional share capital amounting to Rs. 93.75 lakhs to 13 RRBs. The Eighth Plan requirement for this purpose is estimated to be of the order of Rs. 101.25 lakhs. Based on the recommendations of the Kelkar Committee Report, by the amendment of the RRB Act, 1976, the RRBs are permitted to enhance their existing issued share capital from Rs. 25 lakhs to Rs. 100 lakhs. So, the State Government's corresponding share would be Rs. 15 lakhs per RRB. Each of the RRBs is already provided with a share capital of Rs. 7.50 lakhs and the balance of Rs. 7.50 lakhs is the proposed target for release during the Eighth Plan.

During the Eighth Plan 1992-97, a share capital of Rs. 140 lakhs and during the Annual Plan 1992-93, a share capital of Rs. 140 lakhs and during the Annual Plan 1992-93, a share capital of Rs. 23 lakhs is proposed to be provided to RRBs for investment.

(b) Cooperative Institutions (KSCARD Bank)

With a view to floating of debentures for agricultural development purposes in the state thro' the KSCARD Bank, during the Eighth Plan 1992-97, an outlay Rs. 2487 lakhs is proposed to be provided out of which Rs. 1487 lakhs is intended to be invested in CLUMP area Programmes.

In this provision, Rs. 425 lakhs is intended to be earmarked for special component plan of which Rs. 297 lakhs is for CLUMP Programmes.

During 1992-93, the KSCARD Bank is proposed to be provided with Rs. 200 lakhs of which Rs. 26 lakhs would be under special component Plan for floating debentures. The details are presented below:-

Outlays under " Investment in Agricultural Financial Institutions" during Eighth Plan 1992-97 and Annual Plan 1992-93

Institution	Rs.lakhs	
	Eighth Plan Outlay 1992-97	Annual Plan Outlay 1992-93
Investment(Share Capital) in		
(i) Co-operative Institutions (KSCARD Bank)		
(a) General Programmes	1000	200
(b) CLUMP Programmes	1487	-
	2487	200
(ii) Regional Rural Banks	140	28
Total:	2627	228

Note: During Eighth Plan 1992-97, Rs. 425 lakhs is proposed to be under special component plan of which Rs. 297 lakhs would be for CLUMP Programmes.

RURAL DEVELOPMENT

Rural Development and Government:

The economic development of rural Karnataka must be seen as arising out of a complex and hazily understood pattern of investment over which Government has partial control. In the farm sector, investments are predominantly private, assisted no doubt by a credit structure established through public sector and cooperative initiative. In the non-farm sector too, Government investments are limited and confined in large measure to the creation of infrastructure. Policy initiatives are either sector specific (Khadi, Handlooms, Leather industries) or else focussed on poverty alleviation programmes. Indeed, the large range of poverty alleviation programmes implemented by Government has made this the Central instrument of public sector initiative in rural areas. In this manner, although Government has propagated a definitive ideology towards poverty alleviation, it is less certain that viable models for sustained rural development and growth have been set up. Distress has undoubtedly been mitigated but conditions for creating groundswell of rural growth appear not to be in sight.

Devolution and participation:

Experience of the past Five-Year Plans has created scepticism as to whether Centralised planning can deliver the goods. We have created the panchayat Raj system to ensure that the decentralised planning becomes a reality. However, the Mandal Panchayat system is not fully equipped to meet the objectives of rural transformation. The Gramasabha would need to acquire legitimacy which cuts across the differentiated class interests of society. Thus, we have postulated in our State a model for poverty alleviation and a model for peoples participation. The combination of these two objectives, we hope, would deliver the goods better than what was done previously in the earlier Five-Year Plans.

The rural development and Panchayat raj constitutes a crucial component of the State plan aiming at alleviation of rural poverty, unemployment and improvement in productivity of rural activities, particularly of the weaker sections of the society. In the distribution of funds to the various sectors, the imbalances in development in different regions have been fully taken care of. Allocation of funds to the Zilla Parishad level gives weightage to population, backwardness in agriculture, irrigation, industrial output and several other factors would ensure that each Zilla Parishad receives the share of funds from the allocated plan. Apart from the equitable distribution of funds to Zilla Parishads, we have evolved a system of distribution of funds amongst the mandals also taking into account the population, area, dry land areas, agriculture labour population and Per-Capita resources raised. This ensure equitable distribution of funds amongst all the mandals of the State and the mandals have free hand in planning for their development. Thus, we have created in our State a model of poverty alleviation and a model of people's participation. Another strategy which we have adopted is to provide more infrastructural facilities and backward and forward linkages to secure a market for the products produced by the rural poor.

The poverty alleviation programmes are programmes under JRY, Family Welfare programmes like IRDP, DWCRA and 100 wells programme. We have created a massive programme of training for the unskilled under TRYSEM. The outlay in this sector is being increased from 1990-91 as suggested by the Government of India. Apart from this, we have got the infrastructure programmes consistent with environmental concerns, drought-proof in the case of DPAP and conservation of forestry cover in the case of Western Ghats Development Programme. The expenditure and achievements in respect of important rural development programmes are furnished in Tables 1 and 2.

VIII-3

TABLE - 1

Expenditure on Important RD and PR Programmes in the Seventh Plan 1985-90 and annual Plan 1990-91/1991-92 (Includes central share also)

Programmes	Rs. lakhs.		
	VIIth Plan 1985-90	1990-91 (R.E.)	1991-92 (Anticipated)
1. N.R.E.P.	14933	-	-
2. RLEGP	11668	-	-
3. JRY	10943	10892	12059
4. REGS	748	-	-
5. DPAP	5160	1140	1249
6. Westernghat Development	3446	880	947
7. IRDP	12911	3076	3241
8. 100 Wells Programme	2267	369	360
9. Assistance to Surplus Land grantees	286	18	20
10. DW CRA	155	13	21
11. Anthyodaya	667	74	--

TABLE - 2

Achievements of the important RD and PR Programmes in the Seventh Plan 1985-90 and Annual Plan 1990-91/1991-92

Programmes	Unit	Seventh Plan 1985-90	1990-91	1991-92
1. NREP	Lakh	731	-	-
2. RLEGP	Mandays	811	-	-
3. JRY	"	408	-	-
4. IRDP	"	6.84	1.25	1.03
5. 100 Wells Programme	Lakh Nos	0.63	0.76	0.50
6. Assistance to Surplus land grantees	Nbs	11440	36.54	1575
7. DW CRA	No. of groups	1100	528	400
8. Anthyodaya	Lakh Nos	0.46	0.69	-

Eighth Plan proposals and Annual Plan 1992-93

All the programmes which were implemented during the Annual Plan for 1991-92 are proposed to be continued during 8th Plan period except Anthyoday programme which has been dropped w.e.f 1991-92.

Integrated Rural Development Programme:

Integrated Rural Development Programme is a Centrally Sponsored Scheme and an important poverty alleviation Programme. The Programme is implemented in all the Zilla Parishads and DRDS Bangalore in the State. The main objective of RD Programme is to help the poorest families in rural areas to cross the poverty line by providing them with income generating activities. Financial assistance in the form of loan and subsidy is provided to selected beneficiaries to take up income generating activities in primary, Secondary and tertiary sectors. IRDP also provides for assistance to develop infrastructural facilities which are considered essential for better utilisation of assets provided to IRDP beneficiaries.

Financial assistance provided to beneficiaries under IRDP has enabled them to improve their economic status. Out of assistance provided under IRDP, income generating activities have been taken up in primary, secondary and tertiary sectors. The concurrent evaluation of IRDP for the period January 1989 to June 1989 conducted by the Department of Rural Development, Government of India has indicated the following findings in respect of Karnataka State:

- (1) 64% families were covered under primary sector, 6.36% under secondary sector and 29.78% under tertiary sector.
- (2) 84% families belonged to the income group of Rs.1-2265, 16% families belonged to Income group of Rs.2266-3500 at the time of selection.

- (3) The ineligible families belonging to the income group of Rs.4801-6400 were covered in 12% cases and families with more than Rs.6400 income were covered in 0.45% cases.
- (4) All beneficiaries of the ex-bonded labourers who belonged to the income group of Rs.1-2265 at the time of selection were assisted under IRDP.
- (5) 83% beneficiaries were selected in Grama Sabhas, 11% beneficiaries by officials and 6% beneficiaries by others.
- (6) Quality of the asset was good in 92% cases, average in 7% cases and poor in 1% case.
- (7) Assets were found intact in 66% cases and not intact in 34% cases. Reasons for not keeping the assets intact are, defective assets, unexpected events, inadequate income, costly maintenance household requirements etc.
- (8) Inadequacy of input and marketing facility, after care and support.
- (9) Assets had generated additional income of more than Rs.2,000 in 27% cases, between Rs.1000-2000 in 20% cases, between Rs.501-1000 in 12% cases, between Rs.1,500 in 6% cases, and had not generated any additional income in 35% cases.
- (10) 44% old beneficiaries have crossed the poverty line of Rs.3500 and 6% have crossed the poverty line of Rs.6,400.

The concurrent evaluation has also brought out positive results of IRDP in terms of generation of additional income and crossing of poverty line by the IRDP beneficiaries.

In order to overcome the shortcomings in the implementation of the IRDP, the following steps are emphasised and implementing authorities are instructed to ensure them.

- 1) Selection of beneficiaries should be made only in GramaSabha in order to prevent selection of ineligible

beneficiaries. Beneficiaries selected other than in Grama Sabbas should not be considered for financial assistance under IRDP.

2) Selection of economically viable schemes having favourable incremental capital output ratio.

3) Selection of Schemes keeping in view the skill and aptitude of the beneficiaries and the local resources profile.

4) Provision of timely and adequate finance.

5) Ensuring easy availability of raw-materials and marketing of finished products of IRDP beneficiaries. In this regard, establishment of District supply and Marketing Societies will have to be expedited.

6) In order to avoid predominance of primary sector activities, income generating activities under industries, Services and Business Sector and non-traditional Industrial activities will have to be emphasised.

The programme aims to achieve the stated objective by providing income generating assets including working capital wherever necessary to the target group families through package of assistance including subsidy and institutional credit. A family having an annual income of Rs.6,400 or less is considered to be a family below poverty line. Under I.R.D.P. the family will be assisted to reach annual income level of Rs.6,400. The cut-off line for identification of the family for assistance would be Rs.4,800 annual income per family. However, in order to ensure that the poorest of the poor get the assistance first, it would be ensured that families with an annual income level up to Rs.3,500 are assisted first and subsequently those families with an annual income of Rs.3,501 to Rs.4,800 income bracket and the target families are to be selected by the respective GramPanchayat.

The target group consists of small farmers, marginal farmers, agricultural labourers, rural artisans and others whose annual family income is Rs.4800 which is the cut-off line. A cultivator with a land holding of 2 hectares or below is considered a small farmer where the farmer has Class-I irrigated land as defined in the State Land Ceilings legislation with one hectare or less also considered as a small farmer. Also where the land is irrigated but in the Class-I variety, suitable conversion ratio may be adopted by the State Government with a ceiling of two hectares. A marginal farmer is one with a land holding of one hectare or below. In the class -I irrigated land, the ceiling will be 0.5 hectare. An agricultural labourer is one without any land other than homestead and deriving more than 50% of his income from Agricultural wages.

The families belonging to Scheduled Castes and Scheduled Tribes are given special preference and it is provided that atleast 50% of the assisted families should be drawn from the Scheduled Castes and Scheduled Tribes. The targets for the blocks are determined as per the set formula.

Under the scheme, atleast 40% of the total beneficiaries should be women. Priority need to be given to women headed households which applies to all categories of beneficiaries including Scheduled Caste & Scheduled Tribes. The flow of finance to these categories should be commensurate with the percentage of their physical coverage.

During the Eighth plan an outlay of Rs.10415 lakhs is proposed for IRDP and allied programmes and targetted to assist 5,55,000 beneficiaries and for the year 1992-93 an outlay of Rs.1,790 lakhs, is proposed and targetted to assist 1,11,000 beneficiaries.

Training of Rural Youths for Self-Employment (TRYSEM)

The objective of TRYSEM is to provide technical skills to Rural Youths from families below poverty line to enable them to take up self-employment in the broad fields of Agriculture and Allied activities and industries, Services and Business activities. The scheme provides for payment of stipend and honorarium to trainees mastercraftsman and training Institutions under TRYSEM Provision for Providing financial assistance to training Institution for development of infrastructural facilities is provided.

At present, the link between training and self-employment is found to be weak. It is, proposed to strengthen this, link with a view to ensure that all those who are trained under TRYSEM are subsequently and invariably helped to obtain self-employment. It is proposed to identify institutions at various levels for discharging this responsibility. It is also proposed to identify a few trades with high employment potential for purpose of providing training under TRYSEM and to diversify the training programme in non-farm sector, particularly in the field of electronics, computer etc.

During the Eighth plan it is targetted to train 70,000 youths for self employment and an outlay of Rs.240 lakhs is proposed towards assistance to the institutions intending to impart training to rural youths, for infrastructural development, and Rs.1050 lakhs is proposed to be spent out of IRDP funds towards recurring expenses of training etc., For the year 1992-93, an outlay of Rs. 55.00 lakhs is proposed and targetted to train 14,000 youths.

Development of Women and Children in Rural Areas (DWCRA)

The objective of the scheme is to provide income generating activities to the women members of the families

of the target group so as to increase their income and also to provide supporting services needed to enable them to take up income generating activities. The scheme envisages assistance to women in the following manner:

(1) Assistance to individual women to take advantage of the facilities already available under Integrated Rural Development Programme.

(2) Organising women in small homogeneous groups of 15-20 beneficiaries to take up economically viable activities on a group basis.

(3) Providing supporting services to women in terms of provision for caring of children while the mothers are at work, Provision of working conveniences etc.,

(4) Organising child Care facilities to provide for security, health care and nursing of children.

Formation of women groups is an important activity of DWCRA programme. Each women group is provided Rs. 5,000/- as a one time grant which is contributed in equal measure by the Government of India, State Government and UNICEF.

In Karnataka State ,DWCRA programme is implemented in 11 districts viz. Chickmagalur, Bijapur, Shimoga, Mysore, Dharwad, Chitradurga, Dakshina Kannada, Kodagu, Kolar, Bellary and Raichur. The programme was introduced for the first time during the year 1983-84 in Chickmagalur and Bijapur. The programmes extended to other districts during the subsequent years. At present, the programme covers 10⁴ taluks in the 11 districts.

Women groups have taken up a wide range of income generating activity in primary, secondary and tertiary sectors. Since economic viability of these income generating activity depends mostly on marketability

of products produced by the women groups, attempts are made to establish linkages through agencies such as District Industries Centre, Rural Marketing Centres, District and Marketing Societies, Co-operative Societies, Janatha Bazar, Government Departments etc., However marketing linkage needs to be strengthened.

Findings of the study conducted by TECSOK:

The Technical Consultancy Services Organisation of Karnataka (TECSOK) at the instance of the Department of Rural Development had conducted a study in Mysore and Gulbarga Districts about the implementation of DWCRA programme. The study based on certain case studies reveal cases of success and failures in the implementation of DWCRA Programme. Some of the shortcomings indicated by the study are as follows:

- 1) Absence of definite selection criteria
- 2) Imposition of schemes on the beneficiaries without allowing the beneficiaries to opt for schemes.
- 3) Identification of projects without regard to availability of proper infrastructure.
- 4) Indifference of staff incharge of DWCRA.
- 5) Influence of local political leaders in the selection of beneficiaries.
- 6) Lack of training to staff and beneficiaries.
- 7) Lack of viable projects.

Against the above background, the study has made certain recommendations in terms of organisation of Entrepreneurship Development Programme for rural women, pre-project activities, strengthening the staff position, orientation training to the officials and grassroot level workers. In addition, the study has identified certain potential economic activities and prepared project profiles in respect of such activities for implementation over a period of 5 years.

The above shortcomings and recommendations are taken into account as indicators for ensuring better and effective implementation of DWCRA programme. In order to derive advantages from such studies, it is proposed to take up similar studies in other DWCRA Districts also and to make use of the technical expertise of TECSOK on a wider scale.

In order to ensure effective implementation of DWCRA programme, adequate attention will have to be paid to ensure provision of adequate working capital, easy availability of raw materials and marketing outlets for the products of women groups, organisation of awareness generation camps and Entrepreneurship Development Programme for women with the help of TECSOK need to be emphasised. During the Eighth Plan it is targetted to organise 1200 groups and an outlay of Rs.200 lakhs is proposed. For the year 1992-93, the outlay proposed is Rs.35 lakhs and targetted to organise 300 groups.

Assistance to Small and Marginal Farmers for increasing agricultural Production (100 Wells Programme)

The Scheme is continued as a State Sector Plan Scheme with effect from 1991-92 and is in operation in all the Zilla Parishads and DRDS, Bangalore (Urban) district. Under this scheme, financial assistance in the form of loan and subsidy is provided to small and marginal farmers for increasing agricultural production. The programme consists of three components namely Minor Irrigation, Distribution of Mini-kits and Land Development. The Minor Irrigation component is monitored by the Rural Development and Panchayat Raj Department and the other two components are monitored by the Agriculture and Horticulture Department at the State Level.

Assistance is given under Minor Irrigation Component for gully plugging, nala bunding, construction of Small surface storage structure including ponds, percolating

tanks, deepening of existing village ponds, dug wells, renovation of old wells, pumpsets with appropriate water conveyance and distribution system, electric motors, diesel engines, pumphouses, cost of energisation of pumpsets etc., A subsidy of 25 percent of the total unit cost as fixed by NABARD is provided to small farmers and 33 $\frac{1}{3}$ % to marginal farmers and 50 percent of Tribal farmers.

One of the main problems faced in the implementation of the programme is the poor performance of Karnataka Agro-Industries Corporation in executing the work. This matter has to be tackled at the State Level and specific programme is being worked out to streamline the working of Karnataka Agro-Industries Corporation.

The main problem faced in this programme is that of non-energisation of irrigation pumpsets by K.E.B. Considerable delay is caused by K.E.B. in energising the irrigation pumpsets, in spite of repeated efforts at solving this problem. The problem continues causing inconvenience to the beneficiaries and retarding implementation of the programme. Concerted efforts need to be made at the state level to solve this problem.

During Eighth Plan an outlay of Rs.2450 lakhs is proposed and targetted to dig 30,000 wells. An outlay Rs.490 lakhs has been proposed for 1992-93 and targetted to dig 600 wells.

Assistance to Surplus Land grantees:

Assistance to Surplus Land grantees is a Centrally Sponsored Scheme on 50:50 basis to provide financial assistance to those who are granted surplus lands under Land Reforms Act, Land Grant Rules and also ex-tenants. Assistance is given in the form of grant to an extent of Rs.2500/- per hectare both for purchase of bullocks,

Agricultural inputs and for land development. Block Development officer and other staff attached to the Panchayat Samithis are implementing this programme.

The amount of assistance provided under this scheme is very meagre to bring about an improvement in the conditions of surplus land grantees. It is also proposed to follow an integrated Approach for Development of Surplus Land Grantees so that they are assisted under various schemes to take up cultivation on economic lines and improve the economic condition.

During the Eighth Plan an outlay of Rs.125 lakhs and for the year 1992-93 an outlay of Rs.25 lakhs is proposed.

JAWAHAR ROZGAR YOJANA (J.R.Y)

This scheme was introduced in the year 1989-90 by the Government of India, by merging N.R.E.P. and R.L.E.G.P. The expenditure under the programme is shared between the centre and the State on the basis of 80:20. 80 per cent of the amount is released to the concerned mandal panchayats on the basis of rural population as well as population of SC/STs. 20 percent of the money is retained at the zilla parishad level for taking up various programmes. The main objective of the programme is generation of additional gainful employment for the unemployed and under-employed persons in rural areas. People below poverty line are the target group and the preference is given to SCs/STs for employment under the scheme. 30 percent of the employment opportunities are reserved for women. During the VIII plan an outlay of Rs. 17840 lakhs is proposed and targetted to create 3158 lakhs mandays of employment.

For the year 1992-93 an outlay of Rs. 2678 lakhs is proposed as State share and targetted to create 502 lakh mandays of employment.

DROUGHT PRONE AREAS PROGRAMME

This programme is implemented in 71 taluks of 11 districts under central sector programme. The programme aims at drought proofing the area through development of Integrated Watershed basis with the add. mixture of soil conservation, water resources development, afforestation, fodder development, horticulture, sericulture, fisheries sector. This programme has contributed to the mitigation of environmental problems particularly that of soil erosion and depletion of forest cover.

An outlay of Rs. 4260 lakhs is proposed for the VIII Five Year Plan 1992-97, under this programme and for the year 1992-93 an outlay of Rs. 700 lakhs has been proposed.

COMMUNITY DEVELOPMENT AND PANCHAYAT RAJ

This programme consists of (1) payment of per capita grants to Zilla Parishads and Mandal Panchayats, (2) Payment of grants to Karnataka Panchayat Raj Institutions (3) Expenditure on activities of Panchayatraj functionaries both non-officials and officials like Sammelanas, Conferences, Training etc., (4) Misc. expenditure for implementation of ZP Act, (5) Awarding of prizes to best mandals (6) Publication of Karnataka Vikas Journal, (7) SIRD. An outlay of Rs. 17410 lakhs is proposed for the VIII Plan. Out of which Rs. 17150 lakhs is proposed for per capita grants to ZPs & MPs.

STATE INSTITUTE FOR RURAL DEVELOPMENT

The S.I.R.D. set up by the State, is in the Name of Nazir Sab State Institute of R.D. has become fully functional both in terms of hardware and software. The directly recruited B.D.Os. of 1990-91 batch are trained in S.I.R.D. programmes are conducted at S.I.R.D. under under the AEGETS of the State Government and in collaboration with the N.I.R.D. Hyderabad.

LAND REFORMS:

Land Reforms constitute a part of the overall policy of agrarian reforms adopted with the twin objectives of improving agricultural production and bringing about the Socio-economic revolution in the country side. During the VIII Plan period, the following schemes are proposed with a total outlay of Rs. 550 lakhs and for the annual plan 1992-93, an outlay of Rs. 110 lakhs is proposed.

1. Setting up of computer system and Micro Filming units:

The Department of Survey, Settlement and Land Records is incharge of preparation and preservation of land records. In order to preserve and keep the land records intact, it is absolutely necessary to go in for computerisation of about two crores of records and approximately 50 lakhs of records need to be computerised in each revenue division and hence it is proposed to instal one unit of Computer system with Micro Filming units in each Revenue division and an amount of Rs. 200 lakhs is proposed in the VIII plan and for the annual plan 1992-93, the outlay proposed for the scheme is Rs. 40 lakhs.

2. Strengthening of Survey Settlement Training

Institute at Mysore:

The Survey and Settlement Institute, Mysore is meant for imparting training to the Probationary Officers, the newly recruited Surveyors and training in different aspects/areas to inservice personnel of the Govt. The training programme ranging from one week to six months to different categories of officers. The facilities available at present in the institute is inadequate and proposed to be strengthened to the required level and an outlay of Rs. 80 lakhs is proposed for the VIII Plan and for the annual plan 1992-93 an outlay of Rs. 20 lakhs is proposed.

3. Strengthening of Revenue Administration -
Construction of Village Accountant Quarters:
At present, there are about 8601 Village Accountants working in the state and they need to be provided with quarters at their respective village Head Quarters. During the VIII Plan, it is proposed to construct 401 village accountant quarters and the outlay proposed is Rs. 270 lakhs and for the annual Plan 1992-93, an outlay of Rs. 50 lakhs is proposed.

SPECIAL AREA PROGRAMMESHYDERABAD KARNATAKA AREA DEVELOPMENT PROGRAMME

In June 1954, when the question of reorganisation of States was still under examination of the SRC, the Government of Mysore had appointed a Fact Finding Committee to make an assessment of the level of development in the various Kannadaspeaking areas, which were to be integrated with the old Mysore areas. The Committee made a detailed study of the State of development in the fields of education, medical and Public health, rural development, industries, irrigation and power and came to the conclusion that the Kannada speaking areas of the old Bombay, Hyderabad and Madras States and Coorg had not reached the same standard of development as the old Mysore and considerable leeway would have to be made to bring them to that level. The Fact Finding Committee, while revealing the comparative backwardness of most of the newly joining areas, conclusively showed that the areas joining from Hyderabad were much more backward than other areas.

Historically, being a part of interior Deccan Plateau, this area had not been exposed to active development effects. More over having been in the rain shadow area, the agricultural and related development is also retarded. Throughout the centuries this area had been at the border out-skirts of various empires and therefore did not receive the attention of the various rulers. Thus, at the time of State's Re-Organisation in 1956, this area started with a disadvantage in being remote and backward.

There were frequent demands and representations from various quarters for constitution^o_a Board for the development of Hyderabad-Karnataka area. In view of these demands and representations, the State Government constituted a "Committee to Report on the Development of Hyderabad-Karnataka Area" on 3.5.1980 under the Chairmanship of Sri Dharam Singh, the then Minister for Housing and Urban Development with all MLAs, MPs and MLCs of the region as members. Bellary district was included in the scope of the Committee in July

1980. This Committee had 2 meetings in which some of the members expressed the view that the Committee should be converted into a statutory Board. In view of this, a sub-committee was constituted on 18th May 1981 under the Chairmanship of Sri Dharam Singh. The sub-Committee was entrusted with the task of examining all aspects of the issue relating to the conversion of the Committee into a Board. This Sub-Committee made a detailed analysis, studied the position in other states and submitted its report to the main Committee. The main Committee endorsed the report and submitted the same to the Government on 15th October 1981.

The approach adopted in the Report is to identify critical key sectors and develop these sectors to the level of State average in 10 years. Based on this approach, the committee recommended the following:

- (a) an investment of Rs.350 crores in 10 key sectors/areas in 10 years.
- (b) Constitution of a Statutory Board to be called as Gulbarga Area Development Board to formulate plans, monitor the implementation and generally to be the watch-dog against lapsing of funds and
- (c) establishment of Gulbarga Area Development Corporation to execute and promote commercially viable schemes.

The Cabinet accepted the Report at its meeting held at Gulbarga on 22nd October, 1981. The Government took the initiative of sending a copy of the Report to the Planning Commission, New Delhi during 1985 with a request to sanction addition plan assistance as was done in the case of Telangana region in Andhra Pradesh. The Planning Commission replied in the negative.

The Government decided to set up the Hyderabad Karnataka Development Board during 1989-90 and made a provision of Rs.2 crores in the Budget for 1989-90.

The State Government approached the Central Government for special assistance to the Development of Hyderabad Karnataka region as in case of Sunderban Region of West Bengal and Telengana region in Andhra Pradesh. In response to this request a central study team visited the Gulbarga Division viz., Bidar, Gulbarga, Raichur and Bellary Districts as per the instruction of the Planning Commission during may, 1990. The report of this Study Team is still awaited.

In the meanwhile, the Government of Karnataka has prepared a blue print for raising the standard of infrastructure for development of HKD area during 1990-95 and submitted it to the study team. It is proposed to invest Rs.635 crores during 1990-95 for HKD region for the thrust areas like Roads and Bridges, Education, Water Supply, Health and Minor Irrigation. The districtwise and Year-wise allocation are as follows:

Year/ Sector	(Rs. lakh)				Total (4 Dis- tricts)
	Bellary	Bidar	Gulbarga	Raichur	
<u>I. Yearwise outlays by Districts 1990-91 to 1994-95</u>					
1990-91	3039	1127	4730	3702	12598
1991-92	3095	1287	4868	3607	12857
1992-93	3396	1249	4314	3420	12378
1993-94	3442	1322	4299	3435	12498
1994-95	2357	1440	4305	3369	11471
<u>II. Total Outlay by Sector and District for 5 years</u>					
<u>1. Water Supply</u>					
(a) Urban	545	28	420	311	1304
(b) Rural	1004	344	1888	1884	5120
<u>2. Roads and Bridges</u>					
	10766	4045	16517	12081	43409
3.					

3. Education (Primary & Secondary)	1540	1321	1801	1865	6527
4. Health Service	1474	687	1889	1392	5442
5. Minor Irriga- tion	383	126	992	149	1650

Total	15712	6551	23507	17682	63452

Considering the recommendations of Dharam Singh Committee and subsequent developments in this regard a High Power Committee with the Chief Minister as Chairman has been constituted under Government in May 1990 pending the decision on the constitution of Hyderabad Karnataka Development Board.

The Committee also has five other ministers as members and an officer of the rank of Addl. Chief Secretary as the Secretary of the Committee.

The High Power Committee identified the following thrust areas required immediate attention for development of Hyderabad Karnataka Area.

- a) Roads connecting district to district, taluk to district, taluk to taluk, hobli head quarters to taluk etc.,
- b) Medium and Minor Irrigation Programmes
- c) Pending drinking water supply programmes in the rural and urban areas.
- d) New drinking water supply programmes to be taken up in the rural and urban areas.
- e) Primary Health Centres, Taluka Hospitals to be constructed/improved in these areas.
- f) Primary school buildings, secondary school buildings, college buildings etc., to be taken up in these areas.

- g) The investment required to be made by the KEB in setting up of sub-centres etc., in order to fulfil -its commitment towards rural electrification especially electrification of Harijan Keries, Lamani's Tandas etc.,

Government have also constituted an implementation Committee with Secretary HPC as Chairman to implement the Schemes/programmes as per the directions of the above Committee and this committee will function as a fully empowered committee to ensure speedy implementation of schemes/programmes. The committee also consists of Secretary to Chief Minister, Commissioner for Finance, Commissioner for Planning and Divisional Commissioner, Gulbarga as members and Deputy Secretary High Power Committee as Secretary of the Implementation Committee.

It is decided to constitute a statutory Board for the Development of Hyderabad Karnataka Area. In this regard during September 1991, the bill placed on the floor of both the Houses of Legislature has been passed.

During 1990-91 an amount of Rs.50 crores was provided in the budget to take up works in the Hyderabad Karnataka Area and entire amount was spent. During 1991-92 also Rs.50 crores has been provided for various sectors. The State Government expects that substantial portion of investment required for development of Hyderabad Karnataka Area will be forth-coming from the Government of India as special central assistance. However in order to reduce the regional imbalance in this area the State Government has proposed to continue the programme and hence an outlay of Rs.290 crores is proposed for the Eighth Five Year Plan period out of the State Plan Budget expecting the central assistance in the form of central sector or centrally sponsored scheme. Of this an amount of 50 crores is proposed for 1992-93.

The details of sectorwise expenditure during 1990-91, the outlay provided for 1991-92, the amount proposed for 1992-93 and also the Eighth Five Years Plan period are given in the following table.

Sectoral allocation for HKAD Programme during Eighth Plan and 1992-93.

Sl. No.	Sector	(Rs. lakhs)			
		1990-91 Expendi- -ture	1991-92 Outlay provided	1992-93 proposed outlay	1992-97 proposed outlay
1.	Roads and Bridges	577	1125	1167	6769
2.	Major and Medium Irrigation	230	225	83	481
3.	Minor Irrigation	156	420	292	1694
4.	Health and Family Welfare	294	250	583	3381
5.	Education	642	850	708	4106
6.	Karnataka Urban Water Supply and Drainage Board (KUWSDB)	966	600	417	2419
7.	Karnataka Electri- city Board (KEB)	569	500	417	2419
8.	Co-operation	920	66	-	-
9.	Rural Development and Panchayat Raj	634	939	250	7250
10.	Establishment Charges	12	25	83	481
Total		5000	5000	5000	29000

KARNATAKA STATE BORDER AREA DEVELOPMENT PROGRAMME

The State of Karnataka is surrounded by the Arabian sea on the west, and the border of the neighbouring States viz., Goa, Maharashtra, Andhra Pradesh, Tamilnadu and Kerala on the remaining sides.

At the time of the re-organisation of the States during 1956-57 some of the districts and area from the neighbouring States were merged with the Mysore State.

There are in all 52 taluks of the State on the border of the neighbouring states. These are spread over 15 districts as detailed below:

Sl. No.	District	No. of Border Taluks	Name of Border Taluks
1	2	3	4
1.	Bangalore (U)	1	Anekal
2.	Bangalore (R)	2	Hoskote, Kanakapura
3.	Chitradurga	3	Challakere, Hiriyur, Molakalmuru
4.	Kolar	8	Bagepalli, Bangarpet, Chintamani, Gowribidanur, Gudibanda, Malur, Mulabaqil, Srinivasapur
5.	Tumkur	3	Madhugiri, Pavagada, Sira
6.	Dakshina Kannada	4	Bantwal, Mangalore, Puttur, Sulya
7.	Kodagu	2	Madikeri, Virajpet
8.	Mysore	4	Chamarajanagar, Guldlupet, HD Kote, Kollegal
9.	Belgaum	5	Athani, Belgaum, Chikkodi, Hukkeri, Khanapur
10.	Bijapur	2	Bijapur, Indi
11.	Uttara Kannada	2	Karwar, Supa
12.	Bellary	3	Bellary, Sandur, Siraguppa

Sl. No.	District	No. of Border Taluks	Name of Border Taluks
13.	Bidar	5	Aurad, Basavakalyan, Ehalki, Bidar, Humnabad
14.	Gulbarga	6	Afzalpur, Aland, Chincholi, Sedam, Shahapur, Yadgir
15.	Raichur	2	Manvi and Raichur
Total		52	

The Government of Karnataka has prepared a blue print for raising the standard of infrastructure for development of border taluks during 1990-95 and submitted it to the Planning Commission.

The Yearwise sectoral outlay for the period from 1990-91 to 1994-95 as given in the Blue Print is as follows.

Sector	Year Wise Sectoral Outlay (1990- to 1994-95)					Total
	90-91	91-92	92-93	93-94	94-95	
1. Roads & Bridges	435.70	520.20	441.34	451.29	448.57	2297.10
2. Rural/Urban Water Supply	127.50	118.31	169.21	158.52	151.48	725.00
3. Education	110.60	126.94	136.76	137.02	118.68	630.00
4. Health	80.80	92.68	99.84	100.03	86.65	460.00
5. Rural Electrification	39.60	45.31	48.82	48.91	42.36	225.00
6. Minor Irrigation	38.80	44.29	47.71	47.80	41.40	220.00
7. Construction of Anganwadi Buildings	20.80	24.24	26.12	26.17	22.67	120.00
8. Animal Husbandary	5.30	28.03	30.20	30.26	26.21	120.00
9. Others	15.90	-	-	-	-	15.90
10. Amount released to Chincholi and Pavagada Taluks	187.00	-	-	-	-	187.00
Total	1062.00	1000.00	1000.00	1000.00	938.00	5000.00

Some cited sectors are identified as the thrust areas of development.

Out of these 52 border taluks, 16 border taluks of Gulbarga Division are excluded from being benefitted by this programme as these taluks are getting special assistance under Hyderabad-Karnataka Area Development Programme as per Government decision. However during 1990-91 Chincholi taluk was released Rs.93.5 lakhs out of Rs.5 crores budgetted for this programme.

During 1990-91, after releasing Rs.93.5 and Rs.93.0 lakhs to Chincholi and Pavagada taluks, respectively, the balance amount of Rs.3.13 crores of the budgetted amount of Rs.5 crores was released to the 35 border taluks of 11 districts at the rate of Rs.9 lakhs per taluk to spend on the thrust areas of development identified.

During 1991-92 Rs.10 crores have been provided to the Border Area Development Programme, each border taluk is getting Rs.25 lakhs for the year and the sectoral allocations given to the taluks in the beginning are as follows.

(Rs. in lakhs)		
Sl. No.	Sector	Allocation for 1991-92
1.	Roads and Bridges	14.00
2.	Education - Primary & Secondary School Buildings	3.00
3.	Health	2.00
4.	Anganawadi Buildings	2.00
5.	Minor Irrigation	2.00
6.	Rural Electrification SC-ST Colonies, Tandas, etc.,	2.00
Total		25.00

balance

To complete the incomplete works, the amount of Rs.1 crore will be released.

However, a meeting of MLAs of the Border taluks was held during September 1991 under the Chairmanship of the Hon'ble Planning Minister. Keeping in view the opinions expressed by the MLAs during the discussion, the revised guidelines are being issued. 1992-93 onwards the sectorwise allocations under this programme will be as follows.

	(Rs. in lakhs)
1. Roads and Bridges	5.00
2. Education - Primary and Secondary School Buildings	3.00
3. Anganawadi Buildings	2.00
4. Health-Maternity Wards	2.00
5. Housing Programme for the family below the poverty line (supply of roofing materials only)	7.00
6. Rural Electrification - SC/ST colonies and Tandas and families below the poverty line	1.00
7. Veterinary Institutions	1.00
8. Rural Water Supply and Sanitation	4.00
Total (for each border taluk)	25.00

It is proposed to spend Rs.50 crores during 1992-97 at the rate of Rs.10 crores per year under this programme for a period of Five Years. Accordingly during 1992-93 Rs.10 crores will be spent. During the Eighth Plan Period, it is expected to generate 40 lakhs mandays.

Malnad Area Development Programme

Economic planning in our country is expected to bring about economic development with regional balance. It is in this context that the concept of reduction of regional imbalances comes to the forefront. The planning at aggregate level does not necessarily result in uniform development of various regions. Hence, there are every chances of affluent regions growing affluent and the weaker remaining weaker. This phenomenon has necessitated the inception of several Special Area Development Programmes. The Malnad Area Development programme emerges as an addition to the series of programmes. Many parts of the Malnad Area (hilly areas) have still remained under developed in the State, inspite of the special assistance given to them under the Western Ghats Development Programme. They lack proper infrastructural facilities, which is detrimental to the full pledged development of the Malnad area. The Government with a view to reduce regional imbalance and to gear up the socio-economic development of the Malnad area, has taken a welcoming decision of implementing a special programme under the nomenclature of 'Malnad Area Development Programme'.

The Malnad Area Development Programme is a supplementary programme to the Western Ghats Development Programme. It is endeavoured to promote infrastructural facilities of the Malnad Area, i.e., to develop transport and communication network to serve the region adequately and to support social welfare programmes by constructing Anganawadi buildings, school buildings, health centres etc., In a way, it facilitates the human resources development of the region. This programme extends to the taluks of the districts detailed below.

Sl. No.	District	Taluks
1.	Belgaum	1. Khanapur 2. Belgaum 3. Bailahongal 4. Soundatti 5. Hukkeri
2.	Chickmagalur	1. Koppa 2. Mudigere 3. Sringeri 4. Chickmagalur 5. Tarikere 6. Narasimharajpur
3.	Coorg (Kodagu)	1. Mercara 2. Somwarpet 3. Virajpet
4.	Hassan	1. Sakaleshpur 2. Alur 3. Belur 4. Hassan 5. Arakalgud
5.	Mysore	1. H.D.Kote 2. Gundlupet 3. Periyapattana 4. Hunsur 5. Kollegal

6 . North Kanara

1. Ankola
2. Bhatkal
3. Honnavar
4. Kumta
5. Karwar
6. Siddapur
7. Sirsi
8. Supa
9. Yellapur
10. Haliyal
11. Mundagod

7. South Kanara

1. Belthangadi
2. Kundapur
3. Karkal
4. Futtur
5. Sulya
6. Udipi
7. Mangalore
8. Bhantwala

Sl. District Taluks
No. -----

8. Shimoga

1. Hosanagar
2. Thirthahalli
3. Sagar
4. Shimoga
5. Shikaripur
6. Soraba
7. Chennagiri
8. Bhadravathi

9. Dharwad

1. Dharwad
 2. Kalaghatagi
 3. Shiggaon
 4. Savenur
 5. Byadgi
 6. Hirekerur
 7. Hanagal
-

The WGDP being the Central Sector Scheme, covers the development sectors, like agriculture, horticulture, animal husbandry, fisheries, forest, minor irrigation, roads and foot bridges, sericulture, village and small scale industries, etc., except forest, minor irrigation, agriculture, the other sectors are getting very meagre amount under the W.G.D.P. Malnad area being hilly area and the area of heavy rainfall, the maintenance of roads and bridges calls for special consideration. While under the W.G.D.P. very meagre amount is being provided to the roads and bridges sector. Hence, there was a strong need for a supplementary programme, which caters to the bare minimum needs of the region. As such, during 1991-92 Rs.10 crores have been provided under the budget for this programme. It is proposed to spend Rs.50 crores during the Eighth Five Year Plan under this programme, at the rate of Rs.10 crores every year. Accordingly during 1992-93 also Rs.10 crores will be spent. The probable sectoral allocation for 1991-92, 1992-93 and 1992-93 will be as follows :

1215

(Rs. in lakhs)

Sl. No.	Sector	1991-92	1992-93	1992-97
1.	Roads and Bridges	600	600	3000
2.	Education - Primary & Secondary Education and Anganwadi	200	200	1000
3.	Health	200	200	1000
Total:		1000	1000	5000

During the Eighth Five Year Plan, it is expected to generate 40 lakh mandays.

A bill has been passed during September 1991 regarding the formation of the Malnad Development Board in both the houses of the legislature. The Board has to perform the role of co-ordinating the preparation of the annual plan containing programmes and projects for development of Malnad Region, approving the annual plan, supervising the implementation of projects and programmes and monitoring and evaluating the implementation of the annual plan.

X. CO-OPERATION

STATUS OF THE SECTOR:

In a democracy like ours, the Co-operative movement was envisaged as a forerunner in preparing the people to achieve the social and economic objectives and to secure natural justice under the principle Directives-Principles of Liberty, Equality and Fraternity enunciated in the preamble of our Constitution. This movement has given an opportunity to the people to organise themselves to achieve rational and judicious unitary and collective growth of socio-economic institutions crucial for human betterment. In this sense, the Co-operative movement can be termed a synonym for the over-all development through the planning process. With the recent decentralisation in planning, the Co-operative movement in Karnataka has had to shoulder the expanded responsibilities of its supplies and services.

Karnataka has a very good net-work of Co-operative institutions at different levels which have spread their activities to various crucial sectors of the economy in the fields of composite Agriculture, Industry, Trade and Commerce and services and play a very important role in integrated development. Almost every village is covered by one or the other type of Co-operative institution which is instrumental to the flow of institutional finance and agricultural finance to the population.

Karnataka has 25155 Co-operative Institutions including the Apex Institutions at the State, District and Taluka levels with a membership of over 1.57 crores covering about 93 percent of the agricultural households. Share capital amounting to about Rs.407 crores and deposits amounting to about Rs.716 crores is invested by the members.

The development of agriculture and allied activities in the rural sector has been accorded an important place in the plan for economic growth. Although, credit is one of the

important inputs for achieving this goal, it has to be supported by other inputs such as (i) Technology (ii) Supply of inputs such as seeds, fertilisers and pesticides and irrigation (iii) Extension support and Motivation by Government Agencies and (iv) Marketing support to ensure its effective and productive use. The total value of agricultural produce handled by Cooperatives particularly in Dairy services, Agro Processing, Consumer services and Marketing services has crossed Rs.4,000 crores.

With the support of 4,880 Primary Agricultural Credit Cooperatives, 177 Primary Agricultural Societies, D.C.C Banks and State Apex Coop.Bank, Karnataka State Coop. Agriculture and Rural Development Bank with affiliation of 177 Primary Cooperative Agriculture and Rural Development Banks at the Taluk level, Cooperative institutions have provided a very strong base for the flow of agricultural credit to farming community. Primary Cooperative Agriculture and Rural Development Banks are concerned with the flow of long term credit for sinking irrigation wells, installation of irrigation pumpsets, land improvement, development of horticultural crops, purchase of tractors and power-tillers, installation of gobar-gas plants, sericulture and development of piggary, sheep and goat, poultry farms etc. The Agricultural Credit Societies advance term loans and refinance advances. As many as 1520 Consumers Cooperatives render consumer services in the State. In the total institutional finance, the disbursal of agricultural credit through Co-operatives has crossed 50 percent of the requirement of the farmers. The collections, procurement and distribution of milk and milk products by about 5562 milk supply cooperatives in the State is commendable and forms a very significant contribution by the sector. The State has 292 farming, 661 irrigation and 255 fisheries Cooperatives.

The Cooperative Sector's participation in the Industrial growth is also commendable. Out of 28 Sugar Factories, 21 Factories belong to Cooperative Sector and these factories are responsible to produce nearly three lakh tonnes of sugar per annum on an average and this forms over 50 percent contribution in the State, as compared to 55 percent contribution at the All India level.

Apart from these, the State has established 19 Cooperative Spinning Mills with over 1.4 lakhs of spindles producing goods worth over Rs.25 crores per annum. As many as 1339 Industrial Cooperatives and 659 Weavers Cooperatives have been supporting Industry and Weavers. About 232 Labour Cooperatives (including Forest Labour) are supporting the Labourers. As many as 402 Women Cooperatives and over 190 Students Cooperatives are functioning for the welfare of women and students. Among the processing units, Karnataka has 91 Cooperative Rice Mills with 2.41 lakh tonnes of hulling installed capacity and 2 Dal Mills established at Chincholi and Gulbarga in Gulbarga District. The State Government has been encouraging Apex Cooperative Organisations to establish more and more of Processing Units like Oil Complexes, Ginning/Pressing Units etc., by providing technical and financial support.

With the continuous financial support provided by the State Government over the years through the Five Year Plans, the State has been able to create storage capacity substantially and the aggregate storage capacity involving State Ware Housing Corporation, Marketing Cooperative Institutions and Primary Agricultural Cooperatives has reached the level of 16 lakh M.Ts. by the end of 1991-92 and about 3.0 lakh MTs is hired.

The Cooperative Movement through its supplies and services of the agricultural inputs including the flow and refinance of credit to the farming community share the attribute of the "Green Revolution" and achieving of "Self Sufficiency" in agricultural production which has

almost parallelly grown with the spurt in population.

The Public Distribution System (PDS) has captured the services of Cooperative movement and by the end of 1989, out of over 16858 Fair Price Shops, about 7,000 Cooperatives have been working as Fair Price Shops in the State.

The statutory reservation to SCs and STs even in the Cooperative Sector has also helped to this socially suppressed population to obtain economic help of the Government to improve their lot by way of building assets, finding the living and more than all an active participation in the society.

Despite the above positive contributions of the Cooperative movement, its institutions, inherit certain repeated deficiencies persisting continuously and retarding the pace of growth. For instance, due to mal-functioning and irregularities of the office-bearers, some of the Cooperatives become defunct and inoperative because of impure political interventions. The PACs constitute the major retail outlets of short and medium term credit to the rural sector. Even though the Societies cover almost all the villages in the State, their membership is confined to about 65 percent of the rural households. The percentage of borrowing members is still less i.e. hardly about 27 percent of the total. Despite their reorganisation efforts, their quality of operation has not improved. They have turned out to be the weakest link in the Cooperative Credit Structure. Their thrift activities are absent. Because of these deficiencies, some of the societies become defaulters as either they do not repay their advances or repay untimely and irregularly, with the result, that, they become ineligible for getting refinances and weaken the D.C.C. Banks and other Modal institutions in their borrowing capacity from the National Refinancing Institutions. Secondly, due to

change of hands in office bearers, with the limited facilities available, their training in Cooperative Management is inadequate. Due to absence of self-supporting tendency, some of the institutions always look to the support of Government even for their minimum State of survival and in the limited plan funds, Government cannot extend its support to the mounting number of institutions. Bottle-necks to the flow of credit are noted to be as follows:

(a) Natural Calamities such as droughts and floods and erratic monsoons have been a threat for the flow of agricultural credit. Added to this, the recovery of overdues is paralysed by the ryots' agitations;

(b) The size of overdues do not come down on account of defective lending such as delay in sanctions due to large number of records to be collected, centralisation of powers of sanction, over financing and under financing, failure of ensuring the proper end-use of credit flow, failure in taking timely legal steps for recovery of over-dues and recovery measures;

(c) Gap in outstanding of members and member Cooperatives in D.C.C. Banks - on account of weak financial position of PACs as these institutions have just nominal lending business and meagre non-credit activities;

(d) Lack of official management particularly in PACSBs and PCARDBs and untrained and non-professionalised staff at the level of Central Cooperative Banks and PACSBs; added to this, poor involvement of members in the affairs of PACSBs and their non-commitments to the Cooperative movement resulting in chocking of credit channel in the State;

(e) Investment of funds with higher financial Agencies in the form of shares being generally of less remunerative;

(f) Distress sale of agricultural produce for non-availability of adequate storage and marketing facility;

(g) Lack of adequate staff for effective supervision and extension services;

(h) Varying norms prescribed by NABARD for sanction of funds and their drawal also 'sometimes come in the way of smooth flow of credit. For example, particularly, if a D.C.C Bank does not achieve the seasonality discipline by the end of March in a year, the concerned Bank is not allowed to draw funds out of the limit already sanctioned, with the result, the respective khariff advances are hampered during the period April-June in that year.

PROGRESS DURING SEVENTH PLAN: 1985-90

During the period of the seventh plan, various schemes to benefit the Cooperative institutions across the farming community, consumers, industries and other sections of the society were implemented catering the finances, services and encouragement in general. The Cooperation Department and the Cooperative Audit Department were strengthened. The measures of publicity, seminars, trainings, study tours etc., organised by the Karnataka State Cooperative Federation were supported by finances of the State Government. With the support of plan funds, Agricultural Cooperative Banks at the State and District level were strengthened through the schemes of Agricultural Credit Guarantee and Relief Fund, short-fall in recovery of overdues, financial support for recovery of overdues, interest concessions etc., were helped in the efficient discharge of the duties of these institutions. Marketing institutions were supported to catalise their activities and increase their sales and services to abtain the rise of prices. Cooperative consumerism was encouraged by financially supporting the consumer institutions. The Processing institutions such as Oil Complexes and Ginning Mills, Cooperative Sugar Factories and Spinning Mills were strengthened by providing share capital support. The operational and servicing

abilities of consumer institutions were catalysed through the State Government's financial support. The Cooperative institutions organised by sericulturists, women, labourers and employees, students and housing cooperatives were supported by providing funds to the deserving institutions. Special Component Plan Schemes and Tribal Plan Schemes implemented benefitted the SC/ST population in creating the assets and improving their standard of living and their involvement in the movement.

The details of the approved Outlay, expenditure by years of the Seventh Plan under the State Plan, Central Sector and Centrally Sponsored Schemes and the NCDC Schemes under Minor Heads of development with break up for State Sector and ZP Sector are presented in TABLES 2A & 2 B. Physical Achievements in the Seventh Plan period are shown in TABLE 4.

ANNUAL PLANS' REVIEW: 1990-91 AND 1991-92

The financial outlays and expenditures incurred during the years 1990-91 and 1991-92 (anticipated) under State Plan, Central Sector, Centrally Sponsored Schemes and NCDC Schemes, Special Component Plan and Tribal Sub-plan achieved under State Sector and ZP Sector are presented in TABLE 3. The physical targets and achievements of these years are presented in TABLE 4. During these years, most of the schemes implemented were schemes brought forward from the seventh plan after reviews and eliminations.

TABLE - 2'A'

SECTOR - CO OPERATION State Sector

OUTLAY AND EXPENDITURE DURING SEVENTH PLAN 1985-90 KARNATAKA

(Rs. in lakhs)

Minor Head of Development	VII Plan @ Outlay 1985-90	Expenditure during					Total VII Plan period 1985-90
		1985-86	1986-87	1987-88	1988-89	1989-90	
I STATE SECTOR							
1. Direction and Administration	378.25	25.30	19.03	18.19	34.18	42.14	138.84
2. Training	77.48	14.00	9.00	3.00	4.50	7.75	38.25
3. Research & Evaluation	30.30	4.14	4.68	4.30	6.00	5.90	25.02
4. Audit of Cooperatives	111.00	13.93	15.58	22.59	22.60	23.27	97.97
5. Information & Publicity	24.48	4.50	4.00	4.11	0.50	1.20	14.37
6. Assistance to Multipurpose Rural Cooperatives	-	-	-	-	-	-	-
7. Assistance to Credit Cooperatives	920.30	117.48	141.19	36.77	192.00	81.25	568.69
8. Assistance to other Cooperatives	4129.23	307.44	631.75	525.15	210.83	247.44	1922.61
a) Cooperative Processing	1143.56	201.94	288.36	338.60	136.75	153.63	1119.28
b) Cooperative Storage	523.68	88.85	212.27	112.55	64.08	90.81	568.56
c) Consumer Cooperatives	339.21	3.00	3.00	-	-	3.00	9.00
d) Marketing Cooperatives	431.20	10.00	50.00	65.00	-	-	125.00
e) Other Types of Cooperatives	265.45	-	-	-	-	-	-
f) Tribal Sub Plan	281.57	3.55	17.97	9.00	-	-	30.52
g) Special Component Plan	1144.06	-	60.14	-	10.00	-	70.14
h) Farming Cooperatives	0.50	0.10	0.01	-	-	-	0.11
9. Agricultural Stabilisation Fund	310.00	60.00	37.65	-	5.00	5.00	107.65
10. Assistance to Public Sector & Other undertaking	-	-	-	-	-	-	-
11. Education	18.36	3.60	3.60	3.60	2.00	2.20	15.00
12. Other Expenditure	-	-	-	-	-	-	-
State Sector (Total-'A')	6000.00	550.39	866.48	617.71	477.61	416.15	2928.34
II a) Central Sector Schemes	1138.20	22.58	176.50	-	26.86	30.98	256.12
b) Centrally Sponsored Schemes	1078.15	26.41	45.40	20.00	5.00	19.00	115.81
Total II (a)+(b)	2216.35	48.99	221.90	20.00	31.86	49.98	372.73
III NCDC Schemes	2877.05	423.25	608.98	450.38	257.49	335.35	2075.45
Total (I+II+III)	11093.40	1022.63	1697.36	1088.09	766.96	801.48	5376.52

@ includes ZP Sector also

TABLE - 2 'B'

SECTOR - CO OPERATION: Z.P. SECTOR

OUTLAY AND EXPENDITURE DURING SEVENTH PLAN 1985-90 KARNATAKA

(Rs. in lakhs)

Sl. No.	Minor Head of Development	Expenditure during					Total VII Plan Period 1985-90
		1985-86	1986-87	1987-88	1988-89	1989-90	
II Z.P. SECTOR							
1.	Direction and Administration	.	.	.	.	.	.
2.	Training	.	.	.	.	.	.
3.	Research and Evaluation	.	.	.	.	.	.
4.	Audit of Cooperatives	.	.	.	.	.	.
5.	Information & Publicity	.	.	.	.	.	.
6.	Assistance to Multipurpose Cooperatives	.	.	.	1.00	.	1.00
7.	Assistance to Credit Cooperative	8.39	17.18	30.94	14.83	14.93	86.27
8.	Assistance to Other Cooperative:-	186.97	284.86	251.87	225.52	150.32	1099.54
	a) Cooperative Processing	.	.	.	.	.	.
	b) Cooperative Storage	3.22	3.38	6.33	10.98	5.16	29.07
	c) Consumer Cooperatives	26.04	39.21	29.20	43.92	25.75	164.12
	d) Marketing Cooperatives	23.44	22.40	17.45	28.26	13.17	104.72
	e) Other types of Cooperatives	26.02	29.58	35.09	32.13	19.80	142.62
	f) Tribal Sub Plan	10.06	11.46	10.55	7.42	4.37	43.86
	g) Special Component Plan	98.19	178.83	153.25	102.81	82.07	615.15
	h) Farming Cooperatives	.	.	.	.	.	.
9.	Agricultural Stabilisation Fund	.	.	.	.	.	.
10.	Assistance to Public Sector and Other undertakings	.	.	.	.	.	.
11.	Education	.	.	.	.	.	.
12.	Other Expenditure	.	.	.	.	.	.
	Z.P. Sector (Total-'B')	195.36	302.04	282.81	241.35	165.25	1186.81
	Grand Total (A+B)	745.75	1168.52	900.52	718.96	581.40	4115.15
II.	a) Central Sector Schemes	.	.	.	.	.	.
	b) Centrally Sponsored Schemes	.	.	18.55	12.85	17.92	49.32
	Total II (a + b)	.	.	18.55	12.85	17.92	49.32
III.	NCDC Schemes	.	.	101.43	97.81	125.89	325.13
	Total (I+II+III)	195.36	302.04	402.79	352.01	309.06	1561.26

TABLE 3
OUTLAY AND EXPENDITURE UNDER "COOPERATION" : 1990-91 and 1991-92

Rs. lakhs

Sl. No.	Minor Head of Development	1990-91						1991-92					
		Budgetted Outlays			Expenditure			Budgetted Outlays			Expd. (Anticipated)		
		State	ZP	Total	State	ZP	Total	State	ZP	Total	State	ZP	Total
1.	Direction & Administration	35.61	.	35.61	35.32	.	35.32	.	.	.	.	.	.
2.	Training	10.00	.	10.00	10.00	.	10.00	12.90	.	12.90	12.90	.	12.90
3.	Research & Evaluation	6.89	.	6.89	6.18	.	6.18	.	.	.	.	.	.
4.	Audit of Cooperatives	30.00	.	30.00	26.80	.	26.80	.	.	.	.	.	.
5.	Information & Publicity	5.00	.	5.00	5.00	.	5.00	11.00	.	11.00	11.00	.	11.00
6.	Assistance to Multi-purpose Cooperatives	.	0.20	0.20	.	.	.	.	0.25	0.25	.	0.25	0.25
7.	Assistance to Credit Cooperatives	222.00	37.45	259.45	225.30	32.80	258.10	344.00	18.85	362.85	344.00	18.85	362.85
8.	Assistance to other Cooperatives	692.50	200.35	892.95	609.09	189.46	798.55	983.01	183.07	1166.08	983.01	183.07	1166.08
a.	Cooperative Processing	608.00	.	608.00	572.00	.	572.00	789.51	.	789.51	789.51	.	789.51
b.	Cooperative Storage	52.00	17.40	69.40	23.34	9.71	33.05	50.00	20.26	70.26	50.00	20.26	70.26
c.	Consumer Cooperatives	2.50	15.50	18.00	3.75	15.50	19.25	10.00	15.67	25.67	10.00	15.67	25.67
d.	Marketing Cooperatives	20.00	17.58	37.58	.	17.73	17.73	7.50	22.87	30.37	7.50	22.87	30.37
e.	Other types of Cooperatives	.	28.87	28.87	.	28.21	28.21	.	38.63	38.63	.	38.63	38.63
f.	Tribal Sub-Plan	.	21.00	21.00	.	15.82	15.82	15.00	9.39	24.39	15.00	9.39	24.39
g.	Special Component Plan	.	100.00	100.00	.	102.49	102.49	88.00	76.25	164.25	88.00	76.25	164.25
h.	Farming Cooperatives	.	.	.	.	.	.	.	.	.	.	.	.
9.	Agriculture Stabilisation Fund	5.00	.	5.00	5.00	.	5.00	20.00	.	20.00	20.00	.	20.00
10.	Asst. Public Sector & Other undertakings	.	.	.	.	.	.	.	.	.	.	.	.
11.	Education	5.00	.	5.00	5.00	.	5.00	3.00	.	3.00	3.00	.	3.00
12.	Other Expenditure	.	.	.	.	.	.	.	.	.	.	.	.
	Total State Plan	1002.00	238.00	1240.00	917.69	222.26	1139.95	1350.91	202.17	1553.08	1350.91	202.17	1553.08
	Central Sector Schemes	110.00	.	110.00	144.24	.	144.24	205.00	.	205.00	205.00	.	205.00
	Centrally Sponsored Schemes	95.00	22.95	117.95	11.25	15.00	26.25	95.00	9.15	104.15	95.00	9.15	104.15
	NCDC Schemes	1140.00	161.51	1301.51	1118.35	52.99	1171.34	1035.51	190.27	1225.78	1035.51	190.27	1225.78
	GRAND TOTAL	2347.00	422.46	2769.46	2191.53	290.25	2481.78	2686.42	401.59	3088.01	2086.48	401.59	3088.01

TABLE 4

SECTOR : COOPERATION

Targets and Achievements 1985-90, 1990-91 and 1991-92 (Rs. in Crores)

	VII Plan 1985-90		Annual Plan 1990-91		1991-92	
	Target	Achievement	Target	Achievement	Target	Achievement (Anticipated)
A. Co-operative Term Loan Advanced						
i) Short Term Loans	220.00	744.77	239.50	58.65	307.60	307.60
ii) Medium Term Loans	125.00	40.46	25.00	5.70	33.40	33.40
iii) Long Term Loans	250.00	308.17	100.00	58.12	140.00	140.00
Total (A)	595.00	1093.40	364.50	122.47	481.00	481.00
B. Fertilisers sold on Retail basis						
	65.00	376.23	100.00	88.48	101.00	101.00
C. Agricultural Produce Marketed						
	250.00	1002.39	250.00	344.67	250.00	250.00
D. Retail sale of Consumer Goods						
	295.00	1223.96	365.00	354.00	365.00	365.00
i) By Urban Co-operatives	95.00	421.28	125.00	135.00	125.00	125.00
ii) By Rural Co-operatives	200.00	802.68	240.00	219.00	250.00	250.00
E. Storage Capacity added (Lakh Tonnes (cum))						
	8.80	2.39	0.60	0.031	0.50	0.50

Bottlenecks and Shortfalls in Seventh Plan:

1. The Central Sector, Centrally Sponsored and NCDC^a Schemes included in the Seventh Plan were being in the first instance funded year by year and the approved Plan Outlay was altered creating uncertainty of the inflow of funds by the Government of India/NCDC. Even after approval of annual plans, the State Government had to route separate proposals for each of the schemes for sanction and this procedure caused inordinate delay in getting sanctions resulting the State Government in not utilising the funds or partial utilisation. More-over, even the sanctions communicated by the Government of India/NCDC having been received in fag end of the financial year, the State Government could not allow the funds to flow to the concerned institution/by their sanctions, with the result, the respective funds, in many cases lapsed because of non-utilisation of budgeted allocations. So, to remedy this non-utilisation and non-implementation/under implementation, as a modification to the existing procedure, when once the annual plan and the CS/CSS/NCDC Schemes provided are approved and budgetted by the State Government, the corresponding Government of India/NCDC financial assistance could be kept at the disposal of the State Government, of course, subject to all formalities, prerequisites and procedures to be ensured so that the State Government can release the funds to the beneficiary institutions well in time and the concerned schemes could be fully implemented.

2. At present, quite a good number of PACSS are either defunct, do not disburse crop loans regularly every year because of heavy losses. Such Cooperatives should be intensively identified and brought under the fold of rehabilitation programme so as to review them and see that the credit channel in the areas of operation of those Cooperatives is not chocked. These institutions should also be provided with financial assistance analogous to the D.C.C. Banks.

3. With a view to increase the share capital base of Cooperative Credit institutions and enable them to mobilise additional resources by way of credit limit and borrowings from higher lending institutions, the NABARD, out of their funds of long term operations provide loans to the Karnataka Government to enable it in turn to provide share capital assistance to these agricultural cooperative credit institutions. But as per the original norms prescribed, none of the agricultural credit institutions in the State are provided with this assistance. Past experience reveals that the proposals from even the eligible institutions are not hither to considered by the NABARD. As the State ambitious programmes to finance agricultural development in the Eighth Plan, atleast in this plan, the NABARD should provide advance to the State Government to strengthen its Cooperative agricultural institutions in a phased manner by providing share capital base to make them strong enough to shoulder their part of responsibility in the flow of credit to agriculturists.

Broad Thrusts during the Eighth Plan:

The observed deficiencies in the Cooperative structure underline the need to evolve new strategies for the Eighth Plan which would strengthen the Cooperative institutions and enable them to contribute more effectively to increased agricultural production, reduce exploitation and unfavourable terms of trade by private middlemen, safeguard the interests of both the consumers and producers, and provide necessary farm inputs to agriculturists. The following broad thrusts are envisaged:

- (a) Strengthening the administration of Cooperative institutions at the base level;
- (b) Providing performance-oriented incentives of subsidies, share capital and loan to the deserving Cooperative institutions;
- (c) Professionalising the Cooperative movement by introducing greater technical proficiency;

- (d) Promoting involvement of Women and Students in larger proportions by widening the coverage;
- (e) Promotion of rural housing, rural electric, educational and medical Cooperatives;
- (f) With the experience of the consecutive three droughts in the State, the provisions under the Agricultural Stabilisation Fund as a Centrally Sponsored Scheme are to be increased to provide redressal to the farming community;
- (g) Strengthening share capital base of Cooperative Credit institutions from NABARD under Long Term Operation Funds;
- (h) Extending financial support of Govt. to the small and marginal farmers, SC/ST borrowers in the form of insurance to irrigation borewells dug by them;
- (i) State and Central Compensatory support for failed irrigation and tube wells;
- (j) Extending financial support for rising the storage capacity in the State;
- (k) Share capital support to establish Oil Complexes, ginning units and cotton component and to spinning mills and Sugar factories;
- (l) Financial support to the deserving Cooperative institutions in order to encourage the establishment of the Primary Cooperatives at the primary level;
- (m) Financial support for purchase of defaulter properties by Govt. by Primary Cooperative institutions to improve the efficiency of credit flow and strengthen hands in Cooperative administration.

PROPOSALS FOR EIGHTH FIVE YEAR PLAN (1992-97) AND ANNUAL PLAN 1992-93

A detailed review of the Seventh Plan Schemes was made as a pre-requisite to eliminate or to continue them during the Eighth Plan and the Schemes proposed to be included in the Eighth Plan are finalised and included.

Under Cooperation Sector, a State Plan Outlay of Rs.81.90 crores constituting an outlay of Rs. 71.90 crores for State Sector and Rs. 10.00 crores for Zilla Parishad Sector has been proposed to be provided under the Eighth Plan. This apart, an outlay of Rs. 9.67 crores under Central Sector Schemes, Rs. 5.22 crores under Centrally Sponsored Schemes,

Rs. 51.07 crores under NCDC Schemes (including NCDC III World Bank Assistance, Rs. 0.50 crores for REC) are proposed.

A provision of Rs. 8.18 crores under Special component Plan and Rs. 1.42 crores under Tribal Sub-Plan are made and all the schemes under these two sub-plans are proposed to be implemented under Zilla Parishad Sectors except one scheme under State Plan involving Rs. 126.00 lakhs of outlay to KSCARDB loans.

During 1992-93, a state plan outlay of Rs. 14.44 crores constituting an outlay of Rs. 12.44 crores under State Sector and Rs. 2.00 crores under ZP Sector is proposed to be provided. This apart, an outlay of Rs. 1.81 crores under Central Sector schemes, Rs. 1.17 crores under centrally sponsored schemes and Rs. 10.13 crores under NCDC schemes (including NCDC III World Bank Assistance and Rs. 0.10 crores for REC) are proposed.

A provision of Rs. 1.51 crores under special component plan and Rs. 0.81 crores under Tribal Sub-plan are made and all the schemes under these two sub-plans are proposed for implementation under Z.P.Sector.

The details of Eighth Plan provisions and the 1992-93 plan outlay proposed are furnished in the table -5:

TABLE -5Proposed Eighth Plan Outlay (1992-97) and Annual Plan
Outlay 1992-93

Sector: Cooperation

Rs. lakhs.

Segments	State Plan	Central Sector Schemes	Centrally Sponsored Schemes	NCDC/RFC Schemes	Grand Total
1	2	3	4	5	6
<u>EIGHTH FIVE YEAR PLAN: 1992-97</u>					
<u>STATE PLAN</u>	8190.00	967.30	522.00	5106.70	14786.00
State Sector	7190.00	967.30	465.00	4319.20	12941.50
Z.P. Sector	1000.00	-	57.00	787.50	1844.50
<u>Special Component Plan:</u>	818.00	-	-	-	818.00
State Sector	467.00	-	-	-	467.00
Z.P. Sector	351.00	-	-	-	351.00
<u>Tribal Sub-Plan:-</u>	142.00	86.00	-	3.00	231.00
State Sector	86.00	86.00	-	-	172.00
Z.P. Sector	56.00	-	-	3.00	59.00
<u>PROPOSED OUTLAY: ANNUAL PLAN 1992-93</u>					
<u>STATE PLAN:</u>	1444.00	180.50	116.40	1013.10	2754.00
State Sector	1244.00	180.50	105.00	842.00	2371.50
Z.P. Sector	200.00	-	11.40	171.10	382.50
<u>Special Component Plan:-</u>	151.00	-	-	-	151.00
State Sector	81.00	-	-	-	81.00
Z.P. Sector	70.00	-	-	-	70.00
<u>Tribal Sub-Plan</u>	26.00	15.00	-	3.00	44.00
State Sector	15.00	15.00	-	-	30.00
Z.P. Sector	11.00	-	-	3.00	14.00

The policies and the programmes proposed for implementation during the Eighth Five Year Plan and Annual Plan 1992-93 are described in the following paragraphs under the broad sub-heads of development under the Cooperation Sector. For clarity and comprehension, the outlays under the Sub-heads of development proposed for the Eighth Five Year Plan and Annual Plan 1992-93 with break up of State Sector and Zilla Parishad Sector as also the outlays under Central Sector, Centrally Sponsored Schemes, NCDC Schemes (including REC) are presented in Table -6.

Eighth Plan Programmes (1992-97) and Annual Plan 1992-93:
High Lights:-

1. Direction and Administration:-

No provisions are earmarked

2. Audit of Cooperatives:-

No provisions are earmarked.

3. Training and Education (including Information & Publicity):-

These on-going schemes provided for assisting the Karnataka State Coop. Federation for running various Co-operative Training Centres which are meant to impart training in Cooperation besides educating members and disseminating knowledge on cooperation through Seminars, Workshops etc., on topics of special interest useful to the persons involved in the Cooperative movement including Tribal members. Outlays proposed are noted below.

TABLE 6
SECTOR 8 - COOPERATION

Eighth Five Year Plan: 1992-97: PROPOSED OUTLAYS KARNATAKA

Rs. in lakhs

Minor Head of Development	Eighth Plan 1992-97			1992-93		
	State Sector	ZP Sector	Total	State Sector	ZP Sector	Total
I STATE PLAN						
A. Direction and Administration	.	.	.	.	.	.
B. Audit of Cooperation	.	.	.	.	.	.
C. Training and Education (including Information & Publicity)	216.40	.	216.40	44.30	.	44.30
D. Research and Evaluation	.	.	.	.	.	.
E. Assistance to Credit Cooperatives	2104.00	58.27	2162.27	357.00	11.35	368.35
F. Assistance to other Cooperatives	4513.00	941.73	5454.73	782.70	188.65	971.35
a) Processing Cooperatives	3528.50	.	3528.50	558.00	.	558.00
b) Storage Cooperatives	206.18	80.48	286.66	92.20	20.40	112.60
c) Consumer Cooperatives	75.72	69.20	144.92	14.00	18.00	32.00
d) Marketing Cooperatives	149.60	212.61	362.21	22.50	31.30	53.80
e) Other types of Cooperatives	.	172.44	172.44	.	37.95	37.95
f) Tribal Sub Plan	86.00	56.00	142.00	15.00	11.00	26.00
g) Special Component Plan	467.00	351.00	818.00	81.00	70.00	151.00
h) Farming Cooperatives	.	.	.	.	.	.
G. Agricultural Stabilisation Fund	356.60	.	356.60	60.00	.	60.00
Total State Plan	7190.00	1000.00	8190.00	1244.00	200.00	1444.00
II (a) Central Sector Schemes	967.28	.	967.28	180.50	.	180.50
(b) Centrally Sponsored Schemes	465.00	57.00	522.00	105.00	11.40	116.40
Total (a + b)	1432.28	57.00	1489.28	285.50	11.40	296.90
III NCDC Schemes	4319.20	787.50	5106.70	842.00	171.13	1013.13
Grand Total (I + II + III)	12941.48	1844.50	14785.98	2371.50	382.53	2754.03

Rs. in lakhs.

	Eighth Plan 1992-97	Annual Plan 1992-93
a) Cooperative Training & Education under K.S.C.F.	36.72	11.00
b) Establishment cost of approved activities of K.S.C.F.	30.61	9.80
c) Construction of building for KSCF	30.98	4.80
d) Financial assistance for training Programme of LAMPS (Large sized Agricultural Multipurpose Coop. Societies)	36.72	6.00
e) Information & Publicity, Prizes, Seminars, Study Tours Publicity & propoganda by the K.S.C.F.	81.37	12.70
Total:	216.40	44.30

4. Research and Evaluation:-

No Provision is earmarked.

5. Assistance to Credit Cooperatives:-

There are 4681 PACSs and 177 PCARD Banks affilitated to the Karnataka State Cooperative Apex Bank and KSCARD Bank in the State and these institutions are involved in the sanction and disbursal of term loans to the farming community. These institutions are in need of financial support of the Government through Plan Schemes for their efficient functioning and credit operations. There are 12 schemes proposed for implementation during the Eighth Plan. Totally an outlay of Rs. 2162.27 lakhs is proposed for the Eighth Plan and Rs. 368.35 lakhs under the Annual Plan 1992-93 for these schemes Scheme-wise allocations are indicated below:-

Rs. in lakhs

Schemes	Eighth Plan 1992-97	Annual Plan 1992-93
a) Share Capital to DCCBs/PACS/ PCARD Banks from out of loans from National Banks for Agricultural Rural Deve- lopment.	620.00	110.00
b) Financial assistance to failed Well Fund Scheme.	316.28	62.50
c) Agricultural Guarantee and Relief Fund.	37.48	6.00
d) Share Capital to Sericulturists- Cum-Farmers service cooperatives for establishment of Grainage- cum-Chowki Rearing Centres.	3.29	0.55
e) Loans to Credit Cooperatives to bridge the short-fall in the recovery of blocked overdues:	136.00	20.00
f) Loans to KSCARD Bank to cover the blocked overdues of PCARD Banks.	211.50	37.50
g) Scheme for sanction of finan- cial assistance for purchase of defaulters' properties by Govt. (Z.P.Sector).	50.00	10.00
h) Interest subsidy on M.T.loans to Agricultural Labourers and rural artisans (Z.P.Sector)	4.98	0.80
i) Assistance towards payment of insurance premia for irrigation borewells drilled after 1987.	482.00	68.00
j) Subsidy to CCA of PCARDB employees.	86.42	15.00
k) Loans for purchase of defaulter's properties by Govt. in respect of PACS.	141.00	25.00
L) Loans to DCC Banks for insta- llation of computers.	73.32	13.00
Total:	2162.27	368.35

6. Assistance to Other Cooperatives:-

As many as 30 schemes covering different types of Cooperatives are supported in this composite group of schemes (a) storage Cooperatives are financed through 4 schemes for construction/completion of rural godowns, (b) Marketing Cooperatives are financed through 4 schemes to provide share capital support to Oil seeds producers' Cooperatives and Marketing Federation; loans to Taluk Marketing Cooperatives and interest subsidy on loans to Marketing Cooperatives, (c) Under Processing Cooperatives, through 3 schemes involving over Rs. 35.29 crores proposed for the Eighth Plan, share capital by Government is provided to Cooperative Spinning Mills to establish Oil Complexes/ Ginning Units and other processing Units under NCDC III Project through the World Bank assistance investment are proposed to be provided to the Spinning Mills and the Sugar Factories in the State, (d) Under Consumer Cooperatives, the outlay for the Eighth Plan is proposed for construction of business premises, share capital support to States Consumers Federation and rehabilitation of weaker Consumer Cooperatives, (e) other types of Cooperative include institutions for women, house building, employees and labourers. During the Eighth Plan, it is proposed to encourage these types of Cooperatives through 5 schemes by supporting them with share capital, managerial subsidy and loans to a tune of Rs. 172.44 lakhs and an outlay of about 37.95 lakhs in 1992-93. Both the (f) Special Component Plan and (g) the Tribal Sub-Plan are included in this group and their details are presented separately in the subsequent paragraphs.

7. Agricultural Stabilisation Fund:-

A fund is created to facilitate the conversion of short term loans advanced to the farmers. The State Government is normally required to contribute 15 per cent of the estimated funds required for conversion every year as loan towards the Agricultural Credit Stabilisation Fund to redress the overdue loans of farmers. An

Outlay of Rs. 356.60 lakhs is proposed during the Eighth Plan and an outlay of Rs. 60.00 lakhs is proposed in the 1992-93 Plan against this scheme.

A. Centrally Sponsored Schemes:-

Under Centrally Sponsored Schemes there are two schemes and an outlay of Rs. 522.00 lakhs is proposed to be provided under Eighth Plan and Rs. 116.40 lakhs

for 1992-93 and the scheme-wise details are given below:-

Schemes(Central Share)	(Rs. in lakhs)	
	Eighth Plan 1992-97	Annual Plan 1992-93
a) Agricultural Credit Stabilisation Fund.(State Sector)	375.00	75.00
b) Financial Assistance to Departmental Stores LSRO-SSRO and Rehabilitation of Wholesale Stores. (Z.P.Sector)	147.00	41.40
Total:-	522.00	116.40

Under the scheme of financial assistance to Departmental Stores of LSRO-SSRO etc., new retail outlets of Small and Large Sized and Common Kitchen Centres mostly for the benefit of University students are proposed to be assisted aiming at controlling prices of Consumers and essential articles in LSROs, share capital and managerial costs are proposed to be assisted to SSROs.

B. Central Sector Schemes:-

Under Central Sector Schemes, the following ongoing 4 schemes are proposed to be continued ^{with} an outlay of Rs.967.28 lakhs for the Eighth Plan and Rs. 180.50 lakhs for Annual Plan 1992-93 are proposed and the scheme-wise details are furnished below:-

(Rs. in lakhs)

Schemes (Central Share)	Eighth Plan 1992-97	Annual Plan 1992-93
a) Financial assistance to Failed Well Fund Scheme.	316.28	62.50
b) National Grid of Rural Godowns	83.00	35.00
c) Assistance towards payment of Insurance premium for irrigation Borewells drilled after 1987.	482.00	68.90
d) Assistance to Weak Cooperatives in Tribal Areas (non-overdue cover) (Z.P. Sector).	86.00	15.00
Total:	967.28	180.50

Under these schemes, compensation to irrigation wells that have failed to yield ground water to farmers, construction of rural godowns of 200 M.T. Storage capacity, insurance coverage for irrigation borewells undertaken by the Karnataka Agro Industries Corporation provided by New India Assurance Company relating to Small Farmers/Marginal farmers SC/ST borrowers and non-overdue cover to weak D.C.C. Banks in tribal areas have been proposed to be implemented.

C. Schemes under (NCDC) National Cooperative Development Corporation:-

There are 14 NCDC Schemes comprising 6 schemes under State Sector and 8 schemes under Zilla Parishad Sector. A provision of totally Rs. 51.07 crores comprising Rs. 43.19 crores under State Sector and Rs. 7.88 crores under Zilla Parishad Sector is proposed during the Eighth Plan with varying percentages of NCDC shares of participation including the shares of Apex Bank and the recipient Cooperatives which would be benefitted by the Schemes. Correspondingly, totally Rs. 10.13 crores of outlay comprising Rs. 8.42 crores of Outlay under State Sector and Rs. 1.71 crores of outlay under Z.P. Sector is proposed in the Annual Plan 1992-93.

The provision made under NCDC Schemes are principally intended to provide share capital to Sugar Factories,

Cooperative Spinning Mills, Oil complexes and Ginning Units, Consumer Cooperatives, Marketing Cooperatives, Processing Cooperatives, Rural Electric Cooperatives and construction of rural godowns. Promotion of integrated development programme also is included in the NCDC support provided to the State.

D. Special Component Plan:

Under the statutory provisions in the Constitution the Scheduled Caste population are supported in uplifting and ameliorating their economic backwardness even in the Cooperative field and these people are provided wide opportunities to take part in the Co-operative movement. The plan provisions are also reserved to create benefits to these downtrodden communities. An outlay of Rs. 818.00 lakhs is proposed for the Eighth Plan and an outlay of Rs. 151.00 lakhs is proposed in 1992-93 Plan confining to the following five continued schemes listed below:-

(Rs. in lakhs)		
Schemes	Eighth Plan 1992-97	Annual Plan 1992-93
a) Interest free loan for additional share capital contribution to be paid by SC members of Cooperatives to obtain loans.	52.03	8.75
b) Contribution towards loans to the KSC & RD Bank to advance loans to SC members in PCARD Banks which are ineligible for unrestricted finance (State Sector)	467.00	81.00
c) Subsidy on long term loans for creation of assets sanctioned by Rural Development Banks and PACS ceded to Commercial Banks and RREs.	234.76	51.25
d) Financial assistance for enrollment of SC persons in Sugar factories, Spinning Mills and other Cooperatives	56.02	8.00
e) Financial assistance to open purchase and sale points in areas inhabited by SC population.	8.19	2.00
Total:	818.00	151.00

E. Tribal Sub-Plan:-

Anologous to SC population, the ST population also carry statutory provisions of the Constitution and thus this section of population are given special attention for their upliftment even in the Cooperative movement by providing plan funds separately. There are 19 Tribal Cooperatives with membership of 32,161 tribal persons organised in Mysore, Dakshina Kannada, Chikkamagalur and Kodagu districts in Karnataka where this population have concentrated. As many as 6 schemes are drawn up for their upliftment. An outlay of Rs. 142.00 lakhs is proposed for the Eighth Plan and an outlay of Rs. 26.00 lakhs is proposed in 1992-93 plan and Scheme-wise allocations are indicated below:-

(Rs. in lakhs)

Scheme	Eighth Plan 1992-97	Annual Plan 1992-93
a) Assistance Tribal ^{to} Cooperatives for construction of godowns in Tribal Areas.	3.00	3.00
b) Loan/Subsidy to open retail outlets to distribute consumer goods.	30.00	5.00
c) Grant-in-aid for enrollment of members in Tribal Cooperatives.	9.25	0.25
d) Providing assistance to weak Cooperatives in Tribal area. (Non-overdue cover)	86.00	15.00
e) Financial assistance to Tribal Cooperatives for Bamboo works.	3.75	0.75
f) Financial assistance to contribute to Earnest Money Deposits made by IAKPS to Govt. to obtain minor Forest Produce.	10.00	2.00
Total:-	142.00	26.00

Eighth Plan Targets:-

The whole of the Credit Flow to various schemes implemented over the Plan- years, supplies and services rendered by varied types of primary and Apex institutions in the Cooperative movement converge in the boost in agricultural production and service rendered to consumers. So, crucial targets are fixed in the plans. The Eighth Five Year Plan is proposed to aim at the distribution of term loans to a tune of Rs. 2406 crores consisting of Rs. 1538.50 crores of Short Term, Rs. 167.50 crores of medium term and Rs. 700.00 crores of long term credit. The corresponding targets for 1992-93 plan are set to consist term loans of Rs. 463.00 crores involving Rs.303.00 crores of Short term, Rs. 35.00 crores of medium term and Rs. 125.00 crores of long term advances. During these plan periods, the sale of fertilisers is targetted to be of the value of 528.54 crores and Rs. 100.86 crores respectively, marketing of agricultural produce is targetted to reach values of Rs. 1375 crores and Rs. 275 crores respectively. Retail sale of consumer goods are targetted totally to reach the value of Rs. 800 crores and Rs. 325 crores respectively in the Eighth Plan and 1992-93 plan. The corresponding values of consumer goods targetted by urban cooperatives are Rs. 300 crores and **Rs. 125 Crores** and rural Cooperatives of the value of **Rs. 500 crores** and **Rs. 200 crores** respectively. With the ambitious outlays deployed, a target of adding 1.51 lakh tonnes of storage capacity during the Eighth plan period and 0.60 lakh tonnes capacity in the 1992-93 is set for achievement by implementing agencies.

Pre-Conditions for success:-

1. Higher financial Agencies have attained sound financial position over the years in the field of Cooperation as well as by Commercial Banks. But, even now, the system of the lower level institutions

contributing towards the share of Higher Financing Agency to strengthen the borrowing power is still continued. The Credit Agencies are paying hardly 3 to 4 per cent dividend on the share capital so invested, with the result, the investment so made has become very very low remunerative. As a result of this system, the foundation of the credit structure has been becoming weaker and weaker as the years go by. Therefore, in order to safe-guard the interests of the lower level institutions, it is felt that the entire share capital invested with higher Financial Agency should be treated as Fixed Deposit or alternatively the Higher Financing Agency should be made to pay reasonable rate of dividend to member societies/ banks in order to enable their investments reasonably remunerative.

2. The present policy of the Government is to meet the credit requirement of all the new and the non-defaulting members of the Cooperative fold. Minimum recovery percentage fixed at the level of PACS has been withdrawn whereas it is continued in respect of D.C.C. Banks; so, unless the norms of seasonality discipline set for DCC Banks is relaxed or withdrawn, it would be extremely difficult to achieve the objective of the Disbursals targetted for the Eighth Plan in the state as also the aforesaid policy of the Government. As such there is strong need for further relaxation in the NORMS OF SEASONALITY at the D.C.C. Bank level.

3(a). The PCARD Banks should be allowed to sanction credits to the new and non-defaulting members irrespective of their recovery performances.

(b) In order to increase the quantum of finance to SC/ST members, PCARD Banks which are not eligible for unrestricted finance should also be allowed to advance loans to SC/ST members.

(c) Each Credit institution should have a target of covering 5 percent of minimum increase in the number of borrowing members in each of the years of the Eighth Plan period.

4. It is already stated earlier that the weak financial position of PACSS is mainly due to low-loaning business and meagre non-credit activity. So, in order to improve PACSS from their inadequate positions of service, the PACSS should be vit alised to take up multi-farious activities and to become centres of activity to serve the farmers as also to become economically viable as suggested by the Study Team on Agricultural Credit Institutions in Karnataka as back as 1983 but is yet to be implemented in majority of the PACSSs. The credit activity of a PACS should be risen to Rs. 10.00 lakhs per year as a norm. The PACS should invariably undertake the distribution of inputs such as seeds, fertilisers and insecticides agricultural implements etc. The PACS should be made responsible to undertake the distribution of essential commodities. These apart, the PACS should also made to take up banking activities, in order to give an opportunity to the farmers to keep their surplus money with their PACSSs. In order to reduce interest burden on them, the PACSSs should mobilise deposits in their areas of operation to the extent of atleast the cash credit requirements. The State Cooperative Apex Bank should extend their scheme of assistance to the PACSSs for opening of Banking Counters and purchase of iron safes in a phased manner so that all the PACSSs are covered during the Eighth Plan period.

5(a). In order to make the maximum use of the existing storage facilities (particularly in rural areas where godowns are not put to the intended use

for various reasons and the asset is to be brought to use) and also to safe-guard the interest of farmers from distress sale to repay their crop loans. The PAC Ss should invariably take up effective linking of credit with marketing and also should encourage produce loans to the member-farmers. In such of the PACSs which have the facility of additional godowns, a scheme of sanction of loans to farmers on the pledge of "Ware-Housing-Receipts" issued by the PACSs should be introduced during the Eighth Plan.

(b) Linking of credit with marketing which is provided incentive-subsidy under-Non-Plan may be provided under plan-schemes during the Eighth Plan.

6. The Special Schemes of Reserve Bank of India/ NABARD such as "Integrated Cooperative Development Programme" and " Pilot Project" should be extended to all the remaining districts in the State during the Eighth Plan period commencing from the Districts where D.C.C. Banks are weak.

7. "Twelve Point Programme" formulated by the NABARD in respect of the selected D.C.C.Banks should be extended to all the weak D.C.C.Banks in the State.

XI- A. MAJOR AND MEDIUM IRRIGATION

The geographical area of Karnataka State is 1.91 lakh sq.kms., out of which the net sown area is 107 lakh hectares. The ultimate irrigation potential from all sources is 55 lakh hectares, comprising-

- a) 35 lakh hectares under major and medium irrigation,
- b) 10 lakh hectares under minor irrigation using surface water, and
- c) 10 lakh hectares from ground water resources.

The total irrigation potential that has been created to end of March 1991 is 30.29 lakh hectares comprising-

- a) 13.11 lakh hectares under major and medium irrigation,
- b) 9.54 lakh hectares under minor irrigation utilising surface waters, and
- c) 7.64 lakh hectares under irrigation from ground water resources.

The percentage of irrigation potential created to net sown area is 29%.

The total estimated average yield of the river systems in Karnataka is 3440 tmc. The quantum of water that can be economically utilised for irrigation has been roughly assessed as 1687 tmc. The total quantum of water that has become available to Karnataka, in Krishna basin, as a result of the award of the Krishna and Godavari Tribunals is 757 tmc. An additional quantum of 183 tmc will become available to the State only on the constitution of the Krishna Valley Authority either by consent of the party-States or by an act of Parliament.

The utilisation that has been achieved in the

various river basins, upto end of March 1991 is 833.94 tmc, comprising the following:

a) Krishna basin	-	475.23 tmc
b) Cauvery basin	-	312.00 tmc
c) Godavari basin	-	6.69 tmc
d) Other basins	-	40.02 tmc

During the pre-Plan period (i.e. upto end of 1951) the irrigation potential that had been created was 6.71 lakh hectares comprising 2.16 lakh hectares under major and medium irrigation and 4.55 lakh hectares under minor irrigation. The cumulative investment made on irrigation upto end of March 1991 is Rs.2705.62 crores.

On a rough estimate the balance amount required for completion of all the irrigation projects in the various river basins in Karnataka is Rs.5070 crores as per the present level of rates, comprising:

a) Krishna Basin Projects	-	3600 crores.
b) Cauvery Basin Projects	-	1300 crores.
c) Godavari Basin Projects	-	70 crores.
d) Others	-	100 crores.

The present level investment on irrigation projects is of the order of 350 crores annually, which is inclusive of an investment of Rs.130 crores for projects taken up, outside the plan sector, with the State's own resources, and Minor Irrigation.

The balance amount of Rs.3600 crores in respect of Krishna Basin Projects is to be provided over the next nine years in which the State's irrigation projects are to be completed, within the deadline set by the Krishna Water Disputes Tribunal. This means that the additional outlay that will have to be provided annually for major and medium irrigation under Plan will be about Rs.400 Crores.

In addition to the above, the Cauvery Basin Projects namely, Hemavathy, Kabini, Harangi, D.Devaraj Urs Canal, and other projects, will have to be cleared by the Planning Commission so that they could also get Plan assistance and posed for external assistance to speed up their completion.

SEVENTH PLAN - REVIEW OF PERFORMANCE:-

The approved allocation for the Seventh Plan for major and medium irrigation projects in Karnataka in the plan sector was Rs.528.00 crores with a corresponding programme for creating a potential of 1.83 lakh hectares.

The emphasis during Seventh Plan in this sector was on early completion of the ongoing projects taking up employment oriented programmes in the drought affected areas; conjunctive use of water; utilisation of irrigation potential created and improving the efficiency in the water use and management by introducing modernisation.

The financial and potential achievements during the Seventh Plan are as follows:

Plan	Financial (Rs. in crores)		Potential (in hectares)	
	Prgm.	Prqs.	Prgm.	Prqs.
Seventh Plan:				
1985-86	85.72	90.14	41350	39403
1986-87	114.83	104.24	43780	34443
1987-88	186.00	88.64	33006	8621
1988-89	143.70	111.02	17412	6308
1989-90	155.31	132.49	19021	8760
(VII Plan) :				
1985-90	685.56	527.42	154569	97535

Though the approved outlay, as at the time of finalisation of the Seventh Plan was Rs.538.00 crores, the actual outlays budgetted year to year add upto 685.56 crores. The actual expenditure incurred is Rs.527.42 crores and the creation of irrigation potential is 97535 hectares against the programme of 183,140 hectares.

The following reasons could be mainly ascribed for the shortfall in the financial and potential progress.

- a) There was a major cut in the size of the annual plan for 1987-88, the outlay on major and medium irrigation undergoing reduction from Rs.185.00 crores to Rs.93.00 crores.
- b) There was continuous uncertainty in the flow of funds from October 1986 onwards, resulting in the slowing down of the pace of works and also drastically affecting the advance action in potential oriented reaches of canals, programming of projects became almost unpredictable.
- c) In certain projects the bottlenecks in the works on tunnels as well as deep cut reaches of canals could not be overcome in time, problems of land acquisition, time consuming programmes of construction of railway bridges across the alignments of canals and distributaries caused unpredictable delay in the progress of works.

The outlay proposed at the time of finalisation of the Seventh Plan for major and medium projects pending approval (Cauvery Basin) was Rs.330.00 crores. The actual outlays budgetted year to year add upto Rs.405.00 crores. The actual expenditure incurred is Rs.310.46 crores.

Plan	Financial (Rs. in crores)		Potential (in hectares)	
	Prgm.	Prgs.	Prgm.	Prgs.
Seventh Plan:				
1985-86	65.00	66.32	22650	22106
1986-87	70.00	66.55	21220	17886
1987-88	100.00	49.44	20958	3025
1988-89	70.00	55.18	16666	3829
1989-90	100.00	72.98	16150	11252
Total 1985-90	405.00	310.46	97644	58098

The reasons for the shortfall in the financial and irrigation potential achievements during the Seventh Plan as indicated in respect of the approved projects hold good for major and medium projects pending approval also.

The I phase of the Upper Krishna Project, which had been posed for World Bank Assistance, has been completed, excepting certain minor works. The World Bank Assistance of \$ 117.64 million has been fully utilised and the works which have been completed with this assistance are:

- a) Almatti dam, with spillway upto R.L.500.00M(1640.00 ft);
- b) Narayanpur dam and allied works;
- c) Narayanapur Left Bank Canal from Km. 35.5 to Km.78;
- d) Shahpur Branch canal over its entire length of 76 Km;
- e) Creation of irrigation potential to the extent of 76,629 hectares.

The II phase of the project was posed for World Bank Assistance. Negotiations with the Bank authorities were completed in November 1988 and the Board of Directors of the Bank have cleared it on 4th May 1989. The assis-

tance is to the extent of 160 million U.S.Dollars as IDA credit and 165 million U.S. Dollars as IBRD Loan.

The World Bank has provided financial assistance to the tune of \$ 35.11 million for the National Water Management Project (NWMP) over a period of seven years, commencing from 10th August 1987. The Project aims at improvement of the existing canal system served by reservoirs for increasing the productivity and farm income. The project will also help the State in developing institutional capacity to plan, implement and monitor the improved operation and maintenance practices. Each sub-project under the NWMP is to be cleared by two Committees, one at the State level and the other at the Government of India level.

During the Seventh Plan Period the following projects were completed.

Major Project: 1. Tungabhadra Right Bank Low Level Canal:

Medium Projects: 1.Soudagar Project.

2.Teetha Reservoir Project.

3.Upper Mullamari Project.

4.Taraka Reservoir Project.

Similarly out of the projects pending approval the following projects are completed.

1. Nallur Amanikere Project.

2. Chikkahole Diversion to Suvarnavathy.

Apart from the direct employment generated during Construction period to the extent of 1800 thousand man days, there has been indirect employment of 80 thousand mandays.

ANNUAL PLAN 1990-91 REVIEW OF PERFORMANCE:

The approved allocations for the annual Plan 1990-91 was Rs.158.35 crores with a corresponding programme for

creating a potential of 16,426 Ha. against which the actual expenditure incurred is Rs.143.83 crores and the potential created is 13137 Ha.

Similarly the outlay proposed for projects pending approval (Cauvery Basin) was Rs.110.00 crores and the potential programme was 21602 Ha. Against this, the actual expenditure incurred was Rs.88.23 crores and potential created was 14161 Ha.

The following reasons could be attributed for the shortfall in the financial and physical progress.

1. Non release of Forest Land.
2. Shortage of Cement in the commencement of the year.
3. Progress was hampered due to Monsoon.
4. Shortage of L.O.C.
5. Delay in approval to schemes from Government of India with regard to N.W.M.P.Schemes.

ANNUAL PLAN 1991-92 - REVIEW OF PERFORMANCE.

The approved allocation for Major and Medium Irrigation Projects under Plan and for Projects pending approval during 1991-92 is Rs.190.00 crores and Rs.130.00 crores respectively. The corresponding potential programme for the above outlays is 21074 Ha. and 28476 ha

Against the above programme the actual expenditure incurred upto end of September 1991 is Rs.91.37 crores under plan projects and Rs.59.07 crores under projects pending approval. The potential created is 3313 Ha. and 285 Ha. respectively.

The shortfall in progress is due to following reasons.

1. Shortage of L.O.C.
2. Non-release of Forest land.
3. Extend rainy season.
4. Floods in the river course.

However the shortfall in financial and physical progress will be made good in the coming months and the programmed targets will be achieved fully for the year 1991-92.

EIGHTH FIVE YEAR PLAN & ANNUAL PLAN 1992-93.

The Strategy regarding implementation of Eighth Five Year Plan is for completion of many of the long pending on going projects enabling expeditious creation of additional irrigation potential. With this end in view the investment proposed during the Eighth Plan on Major and Medium Irrigation for the Plan Projects and Projects pending approval is Rs.1861.09 crores and Rs.1160.65 crores respectively with the programme for creating a fresh additional irrigation potential of 241685 hectares and 209449 hectares.

While earmarking funds for individual projects, priority is to be accorded as under:

- a) First priority to projects taken up with external aid;
- b) Second priority to projects where head works have been completed and canal system is in advanced stages;
- c) Third priority to projects where head works are nearing completion and canal system is in progress;
- d) Fourth priority to those ongoing projects where headworks are in initial stages; and
- e) Fifth priority to new projects to be taken up.

In order to ensure that the State is in a position to fully harness its share of waters in the Krishna and Godavari basins before 2000 A.D. and the Cauvery basin within the next five years, a beginning

is to be made on the construction of all the new projects in these basins. In order to maintain the tempo of development in Ninth and subsequent Plans, beginning of work on some of the new projects will have to be made in the Eighth Plan. Ten major and four medium projects are proposed to be included in the Eighth Plan and provision are made for these projects.

Eight major and eleven Medium projects in the plan sector and five major, six medium projects under projects pending approval as detailed below, are likely to be completed in the Eighth Five Year Plan.

PLAN PROJECTS:

MAJOR PROJECTS

1. U.K.P.Stage-1
2. Malaprabha
3. Tungabhadra L.B.C.
4. Tungabhadra RB HLC.
5. Karanja
6. N.W.M.P.
7. Bhadra
8. K.R.S.Modernisation.

MEDIUM PROJECTS

1. Amarja
2. F.C. to Ranikere.
3. Manchanabele.
4. Votehole
5. Chulkinala
6. Hodirayanahalla
7. Lower Mullamari.
8. Maskinala
9. Modernisation of Bhadra Anicut.
10. Hirehalla.
11. Gandhorinala.

PROJECTS PENDING APPROVAL:

MAJOR PROJECTS

1. Harangi
2. Hemavathy
3. Kabinī
4. D.Devaraj Urs Canal
5. Yagachi

MEDIUM PROJECTS.

1. Arkavathy
2. Chicklihole
3. Iggalur
4. Hutchanakoplu
5. Uduthorehalla
6. Kamasamudra.

The outlay proposed for the Annual Plan 1992-93 on Major and Medium Irrigation under Plan and for Projects Pending Approval is Rs.239.68 crores and Rs.200.00 crores respectively, with a programme for creating a fresh potential of 48204 hectares under plan projects and 41890 hectares under projects pending approval (Cauvery Basin Projects).

The Financial and Potential details for the eighth plan and Annual Plan 1992-93 are summarised in APPENDIX-I.

PROJECT WISE NOTES ARE FURNISHED BELOW:

A. PLAN PROJECTS:

1. UPPER KRISHNA PROJECT STAGE - I:

The latest estimated cost of the Project is Rs.1500.00 crores, provides for irrigation to an extent of 4.25 lakh ha; in Bijapur and Gulbarga Districts. Upto end of March 1991, a total expenditure of Rs.624.67 crores has been incurred on this project and a potential of 115735 ha. created. During 1991-92, an outlay of Rs.107.00 crores has been provided for this project with a potential programme of 15,000 ha. During Eighth Plan and Annual Plan 1992-93 an outlay of Rs.927.57 cores and Rs.145.18 cores have been proposed respectively to create correspondingly an additional potential of 1,23,650 ha. and 24,730 ha. respectively. The works proposed to be tackled include the spillway and Non-over flow portion of the Almatti Dam, Shifting of part of Bagalkot Town, completion of works on Narayanpur Left Bank Canal and Shahapur Branch Canal and its distributaries, completion of Indi branch canal upto Km - 62 and Mudbal branch canal.

in all respects. Advance action on the remaining works of Alamtti Dam Spillway will also be initiated as this is necessary for continuous development of Irrigation under the Project.

2. GHATAPRABHA PROJECT STAGE-III.

The First and Second Stages of Ghataprabha Project has been completed incurring an expenditure of Rs.72.26 crores and creating an irrigation potential of 1,39,383ha. in Belgaum and Bijapur Districts. The Third Stage of Ghataprabha Project is estimated to cost Rs.539.68 crores provides for irrigation to an extent of 1.78 lakh.ha. in Belgaum and Bijapur Districts. Upto end of March 1991, the total expenditure of Rs.118.06 crores has been incurred on the third stage of the Project creating an irrigation potential of 24859 ha. During 1991-92 an outlay of Rs.12.00 crores has been provided for this project with a potential programme of 620 ha. During Eighth Plan and Annual Plan 1992-93, an outlay of Rs.80.00 crores & Rs.10.00 crores have been proposed respectively.

3. MALAPRABHA PROJECT:

This Project is estimated to cost Rs.385.75 crores, provides for Irrigation to an extent of 2.18 lakh ha. in the districts of Belgaum, Bijapur and Dharwad. Upto end of March 1991 a total expenditure of Rs.251.44 crores has been incurred on this project creating a potential of 153664 ha. During 1991-92 an outlay of Rs.16.00 crores has been provided for this project with a potential programme of 2371 ha. During Eighth Plan and Annual Plan 1992-93, an outlay of Rs.134.33 crores and 8.20 crores have been proposed to create an additional potential of 61641 ha and 12328 ha respectively.

4. HIPPARGI PROJECT:

This Project, is estimated to cost of Rs.281.61 crores provides for irrigation to extent of 59690 ha. in Belgaum and Bijapur Districts. The expenditure incurred upto end of March 1991 is Rs.6.21 crores. During 1991-92 an outlay of Rs.1.50 crores has been provided for this project. During Eighth Plan and Annual Plan 1992-93, an outlay of Rs.50.00crores and Rs.2.00 crores have been proposed respectively.

5. BENNITHORA PROJECT:

This Project, is estimated to cost of Rs.79.12 crores provides for Irrigation to an extent of 20,236 ha in Gulbarga District upto end of March 1991, an expenditure of Rs.18.34 crores has been incurred. Irrigation Potential is yet to be created. During 1991-92, an outlay of Rs.3.50 crores has been provided for this project. During Eighth Plan and Annual Plan 1992-93, an outlay of Rs.40.00 crores and Rs.2.00 cores have been proposed respectively.

6. BHADRA PROJECT:

This project is estimated to cost of Rs.83.46 crores provides for irrigation to an extent of 1.06 lakh ha. in Chickmagalur, Shimoga, Chitradurga and Bellary Districts. upto end of March, 1991 an expenditure of Rs.67.83 crores has been incurred creating full potential of 1,05,570 ha. During 1991-92, an outlay of Rs.1.55 crores has been provided for this project. During Eighth Plan & Annual Plan 1992-93, an outlay of Rs.12.80 crores and Rs.2.00 crores have been proposed to complete all the balance works.

7. TUNGABHADRA LEFT BANK CANAL:

The latest estimated cost of the project is Rs.115.43 crores (inclusive of the actual expenditure incurred on the Dam), for irrigating an extent of

Rs.2.44 lakh ha. in Raichur District. The total expenditure incurred upto end of March 1991 is 102.66 crores, creating a potential of 242206 ha. During 1991-92, an outlay of Rs.6.50 crores has been provided for this Project. The work presently in progress under this canal is mainly strengthening of the inner surface and embankments, necessitated by the increase in atchkat under the canal from the originally contemplated extent of 2.35 to 2.44 lakh.ha. During Eighth Plan and Annual Plan 1992-93 an outlay of Rs.5.45 crores and Rs.5.45 crores has been proposed respectively, for completing the work.

8. TUNGABHADRA RIGHT BANK HIGH LEVEL CANAL:

This Project, is estimated to cost Rs.33.59 crores provides for irrigation to an extent of 80,910 ha. in Bellary District. Upto March 1991 an expenditure of Rs.19.54 crores has been incurred on this Project creating a potential of 68,268 ha. The balance potential of 12642 ha. can be achieved only after the completion of Hagari Aqueduct by means of which the canal crosses the river Hagari. During 1991-92 an outlay of Rs.2.50 crores has been provided. for this project. During Eighth Plan and Annual Plan 1992-93 and outlay of Rs.13.35 crores and Rs.2.00 crores has been proposed with a potential programme of 5694 ha and 1139 ha. respectively.

9. VARAHI PROJECT:

This Project, is estimated to cost Rs.135.09 crores irrigating 15702 ha. in Dakshina Kannada District. Only a begining has been made on this Project and further progress has not been possible and it involves submersion of Forest Land. An Experts Committee Constituted for examining this aspect has furnished its recommendations and further action is being taken in accordance with these recommendations. An expenditure of Rs.2.59 crores has been

XI-A.14.

incurred upto March, 1991 on this project. During 91-92 and outlay of Rs.0.50 crores has been provided for this project. During Eighth Plan and Annual plan 1992-93, an outlay of Rs.27.18 crores and Rs.1.00 crore has been proposed respectively.

10. KARANJA PROJECT.

This project is estimated to cost Rs.117.49 crores provides for irrigation to an extent of 35614 ha. in Bidar District. Upto end of March 1991, an expenditure of Rs.65.46 crores has been incurred creating a Potential of 4250 ha. During 1991-92 an outlay of Rs.6.00 crores has been provided for this project with a Potential programme of 1000 ha. During Eighth plan and Annual Plan 1992-93, an outlay of Rs.66.00 crores and Rs.5.00 ^{crores} has been proposed to create an additional potential of 30364 ha., and 6073 ha. respectively.

11. K.R. S. MODERNISATION.

This scheme for modernisation of Krishnarajasagar canal is estimated to cost Rs.87.57 crores for a potential of 2125 ha, proposed to be created under link canal which is a part of the modernisation of the Visweswaraaya canal. Upto March 1991, an expenditure of Rs.22.18 crores has been incurred. During 1991-92, an outlay of Rs.5.00 has been provided for this project. During Eighth Plan and Annual plan 1992-93 an outlay of Rs.71.84 crores and Rs.5.00 crores has been proposed to create a potential of 1915 ha. and 383 ha. respectively.

12. NATIONAL WATER MANAGEMENT PROJECT.

The world Bank had extended financial assistance to an extent of Rs.25.00 crores during seventh plan period towards the National Water Management Project (N.W.M.P) in Karnataka. Fifteen Sub Projects have

been cleared and of these thirteen sub projects viz Bhadra, Tungabhadra LBC, Vanivilasagar, Dharma Chandrampalli, Marconahally, TBRBHLC, Hagaribommanahally, Kanva, Maidala, Naregal, Ramanahally, Areshankar are in progress. A beginning is to be made on the remaining projects. Some more sub projects are in the pipe line in order to fully utilised the financial assistance from the world Bank.

The Project is estimated to cost Rs.45.65 crores. The expenditure incurred to end of March 91 is Rs. 18.84 crores. During 1991-92 an outlay of Rs.9.60 crores has been provided for this project. During Eighth Plan and annual plan 1992-93 an outlay of Rs.20.05 crores and Rs.7.00 crores have been proposed respectively.

13. DUDHGANGA PROJECT.

The project is taken up jointly by the states of Maharashtra and Karnataka. The Head works are under construction in Kholapur district of Maharashtra state. An extent of 19,668 ha. in Karnataka is likely to get irrigation facilities under this project. The approximate present estimates is Rs.36.97 crores. The state of Karnataka has to meet from time to time its share of the cost of the head works. An amount of Rs.4.07 crores has been paid in this behalf upto end of March 1991. During 1991-92 an outlay of Rs.1.00 crore has been provided for this project. During Eighth plan and Annual plan 1992-93, an outlay of Rs.25.00 crores and Rs.1.00 crore have been proposed respectively.

14. LIFT IRRIGATION CORPORATION FOR KRISHNA BASIN

The lift irrigation corporation for Krishna Basin with its Headquarters at Bijapur is incharge of execution

operation and maintenance of the Lift Irrigation schemes in Krishna and Godavari basins in the state. Funds for the corporation are being provided under the plan sector. The cumulative expenditure incurred by this Corporation upto end of March 1991 is Rs.3.94 crores. During 1991-92 an outlay of Rs.1.00 crore has been provided. During eighth plan and Annual plan 1992-93 an outlay of Rs.5.00 crores and Rs.1.00 crore have been proposed respectively.

15. ON GOING PROJECTS (MEDIUM).

There are Eleven ongoing medium irrigation projects, which are under various stages of constructions in Plan sector. These are Amarja, Lower Mullamari, Hirehalla, Maskinala, Feeder Canal to Ranikere, Manchana-bele, Votehole, Chulkinala, Hodirayanahalla, Gandorinala and Modernisation of Bhadra Anicut. The total estimated cost of these projects is Rs.304.05 crores and when completed they will provide irrigation to a total extent of 56173 ha. The expenditure to end of March 1991 on these projects is Rs.36.72 crores and a potential of 16856 ha. is created. The outlay for 1991-92 is Rs. 14.55 crores with a potential target of 1777 ha. During Eighth plan and Annual plan for 1992-93 an outlay of Rs.242.65 crores and Rs.26.33 crores have been proposed respectively.

B. PROJECTS PENDING APPROVAL.

Presently, five major and six medium irrigation projects have been taken up in the Cauvery Basin in the state. These projects are being funded by the state out of its own resources since, the Government of India is yet to approve them in view of the pending dispute regarding the sharing of Cauvery waters by the basin states.

The details of these projects are as follows:-

1. HARANGI PROJECT.

This project is estimated to cost Rs.199.39 crores provides for irrigation to an extent of 53538 ha. in Kodagu, Mysore and Hassan districts. Upto end of March, 1991 an expenditure of 119.57 crores has been incurred creating a potential of 38370 ha. During 1991-92 an outlay of Rs.15.00 crores has been provided for the project with a potential programme of 1648 ha. During Eighth Plan and Annual plan 1992-93 an outlay of Rs.73.45 crores and Rs.10.00 crores have been proposed to create an additional potential of 7433 ha. and 1487 ha. respectively.

2. HEMAVATHY PROJECT.

This project is estimated to cost Rs.887.12 crores provides for irrigation to an extent of 283596 ha. in Hassan, Mandya, Mysore and Tumkur districts . Upto end of March 1991, an expenditure of Rs.385.30 crores has been incurred obtaining potential of 69748 ha. During 1991-92 an outlay of Rs.65.00 crores has been provided for the project with a potential target of 26395 ha. During Eighth Plan and Annual plan 1992-93 an outlay of Rs.420 crores and Rs.65.00 crores have been proposed to create an additional potential of 158936 ha. and 31787 ha. respectively.

3. KABINI.

This Project is estimated to cost Rs.619.76 crores will ultimately provide irrigation to an extent of 87900 ha. in Mysore district. Upto end of March, 1991 an expenditure of Rs.157.44 crores has been incurred creating a potential of 40895 ha. During 1991-92 an

outlay of Rs.15.00 crores has been provided. During Eighth plan and annual plan for 1992-93 an outlay of Rs.420.00 crores and 60.00 crores have been proposed to create an additional potential of 1748 ha. and 350 ha. respectively.

4. D.DEVARAJ URS (K.R.S. RIGHT BANK) CANAL:-

This project, is estimated to cost Rs.103.16 crores and it will provide irrigation to an extent of 32376 ha. in Mysore and Mandya districts. Upto March, 1991, an expenditure of Rs.27.44 crores has been incurred creating a potential of only 395 ha. Presently, a major aqueduct by means of which this canal has to cross Bangalore - Mysore road, is in progress. Further creation of Irrigation Potential under this project will only be after completion of this aqueduct. During 1991-92 an outlay of Rs.5.00 crores has been provided. During Eighth plan and Annual plan 92.93 an outlay of Rs.86.00 crores and Rs.10.00 crores have been proposed to create an additional potential of 5000 ha. and 1000 ha. respectively.

5. YAGACHI PROJECT:-

This Project is estimated to cost Rs.49.99 crores for providing irrigation to an extent of 21450 ha. in Hassan district. The expenditure incurred upto March 1991, is Rs.9.89 crores and the potential is yet to be created. During 1991-92 an outlay of Rs.6.00 crores has been provided. During Eighth plan and Annual plan 92-93 an outlay of Rs.41.09 crores and Rs.8.00 crores have been proposed to create an additional potential of 21450 ha. and 4290 ha. respectively.

6. MEDIUM PROJECTS:-

At present there are seven medium on going projects, which are under various stages of construction, in the Cauvery Basin, with the states own resources. These are Arkavathy, Chickkihole, Iggalur, Uduthorahalla Diversion of Chikkahole to Suvarnavathy, Kamasamudra and Huchanakoplu . Of these Chikkahole diversion to Suvarnavathy has been completed. The total estimated cost of these projects is Rs.149.31 crores and when completed these projects will provide irrigation to a total extent of 23,240 ha. The expenditure incurred upto March, 91 is Rs.27.25 crores and the potential created is 6660 ha. During 1991-92 an outlay of Rs. 23.00 crores has been provided with a potential target of 433 ha. During Eighth Plan and annual plan 1992-93 an outlay of Rs.115.11 crores and Rs.46.00 crores have been proposed to create an additional potential of 14882 ha. and 2976 ha. respectively.

7. LIFT IRRIGATION CORPORATION FOR CAUVERY BASIN.

The Lift Irrigation Corporation for Cauvery Basin, with its Headquarters at Mysore is incharge of execution operation and maintenance of the Lift Irrigation schemes in the Cauvery Basin in the State. Funds for this Corporation are being provided outside the plan sector from the state's resources. The cumulative expenditure incurred by the Corporation upto end of March 91 is Rs. 5.06 crores. During 1991-92 an outlay of Rs.1.00 crore has been provided. During Eighth Plan and Annual Plan 1992-93 an outlay of Rs.5.00 crores and Rs.1.00 crore have been proposed respectively.

RENOVATION OF OLD RIVER CHANNELS:

The State of Karnataka has a number of old river channels in the Cauvery and Krishna basins. These centuries old channel, which are presently irrigating a total extent of 89,382 ha. have out lived a major portion of their life, if not the whole and, as such, are in a bad state of dis-repair, having developed considerable leakage causing heavy wastage of water. The sections of many of these channels have under gone changes with the result that higher discharges have to be forced in the canals in order to cater to the atchkat under them. , Further, these channels are unable to meet the present demands corresponding to the changing high yield variety crops. As such, it is proposed to make a begining on the work of renovation of these old channels in a phased manner. With this in view, a provision of Rs.6.00 crores is proposed during Eighth plan and Rs.1.00 crore for the 1992-93 plan for this purpose.

INVESTIGATION AND RESEARCH:

During Eighth Plan and Annual Plan 1992-93 it is proposed to provide an outlay of Rs.9.00 crores and Rs. 1.80 crores for survey and Investigation. This is apart from the proposed outlay of Rs.0.20 crore and Rs.0.04 crore for research undertaken with 100% financial assistance from Government of India.

TRAINING:

Water resources being a highly inter-disciplinary sector under going repaid developments, the necessity for imparting continuing education and training to the in service personnel of the Irrigation Department has

attained utmost importance. In order to substantially step up the present activity on this field, it is proposed to provide separate outlays, in the plan sector, for this purpose. Accordingly an outlay of Rs.0.40 crore and Rs.0.08 crore is proposed on this item, during the Eighth Plan and Annual plan 1992-93.

IN COMPLETE ONGOING PROJECTS:

The total latest estimated cost of the 13 ongoing major projects viz., Upper Krishna Project, Hippargi, Ghataprabha, Malaprabha, Bennithora, Bhadra, Tungabhadra Left Bank canal, Tungabhadra H.L.C, N.W.M.P, Dudhganga, K.R.S.Modernisation, Karanja and Varahi works out to Rs.3485.21 crores with a potential of 14.05 lakh ha. against which an expenditure of Rs.1319.28 crores has been incurred and potential 7.15 lakh ha. created upto end of March 91. During 91-92 an outlay of Rs.172.65 crores has been provided for these projects with a potential programme of 19297 ha. Against a balance cost of Rs.1993.28 crores against which an allocation of Rs.1473.57 crores has been provided during Eighth Five Year Plan 1992-97 with potential programme of 198973 ha. The allocation proposed for 92-93 is Rs.201.83 crores with a programme of potential of 44653 ha. under the above projects.

The total latest estimated cost of all the 10 ongoing medium projects viz, Amarja, Lower Mullamari, Hirehalla, Maskinala, Feeder canal to Ranikere, Hodi- rayanahalla, Gandhorinala, Manchanabale, Votehole and Chulkinala works out to Rs.300.41 crores, against which an expenditure of Rs.72.83 crores has been incurred upto March 91. The outlay for 1991-92 is Rs.13.55 crores. During Eighth Plan and Annual Plan 92-93 an outlay

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of Rs.240.58 crores and Rs.24.26 crores has been proposed respectively. The potential achieved as on 31-3-91, under the above medium projects is 6617 ha. against the estimated potential of 56,173 ha. leaving a balance of 49556 ha. It is proposed to create a potential of 18421 ha. under these projects during Eighth five year plan. The proposed potential during Annual plan 1992-93 is 3551.Ha.

Direct on site employment generation of 3445 lakh mandays and 501 lakh mandays are going to be generated during Eighth Plan and Annual plan 1992-93 respectively.

APPENDIX I

PROPOSED FINANCIAL AND POTENTIAL PROGRAMME FOR
EIGHTH PLAN AND ANNUAL PLAN 1992-93:
MAJOR AND MEDIUM IRRIGATION.

Rs.in Crores.
Potential in Ha.

Sl. No.	Project	EIGHTH PLAN 1992-97		ANNUAL PLAN 1992-93	
		Financial	Potential	Financial	Potential
1.	2	3	4	5	6
I. <u>PLAN PROJECTS</u>					
A. <u>PROJECTS TO BE COMPLETED IN EIGHTH PLAN.</u>					
1.	UKP Stage.I	927.57	123650	145.18	24730
2.	Ghataprabha-III	80.00	-	10.00	-
3.	Malaprabha	134.33	61641	8.20	12328
4.	Bhadra	12.80	-	2.00	-
5.	Tungabhadra LBC*	5.45	-	5.45	-
6.	Tungabhadra R.B. H.L.C.	13.35	5694	2.00	1139
7.	K.R.S.Moderni- sation.	71.84	1915	5.00	383
8.	Karanja.	66.00	30364	5.00	6073
9.	N.W.M.P.	20.05	-	7.00	-
10.	Lower Mullamari.	45.68	600	2.00	120
11.	Maskinala.	23.39	-	2.00	-
12.	F.C. to Ranikere*	1.53	-	1.53	-
13.	Manchanabele.	15.79	2207	3.00	441

* likely to be completed during 1992-93.

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Rs. in crores.

Sl. No.	Project	EIGHTH PLAN 1992-97		Potential in Ha. ANNUAL PLAN 1992-93	
		Finl.	Potl.	Finl.	Potl.
1	2	3	4	5	6
14.	Votehole *	4.31	664	4.31	-
15.	Chulkinala	20.93	4047	3.00	809
16.	Hodirayanahalla*.	3.42	-	3.42	-
17.	Modernisation of Bhadra Anicut.*	2.07	-	2.07	-
18.	Hirehalla.	46.00	-	1.00	-
19.	Amarja.	28.00	8903	2.00	1781
20.	Gandhorinala.	51.53	2000	2.00	400
Total-A.		1574.04	241685	216.16	48204

B. PROJECTS
SPILLING OVER
TO NINTH PLAN

1.	Dudhganga.	25.00	-	1.00	-
2.	Hippargi.	50.00	-	2.00	-
3.	Bennithora	40.00	-	2.00	-
4.	Varahi.	27.18	-	1.00	-
5.	UKP. Stage.II	50.00	--	-	-
6.	Markandeya.	6.00	-	1.00	-
7.	Mahadayi	6.00	-	1.00	-
8.	Ramthal lift.	6.00	-	1.00	-
9.	Bhima flow	6.00	-	1.00	-
10.	Bhima lift	6.00	-	1.00	-
11.	Upper Bhadra	6.00	-	0.90	-
12.	Upper Tunga (in- cluding Madag. Masur)	13.07	-	3.00	-
13.	Nethravathy	5.00	-	1.00	-
14.	Singatlur	10.00	-	2.00	-
15.	Dandavathy	1.00	-	0.20	-

* Likely to be completed during 1992-93.

		Rs. in crores			
		Potential in Ha.			
Sl. No.	Project	EIGHTH PLAN 1992-97		ANNUAL PLAN 1992-93	
		Finl.	Potl.	Finl.	Potl.
1	2	3	4	5	6
16.	Manjra lift	1.00	-	0.20	-
17.	Kagna	6.00	-	1.00	-
18.	Renovation of old river channels	6.00	-	1.00	-
19.	Krishna Basin L.I.C.	5.00	-	1.00	-
TOTAL-B.		275.25	-	21.30	-
TOTAL. (A+B)		1849.29	241685	237.46	48204
C. CLUMP.		1.55	-	0.30	-
D. RESEARCH.		0.20	-	0.04	-
E. TRAINING.		0.40	-	0.08	-
F. EVALUATION.		0.15	-	-	-
G. NATIONAL HYDROLOGY PROJECT.		0.50	-	-	-
H. SURVEY AND INVESTIGATION.		9.00	-	1.80	-
TOTAL. I (A+B+C+ D+E+F+G+H)		1861.09	241685	239.68*	48204
C.S.S. RESEARCH.		0.15	-	0.03	-

*
The proposed outlay of Rs.239.68 Crores,
for the year 1992-93 has been limited to Rs.224.08
Crores.

APPENDIX - I

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Rs. in Crores.
Potential in Ha.

Sl. No.	Projects.	EIGHTH PLAN 1992-97		ANNUAL PLAN 1992-93	
		Finl.	Potl.	Finl.	Potl.
1	2	3	4	5	6
<u>II. PROJECTS PENDING APPROVAL.</u>					
1.	Harangi.	73.45	7433	10.00	1487
2.	(a) Hemavathy (Gorur)	110.09	158936	15.00	31787
	(b) Hemavathy (Tumkur)			50.00	
		309.99			
3.	Kabini.	420.00	1748	60.00	350
4.	D.Devaraj Urs Canal.	86.00	5000	10.00	1000
5.	Yagachi.	41.09	21450	8.00	4290
6.	Arkavathi.	51.48	8560	10.00	1712
7.	Chicklihole*	1.37	1087	1.37	217
8.	Iggalur*	8.69	2235	8.69	447
9.	Uduthorehalla.	36.39	3000	8.76	600
10.	Hutchanakoplu*	14.73	-	14.73	-
11.	Kamasamudra*	2.45	-	2.45	-
12.	L.I.C. (Cauvery)	5.00	-	1.00	-
TOTAL. II.		1160.65	209449	200.00	41890
TOTAL PLAN + PENDING APPROVAL. (I + II).		3021.74	451134	439.68	90094

* Likely to be completed 1992-93.

XI-B. FLOOD CONTROL

Karnataka State has a coastal line of about 300 KMs. The beaches are very narrow in most parts and the erosion along these beaches is causing loss of valuable coconut plantation and properties.

In order to provide relief to the coastal region which is subjected to severe onslaught of erosion, Anti Sea Erosion works are taken up in Dakshina Kannada and Uttara Kannada Districts. These works were first commenced during 1979-80. As an experimental measure sea walls were constructed with armour stones of 200 Kgs. each in two layers of coconut/palm leaf mat. After gaining experience, permanent measures are evolved with nylon synthetic filter cloth mesh with flat slopes and increased weight of armour stones of 1360 Kgs. each laid in two layers.

A master plan has been prepared for protecting 75 Kms. of vulnerable reaches at a cost of Rs.145 Crores and sent to C.W.C. for clearance, which is awaited.

A technical expert Committee has been formed by the State Government to examine the design aspects and to suggest suitable type of protective works to be taken up along the identified reaches of the sea coast. The committee has suggested two typical designs with individual armour stones weighing 560 Kgs. and 570 Kgs. which are now being adopted.

A project report for most priority reaches for Rs. 40.00 Crores is got up and placed before the 17th meeting of the Beach Erosion Board on 17.6.1989 and then to the Ministry of Water Resources, Government of India for allotment of 100% Central Assistance which is awaited.

An amount of Rs. 230.15 lakhs has been spent upto end of sixth plan against a budget provision of Rs. 290.00 lakhs from the inception of the programme and a length of 9.04 Kms. of sea coast has been protected.

REVIEW OF SEVENTH PLAN PROGRESS

The approved Seventh Plan outlay for Flood Control and Anti-Sea Erosion Project is Rs. 4.00 Crores with a corresponding programme for protecting a coastal length of 3.75 Kms.

The financial and physical achievements during the Seventh Five Year Plan and Annual Plan for 1990-91, 1991-92 is as follows:

Financial: Rs. lakhs.
Physical : Kms.

Year	Financial		Physical	
	Budget Provision	Expenditure	Length of sea coast proposed for protection	Length of sea coast protected.
1985-86	64.84	61.85	0.500	1.890
1986-87	67.00	66.63	0.500	0.820
1987-88	85.00	35.12	0.600	0.390
1988-89	75.00	58.10	0.450	0.510
1989-90	89.00	95.90	0.500	0.735
1990-91	250.00	250.00	2.500	2.436
1991-92	200.00	77.50	2.000	2.000

There is no shortfall in the physical achievement during Seventh Plan and subsequent years.

EIGHTH FIVE YEAR PLAN AND ANNUAL PLAN 92-93

An outlay of Rs. 2.00 Crores has been proposed for the year 1992-93 for flood control and antisea erosion works.

The break up for 1992-93 is as follows:

Flood Control and Anti-Sea Erosion

a) Flood protection works	0.60	
b) Anti-Sea erosion works	1.22	
c) Direction and Administration	0.18	

	Total	<u>2.00</u> Crores

An outlay of Rs. 11 Crores has been proposed for the Eighth Plan, for flood control and Anti-sea erosion works. The break up is as follows:

a) Flood protection works	3.30	
b) Anti-Sea Erosion works	6.73	
c) Direction and Administration	0.97	

	Total	<u>11.00</u> Crores

It is proposed to complete the spillover works and also to take steps to provide flood protection in several places already identified requiring an outlay of Rs. 330.00 lakhs.

An outlay of Rs. 7.70 Crores i.e., Rs. 6.73 Crores for Anti-Sea erosion works and Rs. 0.97 Crore for Direction and Administration is proposed and it is proposed to protect a length of 6 Kms. of sea coast during Eighth Plan.

The employment generation is expected to be 257000 mandays during 1992-93 and 1414000 mandays during the Eighth Plan.

XI - C. COMMAND AREA DEVELOPMENT

Under Cauvery and Krishna Basins, the Government have constituted five CADAs namely, Tungabhadra Project, Malaprabha and Ghataprabha Projects, Cauvery Basin Project, Upper Krishna Project and Bhadra Project. During Seventh Five Year Plan, the strategy adopted is to ensure effective water utilisation and also its equitable distribution through integrated water management, aimed at optimising the agricultural production.

Keeping this in view, the key activities undertaken by CADAs during Seventh Five Year Plan are:

- 1) On Farm Development Works, such as land levelling and land shaping of the atchkat.
- 2) Construction of Field Irrigation Channels,
- 3) Adoption of Warabandi
- 4) Construction of Field Drainage Channels

To achieve this goal an outlay of Rs. 8200.00 lakhs was earmarked during Seventh Five Year Plan, out of which State sector contribution is Rs. 4700.00 lakhs and the share from Central Sector is Rs. 3500.00 lakhs. During the Seventh Five Year Plan, the expenditure incurred was Rs. 9867.00 lakhs out of which Rs. 5918.00 lakhs is on State's Sector & Rs. 3949.00 lakhs is on Central sector. For the year 1990-91 the annual plan allocation is Rs. 2853.00 lakhs, out of which State Sector component is Rs. 1784.00 lakhs and that of the Central Sector is Rs. 1069.00 lakhs. The expenditure incurred is Rs. 1894.00 lakhs. During 1991-92 an amount of Rs. 2836.70 lakhs is anticipated to be spent.

During the Eighth Five Year Plan, it is programmed to create a Field Irrigation Channel potential of 4.20 lakh hectares in the Cauvery and Krishna Basins. From the experience gained in the implementation of Seventh Five Year Plan, besides the four major activities cited above, three more activities are included. They are 1) Conjunctive use of ground and surface water 2) Farmer's participation and management subsidies and 3) Land Reclamation, which play an important role in creation of the programmed FIC potential besides optimum utilisation of the potential utilised during the Seventh Five Year Plan.

EIGHTH FIVE YEAR PLAN:

An allocation of Rs. 12500.00 lakhs has been proposed during Eighth Plan under State Sector for the implementation of Command Area Development (CAD) programme in the State. During 1992-93 the outlay proposed is Rs. 1850.00 lakhs. The scheme-wise outlays proposed are spelt out in the following paragraphs:

1. CADA Establishment:

An outlay of Rs. 575.00 lakhs has been proposed for establishment and other charges for the five CADAs and the Command Area Development Secretariat. The CAD section at Secretariat is being strengthened for better interaction and co-ordination with the Administrators of the various CADAs and concerned Chief Engineers in charge of execution for CADA works. The proposed outlay for 1992-93 is Rs. 175.50 lakhs.

2. On-Farm Development (OFD):

Land Development works are important in utilising

fully the irrigation potential created under various irrigation projects. Area to be covered under land levelling during Eighth Five Year Plan is 298000 hectares. An allocation of Rs. 2387.00 lakhs is proposed for Eighth Five Year Plan. The outlay proposed during 1992-93 is Rs. 355.00 lakhs.

3. Field Irrigation Channels (FIC):

An area of 4.20 lakhs hectares is proposed to be brought under FICs at a cost of Rs. 5055.00 lakhs during Eighth Five Year Plan. During 1992-93 the outlay proposed is Rs. 465.00 lakhs.

4. Field Drainage Channels:

Provision of Rs. 687.00 lakhs is made for the construction of Field Drainage Channels during Eighth Five Year Plan. The provision made during 1992-93 is Rs. 70.00 lakhs.

5. Ground Water Survey and Investigation:

An outlay of Rs. 31.00 lakhs is proposed under this scheme for Eighth Five Year Plan. An amount of Rs. 5.00 lakhs is proposed to be spent during 1992-93.

6. Subsidy for Small and Marginal Farmers:

Subsidy to Small and Marginal Farmers at the rate of 25% and 33 1/3% respectively will be given to farmers who avail institutional finance for OFD works. A provision of Rs. 69.00 lakhs has been proposed for Eighth Five Year Plan. An amount of Rs. 17.00 lakhs is proposed to be spent during 1992-93.

7. Warabandi

Warabandi is a system of equitable water distribution by terms according to pre-determined schedule specifying the day, time and duration of supply to each irrigator in proportion to land holdings in the outlet command. An outlay of Rs. 441.00 lakhs is proposed for Eighth Five Year Plan. The proposed outlay during 1992-93 is Rs. 90.00 lakhs.

8. Adoptive Trials

An outlay of Rs. 74.00 lakhs has been proposed for Eighth Five Year Plan. Adoptive trials are necessary in order to train the farmers with the scientific method of cultivation of different crops. Rs. 16.00 lakhs is proposed during 1992-93.

9. Project Studies and Research

Studies on Warabandi, cropping pattern and such other studies which are useful are taken up through Research Institutions, like University of Agricultural Sciences, Institute for Social and Economic Change and Institute for Command Studies and Irrigation Management.

The Royal Dutch Government has taken a pilot project in Tungabhadra Project in distributory No. 36 of Left Bank Canal for the reclamation of land which is affected by the salinity and alkalinity. An outlay of Rs. 68.00 lakhs, has been proposed during Eighth Five Year Plan. An allocation of Rs. 10.00 lakhs is made during 1992-93.

10. Land Development Training Centre

A training centre is set up in Upper Krishna Project for training staff of the Agricultural and Irrigation

wings and also the farmers in the area of irrigation management. An allocation of Rs. 25.00 lakhs is proposed during Eighth Five Year Plan and Rs. 6.00 lakhs is proposed during 1992-93.

For all the schemes mentioned above, added to the State Plan allocations Central aid is available under Centrally Sponsored Scheme.

11. Ayacut Roads

An outlay of Rs. 470.00 lakhs is proposed to cover an additional road length and improve existing roads where necessary during Eighth Five Year Plan. The outlay proposed during 1992-93 is Rs. 200.00 lakhs.

12. Housing

An outlay of Rs. 138.00 lakhs and Rs. 40.00 lakhs is proposed under Housing respectively for the Eighth Five Year Plan and Annual Plan 1992-93.

13. Construction of Godowns

An outlay of Rs. 50.00 lakhs is earmarked during Eighth Plan for construction of Godowns. The proposed allocation during 1992-93 is Rs. 9.00 lakhs.

14. Special Component Plan

An outlay of Rs. 2218.00 lakhs has been proposed during Eighth Plan under Special Component Plan Programme to benefit SC/ST persons. The proposed outlay during 1992-93 is Rs. 328.00 lakhs.

15. Miscellaneous Works

Apart from the works mentioned above, CADA has taken up other works in the field of Animal Husbandry, Horticulture, Marketing, Co-operation, Fisheries, Afforestation, Small Scale Industries etc., including Indo-Dutch Programme for which a lumpsum provision of Rs.141.00 lakhs has been proposed during Eighth Five Year Plan. The outlay proposed during 1992-93 is Rs. 45.50 lakhs.

The new activities included under this item are:

- 1) Conjunctive use of Ground and Surface Water by wells, pickups (proposed outlay Rs. 40.00 lakhs during Eighth Plan and Rs. 8.00 lakhs during 1992-93)
- 2) Farmers Participation and Management subsidies (proposed outlay Rs. 10.00 lakhs during Eighth Plan and Rs. 4.00 lakhs during 1992-93)
- 3) Land Reclamation (proposed outlay Rs. 21.00 lakhs during Eighth Plan and Rs. 6.00 lakhs during 1992-93)

Central Assistance is sought for these three new activities.

XI. D. MINOR IRRIGATION

SURFACE WATER:

All Irrigation works having an atchkat area upto 2000 hectares are classified as Minor Irrigation works. All Minor Irrigation works having an atchkat upto 200 hectares come under the control of Zilla Parishads and works of more than 200 hectares come under the control of Minor Irrigation Department.

The ultimate Irrigation potential under Minor Irrigation using surface water is assessed to be about 10,00,000 hectares. As on 01.04.1990, there were about 40,411 Minor Irrigation works benefitting an atchkat of 8,68,420 hectares which comprises of 36,555 tanks with an atchkat of 6,59,495 hectares and 429 LiftIrrigation Schemes with an atchkat of 88,367 hect. and 3427 other Minor Irrigation works with an atchkat of 1,20,588 hectares.

Seventh Plan-Targets and Achievements:-

The approved Seventh Plan outlay for Minor Irrigation (surface water) in the Plan Sector was Rs.150.00 crores, with a corresponding programme for creating a potential of 0.60 lakh hectares. The broad schemewise details are as follows:-

Sl.No.	Scheme	State Plan Outlay (Rs. Lakhs)	Potential (Hect.)
1.	W.D.A. Projects	7407.00	25,210
2.	Other surface M.I. works	5175.00	29,790
3.	Ganga Kalyana Schemes	500.00	5,000
4.	a) Direction & Administration	1818.00	-
	b) Machinery & Equipment	100.00	-
	Total:	15000.00	60,000

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The financial and potential progress during the Seventh Five Year Plan is as follows:-

Financial Progress:

Sl. No.	Scheme	Rs. in Lakhs					Total
		1985-86	'86-87'	'87-88'	'88-89'	'89-90' (Prov.)	
1.	WBA Projects including Establishment	1868.91	2289.76	1445.16	2089.18	1807.51	9500.52
2.	Other Surface MI WORKS	577.96	907.23	713.16	987.86	1475.49	4661.70
3.	Gangakalyana Schemes	98.64	225.23	157.27	2.27	113.45	597.86
4.a)	Direction & Administration	107.26	540.65	229.04	89.87	347.26	1403.88
b)	Machinery & Equipment	121.27	158.08	91.15	7.60	4.00	382.10
Total:		2865.04	4120.96	2635.78	3176.58	3747.71	16546.06

Potential Progress:

Sl. No.	Scheme	(Hectares)					Total
		85-86	86-87	87-88	88-89	89-90	
1.	WBA Projects	3202	3465	3076	7000	6081	22824
2.	Other surface MI works	1473	1445	1353	2375	3397	10043
3.	Gangakalyana Schemes	1025	1163	1173	437	785	4583
Total:		5700	6073	5602	9812	10263	37450

A total amount of Rs.3230.538 lakhs has been spent during 1990-91 comprising Rs.2666.06 lakhs under State Sector and 564.538 lakhs under Zilla Parishad Sector and total potential of 3052 ha. has been created during the 1990-91, 1356 ha. under State Sector and 1696 ha. under Z.P.Sector.

EIGHTH PLAN & ANNUAL PLAN: 1992-93

The amount proposed for Eighth Five Year Plan is Rs.246.73 crores including establishment, Clump, SCP flood control and Sea Erosion. Out of this, the amount proposed for the State sector is Rs.124.15 crores and for the Zilla Parishad Sector it is Rs.122.58 crores.

A. STATE SECTOR SCHEMES:

1. Tank Irrigation Projects under World Bank Assistance:

A programme of construction of new Minor Irrigation Tank Projects was taken up with World Bank Assistance during Sixth Plan period. Under this, 78 projects have been sanctioned. The updated cost of these projects is Rs.126.00 crores. The total contemplated irrigation potential under the programme is 24054 hectares.

During Seventh Plan an expenditure of Rs.95.00 crores was incurred and a potential of 22,824 hect. created by substantial completion of 73 tank irrigation projects.

Thus, at the end of Seventh Plan, a total expenditure of Rs.116.36 crores has been incurred and a potential of 22,874 hectares created by completion of 74 tank Irrigation projects. The expenditure incurred for the year 1990-91 is Rs.828.19 lakhs. The approved outlay for Annual Plan 1991-92 is Rs.226.64 lakhs.

The spill over cost of these works as on 1.4.92 would be Rs.780.00 lakhs. The entire provision has been made during 1992-93.

2. Other New Tanks:

At the commencement of the 1990-91 Plan, an amount of Rs.3260 lakhs was required to complete the committed new tank works of Seventh Plan and earlier plans. It is proposed to give top most priority for these works and complete them during 1991-92 as far as possible. The expenditure incurred during 1990-91 was 210.00 lakhs.

Further an outlay of Rs.260.00 lakhs has been approved for these works for 1991-92. The balance amount required to complete these tanks would be Rs.2790.00 lakhs. Entire cost to complete these tanks has been provided during Eighth Plan. The outlay proposed during 1992-93 is Rs.300.00 lakhs.

3. Restoration of Tanks:

An allocation of Rs.75.00 lakhs has been made during 1992-93 and during Eighth Plan a provision of Rs.200.00 lakhs has been made.

4. Fresh Works:

A provision of Rs.20.00 lakhs is made during 1992-93 and Rs.100.00 lakhs during the Eighth Plan.

5. New Projects proposed for Eighth Plan:

While drawing up the proposals for Eighth Five Year Plan, it is proposed to complete the committed M.I. works of Seventh Plan. In addition to this, it is proposed to take up desilting of M.I.tanks. The scope for construction of new minor irrigation tanks is being reduced gradually with utilisation of available potential, the necessity of desilting the existing operational M.I.tanks and performance of these M.I.tanks has been reduced considerably.

During Eighth Plan, an outlay of Rs.300.00 lakhs been proposed for desilting of tanks under State Sector Schemes for establishing the existing atchkat.

During 1991-92, an outlay of Rs.3.00 crores has been made for taking up desilting of tanks under State Sector. During 1992-93, an outlay of Rs.200.00 lakhs has been made for taking up desilting of tanks.

An outlay of Rs.100.00 lakhs has been made during Eighth Plan and Rs.30.00 lakhs during 1992-93 for modernisation of tanks to bring the suffering atchkat under irrigation.

XI - D.6

In the Annual Plan 1992-93 an amount of Rs.30.00 Crores is provided for State Sector which includes the provision of Rs.13.58 crores specifically made for completing 104 works detailed below which are in advanced stage of completion.

Sl. No.	S c h e m e	No. of works	Amount provided for completion during 1992-93 (Rs. Lakhs)
1.	W.B.A. Tanks	17	780
2.	New tanks	35	270
3.	Lift Irrigation Schemes	30	212
4.	Restoration of tanks	1	1.58
5.	Flood Control	11	43
6.	Anti-Sea Erosion	10	48
Total:		104	1,358

Every effort will be made to complete the on-going works mentioned above during the year 1992-93 only.

ZILLA PARISHAD. SECTOR SCHEMES

An outlay of Rs.122.58 crores has been approved under Zilla Parishad Sector for Eighth Plan which includes Rs.22.06 crores for Special Component Plan and Rs.9.81 crores for Tribal sub-Plan. With this outlay, it is proposed to create a potential of 15,000 hectares during Eighth Five Year Plan.

XI - D.7

During Annual Plan 1992-93, an outlay of Rs.21.00 crores has been approved under Zilla Parishad Sector, which includes Rs.3.78 crores for Special Component Plan and Rs.1.68 crores for Tribal sub-Plan.

The broad break-up of proposed outlay with the physical targets during Eighth Plan is as follows:

Scheme/Programme	Eighth Plan 1992-97	
	Proposed Outlay (Rs. Crores)	Proposed Physical Programme (Hect.)
MINOR IRRIGATION SURFACE WATER:		
1.Completion of spillover works.	90.77	30,000
2.Fresh Works	1.00	200
3.Desilting of M.I.tanks	3.00	Stabilisation of existing atchkats.
4.Direction & Administration	20.00	-
5.Machinery & Equipment	0.50	-
6.Others (Land Acquisition settlement of claims, investigation etc.)	2.70	-
7.CLUMP	6.18	-
8.Zilla Parishad Schemes	122.58	15,000
Total:	246.73	45,200

As regards employment component generated during 1992-97 only the Labour component is considered as no skilled component is generated. The Labour component of 1269 thousand mandays is generated by under taking the works proposed in the Annual Plan for 1992-93. For the Eighth Five Year Plan of 1992-97, the Labour employment generated is 14,434 thousand Man days.

INTRODUCTION:

During the 7th Plan the outlay was Rs.1087-00 lakhs and the expenditure was Rs.724.00 lakhs. The reason for shortfall in expenditure was mainly due to shortage of working Fast Rigs and decreased demand for slow Cylx Drills. During the year 1990-91 an amount of Rs.175.00 lakhs was provided in the State Sector but again due to shortage of working fast rigs etc., the expenditure was 135.50 lakhs.

The recurring droughts during the last decade put tremendous pressure on the groundwater resources in the State. This resulted in an unprecedented spurt in the groundwater usage from just about 2000 million cubic metres in 1980-81 to 3600 million cubic metres in 1990-91 in the irrigation sector. Likewise the number of drinking water bore wells increased from about 50,000 in 1981 to 1,50,000 by 1991. This type of development in an area consisting of some of the oldest crystalline rocks has almost no parallel in any other part of the World. This unusual growth has not been kept tract on a scientific basis for want of necessary technical man power and the lithological log details of more than 4,00,000 bore wells are lost for ever. Also this extra-ordinary growth has resulted in steep decline of water table in several parts of

the state, warranting a systematic detailed study of the status of groundwater, its occurrence, behaviour, age and remedial measures to be adopted to alleviate the situation. During this plan period, it is proposed to make a humble beginning in at least the most essential and important fields of groundwater study, that would pave the way for a systematic planning in the long run.

I. ON-GOING SCHEMES:

It is proposed to continue the following ongoing three schemes during the 8th Plan-period.

1) GROUNDWATER DRILLING:

The operation and maintenance of slow rigs, yield testing units and the newly acquired fast rigs are included under this scheme. The total outlay for the 8th plan period is Rs.75.00 lakhs. The physical targets are:

- | | |
|----------------------------|----------------|
| a) Drilling by Fast Rig .. | Rs.30,000 mts. |
| b) Drilling by Slow Rigs | 10,500 mts. |
| c) Yield Tests .. | 22,800 nos. |

ii) SPECIAL COMPONENT PLAN:

Under this scheme, it is proposed to carry out detailed hydrogeological and geophysical investigations in exclusive S.C. Upland blocks and drill 30 exploratory borewells every year. These borewells are proposed to

XIII :

be handed over to the respective land owners free of cost after experimentation. The outlay for the scheme is Rs.68.00 lakhs.

III) GROUNDWATER TARGETTING BY REMOTE SENSING TECHNIQUES:

The scheme envisages developing packages to prove the various lineaments identified in different hydrogeographic environments by using satellite imageries. It is proposed to acquire computers for digital analysis of field data and the data obtained by Remote Sensing Techniques. This will be followed by ground truth verification, geophysical survey and exploratory drilling. It is proposed to prove at least 75 lineaments during the plan period. The total outlay is Rs.200.00 lakhs of which the capital content is Rs.30.00 lakh

NEW SCHEME

ESTABLISHMENT OF A GROUNDWATER R & D UNIT AND TRAINING CELL

Groundwater in the State is now been recognised as the most precious natural resource available to the needy at his doorstep/farming land. But the precautions required to tap this resource has not been followed because of the lack of knowledge about its exact nature of occurrence movement, after effects of heavy withdrawal, etc.

The scientific investigations required to be carried out in the State on regional scale for long and short term perspective groundwater planning has not been possible in the existing set up. It is therefore envisaged to take up the following programme through a separate R & D. Unit.

1. Regional hydrogeological mapping of Major lithological units;
2. Experimental artificial recharge studies;
3. Determination of basic hydrological parameters in various type of rocks;
4. Establishment of hydrograph stations on river basin concept;
5. Computerisation and analysis of voluminous groundwater data;
6. Publication of reports, maps and seasonal bulletins for the information and guidance of farmers and public in general;
7. Training to field officers/workshops on groundwater progress etc.

Each one of the above constitute a major R & D type of work, particularly because Karnataka consists of some of the oldest hard crystalline and non-crystalline rocks in which such works have not been carried out systematically so far. This has also been emphasised by the working group constituted by the planning commission to formulate a report on minor irrigation during 8th plan (1990-95). As it is not possible to carry out such works in the existing set up, it is proposed to take up all such works by a separate R & D Unit to be established at Central Office. This R & D Unit shall be constituted by pooling a team of

technical officers with proven record in their respective specialised fields of work.

These staff work in co-ordination with the respective district offices and arrange for the dissemination of latest advance in groundwater research, development and understanding to the field officers. This Unit forms the nucleus for all the groundwater developmental programmes in the State.

The total outlay earmarked for this scheme is Rs.632.00 lakhs of which the capital content would be about Rs.100.00 lakhs.

Progress of the Expenditure during the Annual Plans 1990-91 & 1991-92 and
Proposed outlay for the Eighth Five Year Plan (1992-93) and Annual Plan 1992-1993

-(Rs. in Lakhs)

Code No.	Major Head/Minor Head of Development/Scheme	1990-91		1991-92		Eighth Plan (1992-97)		Annual plan (1992-93)		Employment content ('000 Per sons)		Rural Component	
		Budgetted outlay	Expendi- ture	Budgetted outlay	Antici- pated Expendi- ture	Proposed outlay	Of which capital content	Proposed outlay	Of which capital content	Eighth Plan	1992-93	Eighth Plan	1992-
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1 04 2702-00	Minor Irrigation												
02	Groundwater												
005	Investigation												
	<u>State Sector</u>												
1.	Survey	-	-	-	-	-	-	-	-	-	-	-	-
2.	Drilling Unit	20.00	0.16	108.00	108.00	75.00	-	15.00	-	-	-	-	-
3.	Strengthening of Groundwater Phase I-	50.00	42.69	-	-	-	-	-	-	-	-	-	-
4.	Special Component for SC's	13.00	1.20	13.00	13.00	68.00	-	14.00	-	0.75	0.15	0.75	0.15
5.	Strengthening of Groundwater Phase II	83.00	67.21	-	-	-	-	-	-	-	-	-	-
6.	Remote Sensing Scheme	10.00	6.20	35.00	35.00	200.00	30.00	40.00	10.00	3.75	0.75	3.75	0.75
7.	Development of uplands Watersheds by Remote S.T.												
8.	Comprehense water bal- ance studies in Represent- ative watersheds												
9.	Evaluation of chemical quality												
10.	Study and monitoring of water												
11.	Study of mechanics and economical manage- ment of basement aquifer												
12.	Revision of pay scales												
13.	Artificial recharge of Groundwater structures			30.00	30.00								
14.	Establishment of Ground- water B & D Unit & train- ing cell					632.00	100.00	129.00	30.00	166.00	23.00	166.00	23.00
	<u>Zilla Parishaths Sector</u>	<u>42.61</u>	<u>42.61</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
	<u>Sub-Total:- Groundwater</u>	<u>218.61</u>	<u>170.07</u>	<u>186.00</u>	<u>186.00</u>	<u>975.00</u>	<u>130.00</u>	<u>198.00</u>	<u>40.00</u>	<u>170.50</u>	<u>23.90</u>	<u>170.50</u>	<u>23.90</u>

Physical Targets: Proposals for Special Component Plan for SCs - 1992-97 and 1992-93

Major Head:2702 - 02

State: KARNATAKA

Sub-head :005-55

Sl. No.	ITEMS	UNIT	Seventh Plan (1985-90)		1990-91	1991-92	Eight Plan (1992-97)	1992-93
			Target	Achievement Cumulative	Achievement	(Anticipated)	Targets	(Targets)
1	Exploratory Bore wells	nos	-	-	-	30	150	30

A. POWER GENERATION

KARNATAKA was a pioneer in the development of Hydro Power and was in surplus of Power till Seventies. But, it has now slipped from previous position and is facing acute Power shortage due to rapid industrialisation in the State. A review of the Power position at the end of Seventh Plan i.e., 1989-90 indicates that against an unrestricted demand of 19,756 MU, the generation is only of the order of 11,108 MU leaving a gap of nearly 8648 MU. Even after considering import from neighbouring States and the contribution of the Central Stations to the extent of about 3180 MU, the State is left with an annual Power deficit of about 5468 MU. It is estimated that the energy demand position in the State at the end of 1996-97 would be about 24,100 MU as per recent 14th Power Survey report. It is, therefore, necessary that steps for further Power development are initiated immediately.

Karnataka is endowed with a vast Hydro Power potential to the tune of about 7700 MW of which only 2340 MW is harnessed. An additional Power of 1049 MW is expected from the projects (Hydro) which are under execution in different stages. Besides investment constraints, the other reasons for the existing untapped hydel potential have been connected with preservation of environment, submersion of forests, rehabilitation of displaced persons and in some cases delay in settlement of inter-state river problems. However, in order to exploit the extra Hydro potential of the State, a suitable optimistic programme is drawn up to take up the projects in stages during the Eighth & Ninth Plans and onwards.

To cope up with the growing demand for Power, it was found necessary to go in for Thermal Power also. Accordingly, Raichur Thermal Power Station was taken up during 1978 and two units of 210 MW each (2x1150 MU) are already under operation. The 3rd unit is expected to be connected to the grid very shortly. The work of 4th unit is in progress. The 5th unit (500 MW) is planned for Eighth Plan. After suitable projection, it is found that Power position even after Eighth Plan does not appreciably improve. It is, therefore, proposed to add a few more Thermal Power Stations in the State (Eg. Vijayanagar, Mysore, etc.,)

With a view to plug the acute shortage of Power in the State, it is programmed to set up medium size Diesel sets of total capacity 77.76 MW which has a very short gestation period to tide over immediate Power shortage problems in the selected areas of the State. The total energy addition with the commissioning of these sets will be around 420 MU.

In order to meet the Power demand, Government of India is being pursued to expedite laying of gas grid along the Coast line for utilising the associated gas from Bombay High as well as gas pipes from Southern Region for generation of Power.

Apart from tapping electrical energy from conventional sources like Hydro, Thermal, nuclear sources, efforts to tap electrical energy from non-conventional sources like Wind, Solar, Wave energy etc., are also being made. One of the clear advantage of the non-conventional energy source is that the project can be implemented and completed in a shorter duration as compared to conventional methods. A separate wing with Chief Engineer(Planning & Renewable Energy Sources) has been created for investigation and implementation of the above scheme.

To start with, generation of electricity from Wind Power is being explored. As per the preliminary data available, Kappadagodda near Gadag is having Wind source of 28 to 30 Km annual mean speed over a belt of 30 Km long. By installing number of Windmill generators at regular intervals over the entire belt of 30 Km, it may be possible to have an installed capacity of 100 MW with an annual yield of 200 MU approximately. It is proposed to add 16 MW of Power to the grid with an annual yield of 32 MU during Eighth Plan period.

In addition to the above, possibility of extending financial incentives for promotion of the installation of Solar water heater by the individuals and organisations who are willing to own such installations are being explored. This scheme is yet to be formulated.

Several Mini Micro New Schemes have been identified and are being proposed to be taken up with the assistance of World Bank and completed during the Eighth Plan period. The total installed capacity on completion of these projects will be around 22.5 MW with an energy yield of about 89 MU.

In view of the financial crisis which would have a crippling effect on the development of Power sector programme during the Eighth Plan the State Government has taken a policy decision to encourage participation of the private sector in Power generation. Further, Thermal Power Stations which would provide substantial capacity and energy and the same could be implemented quickly in a span of 4 to 5 years, can be offered to Private Sector. Similarly, diesel sets and small Hydro schemes can also be offered to augment the Power supply quickly. Further, private participation have also been allowed to identify any other location for generation of Power through conventional or non-conventional sources. Advertisements have been issued by the State Government regarding private sector participation in the area of Thermal, DG sets and Small Hydel Scheme. There is a good response from the private firms.

Keeping the above aspects in view, the total requirement of funds for the Annual Plan 1992-93 and Eighth Five Year Plan is worked out and the project-wise requirement is indicated in the annexures. A brief write up on the various ongoing schemes and New schemes proposed to be taken up during Eighth Plan period is presented below :

I. REVIEW OF PROGRESS OF SEVENTH PLAN :

The approved outlay for Power generation for the Seventh Plan was Rs.466.46 crores with a corresponding programme to create an installed capacity of 581 MW. The expenditure incurred is Rs.491 crores (Provisional).

The yearwise plan allocation and actual expenditure including Survey and Investigation is as follows :

Year	Plan allocation (Rs.in crores)	Expenditure (Rs.in crores)	Creation of installed capacity in MWs
			2220 (Upto 1984-85)
1985-86	87.05	87.23	310
1986-87	110.67	81.32	-
1987-88	139.65	72.43	-
1988-89	132.70	118.10	-
1989-90	173.95	132.12	115
Total for Seventh Plan	644.02	491.20	425
As on 1.4.90 ..			2645 MW

It was programmed to add 581 MW of installed capacity during Seventh Plan period; 210 MW from 2nd unit of Raichur Thermal Power Station, 100 MW from Supa Dam Power House in Kalinadi Stage-I, 239 MW from Varahi Hydro Electric Project and 32 MW from Ghataprabha Dam Power House. 425.40 MW of installed capacity only 210 MW from 2nd unit of Raichur Thermal Power Station, 100 MW from Supa Dam Power House, 115 MW from Varahi Hydro Electric Project and 0.4 MW from Kalmala Mini Hydel Scheme were added to the grid. There was a shortfall of 156 MW during the Seventh Five Year Plan period due to slow progress by the Contractors and various other reasons. By end of Seventh Plan, the installed capacity was 2645.20 MW with corresponding 11,985 MU of energy per annum. During 1990-91 annual plan period, 2nd unit of Varahi Underground Power House was commissioned. 3rd unit of RTPS was synchronised on 30th March 1991. However, commercial commissioning was done during October 1991. By the end of October 1991, the total installed capacity is 3013.4 MW (including the uprated capacity of 2 units of SGS) with corresponding energy of 13665 MU per annum.

POWER PROJECTS - IN PROGRESS & PROPOSED FOR EIGHTH FIVE YEAR PLAN (1992-97):

A1: Schemes completed by 31.3.1991

I. KALINADI HYDRO' ELECTRIC PROJECT STAGE-II :

The project is located in North Kanara district and the Project completed during 1985-86. Six units of 135 MW each at Nagjhari Power House and Two units of 50 MW each at Supa Dam Power House are under operation. The project was completed with State Government Plan assistance.

II. KALMALA MINI HYDEL SCHEME (1 x 0.4 MW) :

This is the first mini project to be commissioned. It was synchronised on 24-1-90 and it is under operation.

A2: Approved and ongoing schemes as on 1-4-1991 :

a) H Y D R O :

i) VARAHI HYDRO ELECTRIC PROJECT(2x115 +2x4.5 MW) :

The project is located in Shimoga district. The scheme consists of Mani dam which is a major reservoir, a pick up dam, eleven saddle dams, a forebay dam, an inter-connecting channel, water conductor system, Underground Power House and Mani dam Power House.

UNDERGROUND POWER HOUSE :

All the surface works are completed. The two units of Varahi Underground Power House (2x115 MW) are under operation.

MANI DAM POWER HOUSE (2 x 4.5 MW) :

Erection and concreting works of the draft tubes for both the units at the Mani Dam Power House have been completed. The assembly and erection of the spiral casing completed and handed over for concreting. The erection of BF valve ODY towers and switchgear etc., has been already entrusted to a contract agency M/s PES Engineers Pvt Ltd., Hyderabad. The schedule date of commissioning of the units 1 & 2 are 6/92 and 9/92 respectively.

ii) KALINADI HYDRO ELECTRIC PROJECT STAGE-II :

1) Kodasalli Dam and Power House - 3 x 40 MW :

The project is located in Uttara Kannada District and consists of construction of concrete dam across Kali river at Kodasalli village and construction of dam Power House with installed capacity of 120 MW (3 x 40) with energy generation of 512 MU. The estimated cost of the project is Rs.14366 lakhs. The project is aided by World Bank under KPP-I.

Kodasalli dam : The work was awarded to M/s Continental Construction Ltd., New Delhi. The value of work is 3550 lakhs on 25-11-88. About 62625 cum excavation and 1225 cum of concreting have been completed out of 1,61,800 cum of erection and 4,16,100 cum of concrete respectively as on 3.6.91. Work is under progress.

Kodasalli Power House : The work was awarded to M/s Mycon Constructions Ltd, on 25-11-88. About 84,000 cum excavation and 2635 cum of concrete has been completed out of 90,000 cum and 79,715 cum respectively as on 30-6-91. The work is under progress.

Hydraulic & Electrical works : Full ordered quantity of steel plates for penstocks transported to site and fabrication of different sizes of shells are in progress. For EOT cranes order placed on M/s Greaves Chitram Ltd, Madras and the cranes are received at site. Erection work of EOT crane is started. For generating units orders placed on M/s BHEL and some of the turbine generation parts despatched from the firm. For other major items like generator transformer, SF-6 breakers etc., orders have been placed. Probable date of commissioning of 1st unit is 12/94.

2) Kadra dam and Power House (3x50 MW) : This project is located in North Kanara district and consists of composite dam to be built across Kali river and construction of dam Power House with installed capacity of 150 MW(3 x 50) with energy generation of 670 MU. The estimated cost of the project is Rs.17414 lakhs. The Kadra dam is aided by Kuwait Fund and Kadra Power House and appurtenant works are aided by World Bank under KPP-I.

Kadra Dam : Due to poor performance of earlier contractor M/s HSCL for concrete dam portion contract was terminated and awarded to M/s HCC during 9/89. The value of the work is Rs.2739 lakhs. As on 30-6-91 about 17,630 cum of concrete has been completed out of 3,51,300 cum. The works on each dam portions are under progress.

The Power House work was awarded to M/s Mycon Construction Co., Bangalore. The value of the work is Rs.1533 lakhs. About 1,88,600 cum of excavation and 2613 cum of concrete works were completed by June 1991.

Penstock steel plates received at site and fabrication work is under progress. Orders placed on M/s BHEL for generating units. Some parts already despatched and received at site. Both EOT cranes are also received at site. Orders for supplying main transformers and SF-6 breakers were also placed. The first unit is expected to be commissioned in 12/94.

iii) GHATAPRABHA DAM POWER HOUSE (2 x 16 MW) :

This is located in Belgaum district and consists of construction of a Power House with an installed capacity of 32 MW (2 x 16) at the foot of existing Ghataprabha dam. The energy generation is 143 MU.

The main building works of the Power House and raising the generator barrel to the full height along with casting the two intermediate floors of Unit no.1 have been completed.

The Electrical Operated Traverse crane is in service. Concreting of spiral cases 1 & 2 is completed. Pressure testing of B.F.valve of unit no.1 was completed and lowered on its foundation. Stator of the I unit is also lowered into the pit. Further work is under progress. Erection work of tail race gates, interconnecting gates etc., also are in progress. Generator transformers and other major equipments like breakers, auxiliary transformer etc., are also received at site. The commissioning of I unit is expected by 2/92 and II unit by 5/92.

iv) GERUSOPPA HYDEL PROJECT (4 x 60 MW) :
(Sharavathy Tail Race Project)

The Project is located in the districts of Shimoga & Uttara Kannada. The Project consists of construction of concrete dam across river Sharavathi near Gerusoppa village and construction of Power House of installed capacity of 240 MW (4x60) with energy generation of 600 MU. The estimated cost of the project is Rs.23200 lakhs and is aided by World Bank under KPP-I.

Diversion channel and downstream bridge works were already completed. However, the works of dam and Power House were suffered due to local agitations and consequent stay order of High Court on felling of trees in the construction area. 2,32,500 cum excavation have been completed in dam and Power House areas. Concreting could not be started as quarries and other areas required for machinery erection are not cleared by the Forest Department as a result of High Court stay. However, the Supreme Court in its interim order has permitted to resume the work in the Sixty hectares already cleared by Forest Department.

Hydraulic & Electrical works : For EOT crane orders has been placed on M/s Thiyan Heavy Machinery, China. For generating units orders have been placed on BHEL. Some of the turbine items have been despatched. For supply of steel plates for penstock orders placed on M/s HOESCH Exports AG, West Germany and supplies completed. For fabrication and erection of penstocks order was placed on M/s PES Engineers Pvt.Ltd., Hyderabad. Commissioning of unit-1 is scheduled during 9/95.

v) MINI HYDEL SCHEMES(ONGOING) :

- (1) Ganekal (1 x 0.35 MW)
- (2) Sirwar (1 x 1 MW)
- (3) Mallapur (2 x 45 MW)

All these schemes are situated in Raichur district. The energy generation from these schemes is about 58 MU.

The Ganekal works are badly affected due to non-supply of generator parts by BHEL. The civil works of Sirwar are in completion stage and the erection works are progressing satisfactorily. The civil works of Mallapur are also progressing well. Orders have been

placed for generating units of Mallapur on M/s Boving Fouress for 2 units of 4.5 MW each and the scheduled date of completion of supply is 10/91. Order for generator transformer (11 KV) has been placed on M/s Voltamps, Baroda and the schedule date of completion of supply is 6/91. Order for 315 KVA Auxiliary transformer is placed on M/s KEL, Cochin and for EOT Crane on M/s Universal Engineering Corporation, Hyderabad. Both Ganekal and Sirwar units are expected to be commissioned by 12/91 and two units of Mallapur by 8/92.

RENEWABLE ENERGY SOURCES :

As per the preliminary data available, Kappadagudda near Gadag is having Wind source of 28 to 30 Km annual mean speed over a belt of 30 Km long. By installing number of Windmill generators it may be possible to have an installed capacity of 100 MW with an annual energy of 200 MU approximately. It is proposed to add 16 MW with an annual yield of 32 MU during Eighth Plan period. Preparation of DPR for 4 MW is now in progress.

Apart from this 200 KW bio-mass energy for catering the remote rural places is contemplated during this plan, as an experimental R & D project.

A 100 Km Solar pond is also proposed to be installed at RTPS, Shaktinagar.

(b) T H E R M A L :

i) RAICHUR THERMAL STATION St.II(Unit-3)-210 MW :

This project is located at Shaktinagar (Raichur district) and consists of installation of one unit of 210 MW with energy generation of 1150 MU.

The unit was synchronised on 30-3-91 and after completing the balance works of Ash handling, coal handling system, the unit was coal fired and synchronised during October 1991.

ii) RAICHUR THERMAL STATION (UNIT-4) -210 MW :

The scheme consists of installation of one more Thermal unit of capacity 210 MW (with energy generation of 1150 MU) at Shaktinagar in Raichur district.

The total present estimated cost of the project is Rs.59156 lakhs and is aided by OECF, Japan.

The supply order for BTG, DM plant, generator transformer and interconnecting transformer (220/400 KV, 315 MVA) of the unit has been placed and letter of intents for chimney and cooling tower have been issued. The tenders for main plant foundation is in progress. Construction works for chimney and cooling tower have started. The Unit is scheduled to be commissioned during 5/94.

A3. SANCTIONED SCHEMES COMMITTED IN 1991-92 :

(a) H Y D R O :

i) BRINDAVAN SMALL HYDEL SCHEME-(2 x 6 MW) :

The scheme proposes construction of canal Power House at the head works of Visveswaraiah canal in Mysore district, with an installed capacity of 12 MW (2 x 6). The Power generation is of the order of 65 MU annually.

The total present estimated cost of the scheme is Rs.2442 lakhs and scheme is to be aided by OECF, Japan.

Preliminary works are being taken up, during 1991-92 and both the units are programmed to be commissioned during 95-96.

ii) BHADRA RIGHT BANK CANAL POWER HOUSE (1 x 6 MW) :

The scheme proposes installation of an additional unit of 6 MW with energy generation of 28 MU at Bhadra right bank canal in Shimoga district.

The Project estimated cost is Rs.1420 lakhs and is assisted by State Government Plan assistance.

Preliminary works are being taken up during 1991-92 and specifications of generating units are under finalisation. Expected to be commissioned during 95-96.

iii) OTHER MINI/MICRO SCHEMES(NEW) :

Salient features: In addition to the major projects, other mini/micro schemes in the State have been contemplated to be implemented. 12 Mini/Micro schemes have been identified and posed to World Bank for financial assistance. The total installed capacity is 22.5 MW. All the schemes are expected to be commissioned during the Eighth Plan period.

(b) T H E R M A L**DIESEL GENERATING SETS -(77.6 MW) :**

The scheme consists of installation of diesel generating sets at four places in Karnataka State, with total installed capacity of 77.6 MW with energy generation of 420 MU annually. Tenders have been invited for the supply and erection of DG sets.

The original estimated cost is Rs.5080 lakhs approved by CEA. But the latest cost is estimated to be Rs.15092 lakhs and revised estimate has already been forwarded to CEA for approval.

B. NEW SCHEMES**(a) HYDRO :****(i) SARPADI BARRAGE HYDRO ELECTRIC PROJECT (3x30 MW) :**

The Scheme consists of construction of Barrage across river Netravathi in South Kanara District. The project is multi-purpose one and provides water supply to Mangalore City and to Mangalore Refinery in addition to generation of Power. The Power House on downstream of Barrage will have 90 MW capacity (3x30) with an energy generation of 173 MU.

Project is cleared by CEA. However, clearance from Ministry of Environment and Forest is to be received. Preliminary infrastructure works are being taken up during 1991-92.

ii) BEDTHI SCHEME :

The work on Bedthi project have been suspended by the State Government pending re-appraisal of the ecological and other aspects. Further, in order to utilise the Bedthi waters in an optimum way and with least effect on ecology and environment of the area, it is proposed to divert 18 TMCft of water to Kali basin through Tattihalla reservoir to generate energy in the existing Power Houses of Kali basin to the extent of 447 MU annually. The Project Report for the above scheme is ready and is being shortly forwarded to the State Government/Central Government for further processing.

iii) VARAHI IRRIGATION DAM POWER HOUSE (4 x 10 MW) :

This project is located in Dakshina Kannada district and is a run off the river Power Station. The total estimated cost of the project is about Rs.80 crores and the project consists of installation of 4 x 10 MW units giving an annual yield of 150 MU. Preliminary works are expected to be started during Eighth Plan.

iv) SHIVASAMUDRAM SEASONAL SCHEME (2 x 135 MW) :

The project consists of installation of 2 units of 135 MW each at Underground Power House on river Cauvery at Shivasamudram in Mysore district.

The project is yet to be cleared by CEA. Regarding environmental clearance studies of catchment area treatment is entrusted to ICSIM, Bangalore.

v) ALMATTI DAM POWER HOUSE (5 x 150 + 1 x 18 MW) :

The scheme consists of construction of the dam Power House on the downstream of Almatti dam in Bijapur district. The scheme consists of installation of 268 MW (5 units of 50 MW each and 1 unit of 18 MW). The total generation of energy is about 714 MU. The detailed project report was submitted to CEA/Govt of India during 1983. Certain details required by CEA/CWC regarding inflows, FRLs, ultimate utilisation pattern of irrigation etc., are yet to be submitted by Irrigation Department, Govt. of Karnataka.

vi) MAHADAYI HYDEL PROJECT (2x150 + 2x10 + 2x12.5 MW):

This project is located in Belgaum district. The project consists of construction of dam across Mahadayi river and construction of an Underground Power House with a capacity of 300 MW (2 x 150 MW) a dam Power House and a tail race Power House (2x10 + 2x12.5 MW). The energy generation is of the order of 800 MU annually.

Project report is submitted to Govt of Karnataka and proposal for forest clearance was sent to Forest department.

vii) THAMANKAL HYDRO ELECTRIC PROJECT (5 x 150 MW) :

The project is located in Bijapur district. The project consists of construction of a canal of sufficient capacity to drain water from Narayanpur reservoir for a length of about 35 Kms, construction of a forebay dam and an Underground Power House with an installed capacity of 750 MW (5 x 150 MW with an energy generation of 2000 MU annually. Detailed project report is under preparation.

viii) AGHANASHINI HYDEL PROJECT (3 x 145 MW) :

Aghanashini Hydel project is located in the Uttara Kannada district. It is proposed to instal 3 units of 145 MW capacity with an annual yield of 1200 MU. It is programmed to take up this work for obtaining required clearances during 1993-94 so that the project will yield benefit during the early part of the Nineth Plan period.

(b) THERMAL

i) RAICHUR THERMAL POWER STATION - UNIT 5 (1 x 500 MW) :

One no.of 500 MW unit was proposed under Stage-III of the existing Raichur Thermal Power Station. Detailed Project Report has already been submitted to CEA for clearance. CEA has requested us to intimate the feasibility of installing one more unit of 500 MW in Stage-IV in addition to St.-III. The same is under preparation. Environmental clearance from Government of India is also to be obtained. Clearances from Civil Aviation department, Ecology & Environment from State Government and State Pollution Control Board have already been obtained.

ii) HOSPET THERMAL POWER PLANT (2 x 250 MW) :

2 units of 250 MW each are proposed to be installed in Stage-I at Hospet in Bellary district. Feasibility Report is ready. Coal linkage is yet to be established. Hospet has the advantage of the available Broad gauge line from Madras to Hospet for transporation of coal. The broad gauge line presently carries Iron ore to Madras and on the return, do not bring anything. The project can be completed in a period of 5 years. The work has to be commenced in Eighth Plan and to complete the same in Nineth Plan period.

II. SCHEMES ON UPRATING OF HYDRO STATION AND SCHEMES
AIMED AT MAXIMISING BENEFITS:

(i) SHARAVATHY GENERATING STATION(RENOVATION) :

The scheme consists of renovating the Sharavathi generating Station in Shimoga district with a capacity increase from 891 MW (10 x 89.1) to 1035 MW (10 x 103.5) i.e., an overall increase of 144 MW by providing epoxy coil winding, replacement of governors & excavation system etc., Rewinding of one unit (Unit no.4) was completed under State plan allocations. Rewinding of other 7 units, replacement of Hydro electric govonors, changing the conventional excitation to static excitation system, replacement of 220 KV Oil Circuit Breakers and disconnects, instruments etc., for all the ten units is under World Bank Aid (KPP-I).

5 sets of epoxy coils were ordered on M/s CGE & 2 sets on M/s Hitachi. Two sets of CGE coils received and rewinding works on Unit no.5 & 3 completed. Supply of balance 3 sets of coils and accessories are expected by December 1991. Works will be completed during 1992-93.

2 sets of coils from M/s Hitachi were also received at site. Dismantling work of Unit no.2 has already been started. Work on both the units is expected to be completed before March 1992.

Orders for supplying the static excitation system was placed on M/s BHEL. Some of the equipments have been despatched . Orders for supplying electronic governors were also placed on M/s Neyrpic, France.

Detailed Project Report in respect of uprating of Unit No.9 and 10 is now submitted to CEA for clearance.

ii) CAPITAL REPAIRS TO TALAKALALE DAM :

The scheme consists of providing remedial measures to reduce the leakage observed in Talakalale dam in Shimoga district.

The estimated cost of the scheme was Rs.1390 lakhs. An amount of Rs.105 lakhs is towards consultancy and is aided by World Bank under KPP-I and an amount of Rs.1285 lakhs is towards repairs which is aided by World Bank under KPP-II. The consultancy report was received and

it was examined by the Experts. Now, a decision has been taken to provide steel plates on the upstream side of dam. The cost of repairs is now estimated to be 2572 lakhs.

iii) GENERATION MANAGEMENT OF KALI COMPLEX :

The project consists of implementation of computerised integrated operation of all the reservoirs and Power Houses coming under Kali Stage-I and Kali Stage-II for optimising the generation. Consultancy work was entrusted to M/s EDF. They have furnished the complete specifications for hardware, software and telecommunication equipment. This has to be sent to World Bank as this is financed under KPP-I. Total cost is now estimated at Rs.5210 lakhs.

iv) NAGJHARI POWER HOUSE (RENOVATION) :

It is also programmed to take up the renovation and uprating the existing units of NPH during the Eighth Plan period for augmenting the existing capacity of 135 MW to 150 MW. With this, the total installed capacity of the Stations will go up by 90 MW on completion of renovation of all the 6 units. The estimated cost of this renovation works is Rs. 62.16 crores. It is programmed to take up this work during the coming years and complete it during the Eighth Plan period.

III. ENERGY CONSERVATION :

In association with Karnataka State Council for Science and Technology, necessary arrangements are made for advertisement campaign to intensify the dissemination programme of Solar water heaters. Further, to promote usage of Solar water heaters by domestic users, Council for Science and Technology create a revolving fund for giving soft loan for domestic users of Solar water heaters.

IV. DEPOSIT CONTRIBUTION WORKS :

i) MULKI RESERVOIR SCHEME :

The project envisages construction of a dam across mulki river in Dakshina Kannada district to form a reservoir to cater water for Mangalore Multifuel Thermal Plant.

The total estimated cost of the project is about Rs.2033 lakhs and work on this has been taken up as deposit contribution work.

Scheme is approved by Central Water Commission. Specification of tenders are under preparation. The work is programmed to be completed during 1993-94.

ii) SURVEY AND INVESTIGATION :

The major projects, the investigation of which is already in progress are Tamanakal Hydro Electric Project, Mahadayi Hydro Electric Project, Netravathi Scheme, Barapole scheme, Mokedatu scheme on Cauvery river, Gundia High Head scheme and Varahi Tail Race Scheme. In addition, the investigation of several new projects are also proposed to be taken up during the Eighth Plan period. For carrying out the above investigation works, a provision of Rs.8 crores has been proposed in Eighth Plan.

POWER POSITION AT THE END OF EIGHTH PLAN :

With the programme of works as indicated above, the availability of Power and energy by the end of Eighth Plan period will be 4320 MW (addition of 1140 MW by KPC and 120 MW by KEB) and 18,879 MU respectively.

EMPLOYMENT GENERATION:

Energy is a Core Sector and the investment made in this Sector generates direct employment as well as indirect continuous employment potential in all the spheres. During the construction of Power projects, the direct employment generation is 1,70,669 Thousand mandays during Eighth Plan and 26,635 Thousand mandays during 1992-93 Annual Plan. After construction, i.e., during operation and maintenance this generates direct continuous employment. Apart from this, also generates indirect continuous employment in agriculture, industrial and other sectors by supplying Power to them. Therefore, it is very necessary that Energy Sector shall be given priority so as to keep the employment generation in the upward direction at all times.

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APPENDIX-I
POWER GENERATION OUTLAYS
FOR EIGHTH PLAN & ANNUAL PLAN 1992-93

(Rs. in Lakhs)

Sl. No.	Name of the Project	Proposals	
		Eighth Plan	1992-93
I ONGOING SCHEMES :			
1.	Kalinadi Hydrel Project Stage-I	257	100
2.	Varahi Hydro Electric Project	750	327
3.	Kalinadi Hydro Electric Project Stage-II:		
	a) Kodasalli dam and power house	7238	4462
	b) Kadra dam and power house	10098	3000
4.	Ghataprabha dam power house	259	236
5.	Gerusoppa Hydrel Project	16583	3000
6.	Mallapur Mini Hydrel Scheme	250	250
7.	Sharavathi Generating Station(Renovation)	1261	660
8.	Capital repairs to Talakalale dam	2278	780
9.	Generation Management of Kali Complex	4975	200
10.	Brindavan Small Hydrel Scheme	2416	428
11.	Bhadra Right Bank Canal Power House	1279	260
12.	Almatti Dam Power House	4538	100
13.	Renewable Energy Sources	4300	100
14.	Mini Micro (New Schemes)	6880	100
15.	Raichur Thermal Power Station St.II Unit-3	2483	1250
16.	Raichur Thermal Power Station St.II Unit-4	47609	9633
17.	Diesel Generating Sets	15073	1500
Total for I : Ongoing Schemes ..		128527	26386
II. NEW SCHEMES :			
1.	Shivasamudram Seasonal Scheme	4000	100
2.	Sarpadi Hydro Electric Project	13541	150
3.	Mahadayi Hydrel Project	3000	20
4.	Bedthi Scheme	4000	-
5.	Energy conservation	125	18
6.	Diversion of Nalas to Linganamakki and Talakalale	500	-
7.	Aghanashini Hydrel Project	100	-
8.	Varahi Irrigation Dam Power House	500	-
9.	Thamankal Hydro Electric Project	100	-
10.	Raichur Thermal Station Stage-III :Unit-5	21520	20
Total for II : New Schemes		47386	308
III. DEPOSIT CONTRIBUTION WORKS :			
1.	Mulki Reservoir Scheme	1619	960
2.	Survey and Investigation	800	160
Total for III : Deposit Contribution Works		2419	1120
GRAND TOTAL		178332	27814

B. TRANSMISSION AND DISTRIBUTION

Formulation of Eighth Five Year Plan calls for strategy aimed at achieving better growth rate in Industry and Agriculture with effective demand management and energy conservation as well. The Planning Commission, has decided to go in for a growth rate of 5.6% in the Eighth Five Year Plan. The Central thrust of the Eighth Five Year Plan is to maximise employment. The pattern of investment is therefore to be so designed as to maximise the use of labour.

The total allocation proposed for Transmission and Distribution during Eighth Five Year Plan is Rs.1100.09 Crores. The broad investment thrust for Eighth Five Year Plan has to provide sufficient evacuation capacity from new generation projects likely to be available during Eighth Five Year Plan period and to improve the reliability and quality of power supply by providing sufficient substation capacity and associated transmission and distribution system network. Due importance is given to reduce the energy losses to 17.5% by the end of Eighth Five Year Plan. An allocation of Rs.85.00 Crores is specifically earmarked for systems improvement works. It is contemplated to electrify Hamlets, Harijan Basthis, Tribal Colonies to the maximum extent with the available allocation of funds. However due to constraints in the funds made available many of the important works for stabilising the network have to be postponed. To make available the electricity to weaker sections in Rural area 'BHAGYA JYOTHI' which was introduced earlier in the Sixth Five Year Plan is being continued.

ACHIEVEMENT DURING SEVENTH FIVE YEAR PLAN AND
ANNUAL PLANS 1990-91, 1991-92.

The financial allocation for Transmission and Distribution for the Seventh Five Year Plan period was Rs.333.54 Crores and was provided outside Plan Rs.162.50 Crores. The total expenditure under plan and non-plan programme during Seventh Five Year Plan was Rs.561.61 Crores. Out of this the Expenditure on Plan works was Rs.382.44 Crores.

The major bottle neck faced during the Seventh Five Year Plan period can be briefly stated as:

- (a) Non availability of sufficient funds
- (b) Non availability of essential materials due to various reasons
- (c) Delay in getting approval for the forest clearance. etc.

In spite of the above constraints, the major achievement made during the Seventh Five Year Plan period is as indicated in Appendix-I.

The Seventh Five Year Plan contemplated to bring down the over all transmission and distribution losses in the system by 2% by the end of Plan period (20.40%) by providing Reactive Compensation to an extent of 579.12 MVAR. Details of yearwise % losses and details of Capacitor installation classwise (KV) are as shown in Appendix-1.

The yearwise service connections provided along with I.P.Sets achievement, electrification of Harijan Basthis, Tribal Colony, Hamlets and Energisation of Bhagya Jyothi house holds are as shown in Appendix-1.

RURAL ELECTRIFICATION

Electrification of all the 26503 Revenue villages in Karnataka (1981 Census) by the end of 1989 is a significant achievements. Also the progress of electrifying Harijan Basthis, Tribal Colonies and Hamlets is impressive with targets being exceeded.

The Yelahanka Diesel Generation Plant work has picked up momentum and works are under advance stage. One Generator set has already arrived and erection is in progress. Ist set is programmed for commissioning by 3/92.

Work on Nagjhari-Ponda 220 KV D.C.Line will be completed in all respects by January 1992. The latest position as at the end of 1st week of October 1991 are as follows:

	<u>Karnataka Portion</u>	<u>Goa Portion</u>
1. Total No.of stubs erected	238	113
2. Total No. of towers erected	205	113
3. Line stringing	39 Kms.	18 Kms.

The allocation for 1990-91 and 1991-92 are Rs.97.10 Crores and Rs.136-75 Crores respectively. The achievement during 1990-91 and anticipated achievement during 1991-92 are as shown in Appendix-1.

EIGHTH FIVE YEAR PLAN AND ANNUAL PLAN 1992-93

The strategy adopted while formulating the Eighth Plan proposals are primarily based on (a)priority of works (b) fixation of realistic targets and (c)conser- vation of available resources, with a view to achieve an efficient and reliable transmission systems for fair distribution of power.

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As per the finalised generation programme, additional generating capacity to an extent of 1385 MWs from new projects in the State viz., Kalinadi II Stage, Raichur Thermal, Unit-4, Sharavathi Tail Race Project, Kaiga Power Project and Diesel Generating set at Yelahanka as well as State's share of Central Generation will be available in full measure at the end of Eighth Five Year Plan period. Necessary adequate Transmission and Distribution net work will be required to carry this additional power to load centres at appropriate voltages. Such transmission schemes essential during Eighth Five Year Plan to evacuate anticipated additional generation and to reinforce the existing power grid have been identified by conducting System Studies. The studies conducted by the C.E.A., the rate of load growth and the power availability in the System have also formed as a base for formulating these schemes.

Major Transmission schemes inclusive of World Bank Aided works programmed for execution during Eighth Plan period are:

(A) TO EVACUATE POWER FROM KALINADI II STAGE AND KAIGA NUCLEAR POWER STATION.

		<u>Ckt. Kms</u>
1) Kaiga-Sirsi 400 KV D.C.	..	100
2) Sirsi-Davanagere 400 KV D.C.	..	280
3) Davangere-Melamangala 400 KV D.C.	..	500
3(a) Nelamangala-Hoody 400 KV D.C.	..	100
4) Kadra-Kodasalli 220 KV D.C.	..	62
5) Kadra-Karwar 220 KV S.C. on DC	..	30
6) LILU Sharavathi-Hubli through Sirsi 220 KV 2 D.C.	..	40
7) Kodasalli-Nagjhari 220 KV D.C.	..	80
8) Ambewadi-Dharwad 220 KV B.C.	..	130

SUB-STATIONS:

- 1) Sirsi 400/220 KV, 2 x 315 MVA
- 2) Nelamangala, 400/220 KV, 1 x 500 MVA
- 3) Davangere, 400/220 KV, 1 x 315 MVA
- 4) Karwar, 220/110 KV, 2 x 100 MVA
- 5) Hadag, 220/110 KV, 1 x 100 MVA
- 6) Dharwad, 220/110 KV, 2 x 100 MVA

(B) TO EVACUATE POWER FROM RAICHUR T.P.S. UNIT III AND IV.

	<u>Ckt. Kms.</u>
1) Davanagere-Munirabad 400 KV S.C. ..	120
2) Linklines from Davangere 220 KV station to 400 KV Station. ..	70
3) R.T.P.S.-Sedam 220 KV D.C. ..	102
4) Sedam-Humnabad 220 KV S.C.on D.C. ..	65
5) Shimoga-Davangere 220 KV D.C. ..	150
6) Lingasugur-Basavanabagewadi ..	140

SUB-STATIONS:

- 1) Sedam, 2x100 MVA, 220/110 KV
- 2) Humnabad, 220 KV, 2x100 MVA
- 3) Basavanabagewadi, 2x100 MVA

(C) TO EVACUATE POWER FROM SHARAVATHI TAIL RACE POWER HOUSE AND SHARAVATHI COMPLEX

	<u>Ckt. Kms</u>
1) Sharavathi Tail Race to Talaguppa 220 KV D.C. ..	76
2) Shimoga-Nelamangala 400 KV D.C. ..	500
3) Talaguppa-Shimoga 400 KV D.C. ..	180

SUB-STATIONS:

- 1) Talaguppa 220/400 KV, 1x500 MVA

(D) OTHER SYSTEM IMPROVEMENT WORKS TO REINFORCE THE GRID:

- 1) Link lines between Somanahalli and Hoody D.C. .. 70 Ckt.KMs
- 2) Hoody 400/220 1x500 MVA
- 3) Mahalingapur-Basavana Bagewadi
- 4) Nelamangala: 1x500 MVA

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5) ESTABLISHMENT OF 220 KV SUB-STATIONS AT:

- A) N.R.S. (Bangalore)
- b) Ejipura (Bangalore)
- c) Hebbal (Bangalore)
- d) Yerrandahalli (Bangalore)
- e) Mysore II Station
- f) Hassan
- g) Kamar
- h) Karwar
- i) Tiptur
- j) Tumkur
- k) Hagari Bommanahalli
- l) Haveri
- m) T.K.Halli
- n) Bellary

In addition to this 66 KV U.G. Cable will be laid from 'B' Station to 'C' Station and Austin Town to 'C' Station respectively and from 'A' Station to 'C' Station in Bangalore City.

Further the N.T.P.C. will be executing the following Transmission Schemes for evacuation of power from the I Stage, Mangalore Super Thermal Power Station, Stage-I (2x210 MW) at Nandikur.

- 1) Mangalore S.T.P.S. - Hassan 400 KV D.C. .. 320 Ckt.
Kms.
- 2) Mangalore S.T.P.S.-Mercara 220 KV D.C. .. 70 Ckt.
Kms.

SUB-STATIONS:

- 1) Hassan 400/220 KV, 2 x 315 MVA.

However, due to reduction of allocation it will not be possible to take up many schemes envisaged as per the systems requirements to improve the reliability, voltage fluctuations quality of supply and reduction of

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transmission and distribution losses. Priority has been given for the generation evacuation transmission line schemes.

Under the circumstances, the details of Transmission lines and Sub-stations envisaged under Eighth plan are as hereunder:

Sl. No.	Transmission Lines	Ckt.Kms	SUB-STATIONS			
			N E W		Modification	
			No.	MVA	No.	MVA
1.	400 KV	898	5	2445	-	-
2.	220 KV	1554	17	2510	5	500
3.	110 KV	521	20	330	11	120
4.	66 KV	407	31	433.5	21	222.5
5.	33 KV	176	19	97	3	15

As at the end of Seventh Plan period, the installed trans-former capacity at the upstream transmission voltage level of 220 KV is about 3005 KV and at the down stream voltage level of 110 KV and 66 KV and 33 KV is about 4972 MVA. Consequently, there is an imbalance in the installed transformer capacities at the up stream transmission and down stream distribution voltage level. This imbalance is to be set right during the Eighth Plan period. Accordingly to set right the imbalances in transformer capacities during the Eighth Plan Period, it is proposed for higher transformer capacity of 2510 MVA at 220 KV and correspondingly lower capacity of 860 MVA at the distribution voltage level of 110 KV, 66 KV and 33 KV.

CAPACITORS:

The MVAR compensation requirement of grid by the end of Eighth Plan is assessed at 1675 MVAR. The achievement by the end of Seventh Plan period

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is 579 MVAR and at the end of 1991-92 the capacitor installations is expected to be about 835 MVAR. Thus the capacitors to be installed during the Eighth Plan period would be 840 MVAR. It has been contemplated to bring down the Transmission and Distribution losses to 17.5% by the end of the Eighth Plan period, by providing reactive compensation to an extent of 840 MVAR in addition to other system improvement works. The programme of bringing down the losses in the system year-wise is as detailed below:

1992-93	..	18.90
1993-94	..	18.45
1994-95	..	18.00
1995-96	..	17.75
1996-97	..	17.50

Next to Transmission Scheme, the thrust during Eighth Plan would be towards conservation of energy. Implementation of the usage of low friction pipes (HDPE/RPVC), frictionless foot valve and monoblock pumpset, by making it mandatory for prospective I.P. Consumers, with a view to conserve energy in the agricultural sector.

Master Plans for important cities in Karnataka viz., Bangalore, Mysore, Hubli-Dharwad, Belgaum, Mangalore, Gulbarga, Bellary and Davanagere have been formulated with a view to meet the load growth upto 2000 AD and to ensure a reliable and uninterrupted power supply to the power consumers as well as to reduce the distribution losses in the system. This programme has been spread over a period of ten years and a beginning has been made during Eighth Plan taking some of the important works in Bangalore.

YELAHANKA DIESEL GENERATING STATION

The project envisages setting up of a 120 MW Diesel Engine Power Plant consisting of 6 Nos. of Diesel Generating sets of 21.32 MW capacity each, near Yelahanka, Bangalore. The plant is proposed to be run by using petroleum based fuels. The funding of the project is through contributions from participating H.T. Consumers by way of collecting a surcharge on certain quantum of additional energy allotted to them over and above their normal entitlement during the Power Cut period and partly through soft loan and suppliers credit offered by the Government of France to be routed through the Power Finance Corporation Ltd., New Delhi, in addition to the plan allocation.

The project has been cleared from all angles and other statutory approvals has been obtained. Land has been acquired to an extent of about 90 acres and another 30 acres of land is under acquisition. Arrangements for creation of infrastructural facilities such as railway siding, fuel storage, water supply has already been made. Foundations for engines are in progress.

Purchase Order for supply of equipments has been placed on M/s.S.E.M.T.Pial Stick, France, a French firm. Engines are on the way to India. The first engine is due for commissioning in March 1992. The remaining five engines are expected to be commissioned before March 1993. M/s.Power Finance Corporation Ltd., has sanctioned a loan equivalent to 305 million French Francs. The energy expected to be generated from the plant will be 720 million units per annum.

The total expenditure incurred for the projects as on 31.3.1991 is Rs.2,831.00 lakhs and from April 1991 to July 1991 is Rs.210.00 lakhs.

RURAL ELECTRIFICATION:

Rural Sector being vital for the economy of the State, Power supply has to be extended to the rural areas for electrification of hamlets, Harijan Basthis, Tribal Colonies and energisation of Irrigation Pumpsets. With the achievement of 100% village electrification in the Seventh Plan, the rural electrification programme envisages electrification of large number of hamlets, with a higher target than in the seventh Plan.

The target set under this programme is : :

Hamlets	..	2650 Nos.
Harijan Basthis	..	2,800 Nos.
Tribal Colonies	..	460 Nos.

The programme of extending electricity to the weaker section of the Society, under Bhagya Jyothi Scheme, will be continued in the Eighth Plan by servicing 16,000 Bhagya Jyothi installations annually.

IRRIGATION PUMPSETS:

It is proposed to energise 3,00,000 I,P,Sets during the entire Eighth Plan period at the rate of 60,000 I.P.Sets per year. This programme is entirely dependent on the advancing of funds under "Special Project Agriculture" (SPA) programme by the R.E.C. An average cost of Rs.16,000/- per I.P.Set has been assumed in working out the requirement of funds.

SERVICE CONNECTION:

It is proposed to provide service connections to new installations of about 15,00,000 numbers during the Eighth Plan period at the rate of 3,00,000 installations on an average per years commencing from 1992-93.

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LOAD DESPATCH AND COMMUNICATION:

Modernisation of Load Despatch Centre with computerised data acquisition system at Bangalore and providing communication facilities between Generating Station and Local Centres are the main activity under this sector. It is also proposed to introduce U.H.F. communication to support the existing P.L.C.C. System.

MISCELLANEOUS

A sum of Rs.21.36 Crores has been provided for 1992-1997 for construction of buildings and miscellaneous works.

The allocation proposed during 1992-93 for all the Transmission and Distribution works is Rs.171.63 Crores. During the year it is proposed to take up major Transmission & Distribution works of World Bank aided projects allocating Rs.110.00 Crores and other works costing Rs.4.71 Crores. It is proposed to take up energy system works to an extent of Rs.3.10 Crores. It is contemplated to energise 60000 I.P.sets and service three lakhs installations. An allocation of Rs.5.79 Crores for Rural Electrification and Rs.20.00 Crores for S.C.P. has been provided. Details are as presented in Appendix-II.

EMPLOYMENT GENERATION

The estimated Employment Generation for the proposed outlay of Rs.171.63 Crores for the year 1992-93 is 6611 thousand mandays and for the proposed outlay of Rs.1100.09 Crores for the Eighth Five Year Plan period (1992-1997) is 42375 thousand mandays.

CONCLUSION

Based on the experience gained during Seventh Five Year Plan period, more importance has been given during Eighth Five Year Plan for improving the quality of power supply by strengthening the transmission and distribution system and also for execution of major works as per the schedule by restructuring the organisation setup. Transmission Technology is developing at a fast space and adoption of new Technology to suitable long term requirements is inevitable. A massive investment on transmission and distribution programme is therefore essential in the Eighth Five Year Plan. In spite of limitation of finances due to restricted outlay for transmission lines and substations. The State is having an ambitious programme to complete most of the transmission lines and sub-stations with financial assistance from P.F.C.ltd. to set right the imbalance to the maximum extent in the Transmission Lines network. Much thrust has been laid in Eighth Five Year Plan on direct and indirect employment due to evacuation of power generated through transmission lines.

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APPENDIX - I

ACHIEVEMENT DURING SEVENTH PLAN 1990-91 AND 1991-92*

1. TRANSMISSION LINES

(Ckt.Kms.)	<u>1985-1990</u>	<u>1990-91</u>	<u>1991-92</u>	<u>1992-93</u>
(a) 400 KV	-	-	180	120
(b) 220 KV	953.5	13.4	227.3	252
(c) 110 KV	407.5	140	51	44
(d) 66 KV	389	115	102.5	80
(e) 33 KV	859.5	284	81	41

2. STEP DOWN STATIONS

M. V. A. ADDED

	<u>1985-1990</u>		<u>1990-91</u>		<u>1991-92</u>		<u>1992-93</u>	
	New.	Mod.	New	Mod.	New	Mod.	New	Mod.
(a) 220 KV	700	340	-	40	255	200	-	300
(b) 110 KV	250	371	60	65	40	20	30	20
(c) 66 KV	238.6	170.9	37.75	20	71.6	12	12.6	27.8
(d) 33 KV	254	119	5	15	15	10	10	-

3. MVAR COMPENSATION (CAPACITOR INSTALLATIONS)

	<u>1985-90</u> (MVAR)	<u>1990-91</u> (MVAR)	<u>1991-92</u> (MVAR)	<u>1992-93</u> (MVAR)
(a) 110 KV	150	-	-	-
(b) 66 KV	170	30	-	-
(c) 33 KV	35	-	145	40
(d) 11 KV	224.12	12.5	-	-
Total:	579.12	42.5	145	40

* Anticipated

Mod. = Modification.

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4. Percentage losses on the system yearwise

A.	(a)	1985-86	22.79
	(b)	1986-87	22.85
	(c)	1987-88	21.34
	(d)	1988-89	20.74
	(e)	1989-90	20.48
B.	(a)	1990-91	19.60
	(b)	1991-92	19.30

5. Number of Service Connection

A.	(a)	1985-86	267709
	(b)	1986-87	264355
	(c)	1987-88	276222
	(d)	1988-89	273683
	(e)	1989-90	279650
B.	(a)	1990-91	284504
	(b)	1991-92	300000

6. R.E. Programme, Achievement (Nos.)

	<u>1985-1990</u>	<u>1990-91</u>	<u>1991-92</u>
a) Electrification of Hamlets	2009	186	400
b) Electrification of Harijan Basthis	3187	295	600
c) Electrification of Tribal Colonies	193	34	50
d) Electrification of Bhagya Jyothi House Holds	142166	7383	20000
e) Energisation of I.P.Sets	229883	70138	60000

APPENDIX-II

POWER TRANSMISSION AND DISTRIBUTION-SECTORWISE
 DETAILS EIGHTH FIVE YEAR PLAN & ANNUAL PLAN 1992-93
 (RUPEES CRORES)

S C H E M E	PROPOSED OUTLAY	
	1992-93	EIGHTH PLAN
<u>I. STATE PLAN</u>		
1(a) Transmission Line & Substations with attached Civil Works:		
(i) Plan Works	4.71	110.50
(ii) World Bank aided Projects	110.00	551.56
(b) Load Despatch and Communication	0.30	5.00
2(a) Extension & Improvements to Distribution works including System Improvement Works	1.00	25.00
(b) Capacitor installation	1.00	25.00
(c) Energy Conservation	0.10	3.00
(d) Master Plan of Towns and Cities	1.00	32.00
3. Service Connection	5.00	75.00
4. Renovation of Power Stations	0.25	15.00
5. <u>Other Works</u>		
(a) Buildings	1.00	19.60
(b) Generating Stations-Yelahanka Diesel Power Projects 120 MW	21.00	25.00
(c) Tools and Plants	-	1.00
(d) Miscellaneous	0.38	1.03
6. Rural Electrification Programme		
(a) R.E.C.Normal (I.P.)	-	4.00
7. R.E.General Programme		
(a) Electrification of Villages & Hamlets	1.25	20.00
(b) Irrigation Pumpsets	0.64	22.50
(c) Tribal Colony Electrification	3.50	23.20
(d) Bhagya Jyothi	0.40	3.20
8. Survey and Investigation	0.10	0.50
9. Special Component Plan		
(a) Electrification of Harijan Basthis	5.04	22.50
(b) Irrigation Pumpsets	14.56	112.30
(c) Bhagya Jyothi	0.40	3.20
	171.63	1100.09

C. RURAL ENERGY

Nearly 90 percent of the total energy consumption by the rural people consists of non-commercial fuels like firewood, cowdung and agricultural wastes. These non-commercial fuels comprise more than 40 per cent of the total energy consumed in the country.

The continued and widespread use of these non-commercial sources of the energy in the rural areas is resulting in the large scale destruction of the environment, yet the demand for the energy continues to be for more than supply. This has resulted in serious environmental problems which includes widespread deforestation, soil erosion, loss of fertility etc.,

However, part of this energy gap in rural areas could be met by decentralised and renewable sources of energy and by maximising the potential of bio-energy such as cowdung and firewood.

The main objectives of the Rural Energy Programme are:- (1) In the context of over growing scarcity in the supply of conventional energy, conservation of this energy has to be ensured (2) Popularisation of non-conventional sources of energy like, solar, wind and biogas to meet the deficit in the supply of conventional energy to the extent possible. The Rural Energy Programmes consists of the following:-

- | | |
|---|--|
| (1) Integrated Rural Energy Planning Programme (I.R.E.P.P.) | A State sector plan scheme with 100 per cent State funding. Govt., of India only reimburse the expenditure incurred on staff, extension and training components of the programmes. |
| (2) National Project on Bio-gas Development (N.P.B.D.) | A central sector scheme with 100 per cent funding by Govt., of India. State Govt., will meet the salaries of Bobargas supervisors from the State budget. |

(3) National Project on
Improved Chullha
(N.P.I.C.)

A central sector
scheme with 100 per cent
funding by Govt., of India.

EXPENDITURE DURING VIIITH PLAN (1985-90) AND ANNUAL PLAN
1990-91 AND 1991-92

Programme	Total Expendi- ture 1985-90 VIIth Plan	1990-91 (Actuals)	1991-92 (Anticipated)
1. I.R.E.P.P.	150.12	40.17	85.00
2. N.P.B.D.*	1723.80	204.52	235.72
3. N.P.I.C.@@	232.03	89.14	97.50

Note: * Inclusive of both Central and State Plan Funds.

@@ 100 percent Central assistance.

PHYSICAL ACHIEVEMENT DURING THE VIIITH PLAN 1985-90 AND
ANNUAL PLAN 1990-91 AND 1991- 92

Programme	Unit	Seventh Plan Achievement	1990-91 (Actuals)	1991-92 (Anticipated)
1. Energy Devices (I.R.E.P.P.)	No	35284	12077	30347
2. Bio-gas Plants	No	36078	4405	5000
3. Improved Chullahs	No	289566	114078	110000

VIIIth PLAN PROGRAMME:

The Rural Energy Programme encompassing promotion of non-conventional and renewable energy sources and technologies and the conservation of exhaustible energy sources, must assume greater prominence in the VIIIth Plan. Experience hitherto has established that bio-gas and chullahs are strongly replicable commercially, and their subsidised installation under the dispensation of the department of non-conventional energy sources of the Government of India has greatly assisted the process.

Subsidy oriented promotion of non-conventional energy devices and the installation of demonstration equipments under I.R.E.P. have contributed in the building up confidence in the people about the utility and application of devices. The trust on all these programmes will be continued during the VIIIth Plan.

During the VIIIth Plan it is proposed to install 37,000 Bio-gas plants and another 50 institutional/community/nightsoil institutional bio-gas plants. Also it is proposed to install 6,00,000 improved wood burning chullahas/stoves. In addition to the central assistance towards subsidy, the State Government has proposed an outlay of Rs. 225 lakhs towards salary of bio-gas supervisors and Rs. 125 lakhs as additional grants towards routine and breakdown maintenance, rectification of defective plants, research and development and additional subsidy in non-hilly areas.

It is also proposed to install demonstration equipments and supply non-conventional energy devices on subsidised rates. It is also programmed to setup a regional training and development centres on I.R.E.P. at Jakkur, Bangalore for which the Planning Commission, Government of India have agreed to provide major portion of the funds towards recurring and non-recurring expenditure under the I.R.E.P. programmes. The expenditure on the subsidy and demonstration programmes of I.R.E.P. will be met out of State plan budget. Accordingly an outlay of Rs. 550 lakhs is proposed, which includes an outlay of Rs. 75 lakhs on regional training and development centre at Bangalore.

XIII.A INDUSTRIAL POLICY
OF THE STATE

Government of Karnataka has initially enudated industrial policy in the State of Karnataka during 1983 and which was an unique one in the whole of the Country. The major items of thrust in the policy include are

1. Development of Cottage and Village Industries in the State.
2. To develop the skill based craftsmen and also improvement in the sectors of handloom, handicrafts & leather industries.

In addition, the policy has also encouraged entrepreneurial talent to be developed within State and for development of proper training programmes and institutions; development of infrastructural facilities; commissioning of Single Window Agency to be developed both at the State Level for large/medium industries and in the District for small and tiny units; adequate support to export oriented industries. Considerable achivements have been made through the policy during the past few years. However in order to further give maximum assistance and also to improve the various existing schemes in the policy, the State Government has proposed to revise and to modify the industrial policy of 1983.

The new policy announced during September 1990 has stressed the importance of curbing imbalances that have arisen in the earlier policy and to exploit the strengths, the State offers for industrial development.

The new industrial policy highlights development of tiny, SSI units and also offers an equal thrust for promotion of medium and large scale industries. In addition, the policy highlights -

1. Dispersal of industries to the backward areas.
2. Development of growth centres with comprehensive infrastructure facilities.
3. Development of electronic cities.
4. Strengthening of promotional activities of KSSIDC and KSIIDC.
5. To give a major thrust for important sectors which have large employment potential within the State and to assist the conservation of energy and pollution control.

The policy further has indicated that in order to achieve the above major salient features, package of incentives and concessions also will be restructured suitably to ensure that the entrepreneurs of the State are well placed and also oriented towards development of backward areas in the State. As per above decision, the State Government has announced the new Package of Incentives and Concessions - vide G.O.No.CI.138.. SPC.90(P) Bangalore, dated:27th September 1990.

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According to the above Package of Incentives and Concessions, the State has been divided into four zones and concessions have been offered with additional incentives to backward areas. The special features of the new package of incentives and concessions are;

- * Investment Subsidy for all sectors;
- * Sales Tax Exemption for all sectors;
- * Special concessions for Electronics, Telecommunication and Informatics (software) industries to be set up at Electronic Cities
- * Concessions to special categories of entrepreneurs;
- * Incentives for installation of Pollution Control Equipment;
- * Exemption from stamp duty and concessional registration charges to tiny and small scale industries;
- * Incentives for Rehabilitation of Sick Units.

These incentives and Concessions as per the C.O. shall be applicable to all new investments made on or after 1st October 1990.

The specific objectives of the Industrial Policy by and large are;

- a) Generation of Employment
- b) Significant increase in industrial output,
- c) Creation of additional employment opportunities.

It is also necessary that relative strength of different sectors of Industry viz., Artisan and Village, Tiny and Small Scale and Medium and Large Scale are exploited to the fullest extent by creating suitable linkages.

In order to ensure that sickness in the SSI Sector is arrested, District Level Committee for identification, monitoring and implementation of rehabilitation programme for SSI units will be set up along with a suitable package of assistance from the Government.

The role of the District Industries Centre will be restructured suitably to enable them to function as Nodal Agencies for achieving industrial development at the District Level rather than perform as regulatory agencies.

While the Government is committed to the promotion and development of Tiny and SSI units, an equal thrust

will be given for promotion of medium and large scale industries which alone would make available in expanding market for the products of the SSI sector.

Development of ancillary industries will be strengthened through active support of the Government for motivating Buyer-Seller Initiative and creation of linkages between the ancillary industries and the medium/large industrial unit.

Growth Centres with comprehensive infrastructural facilities will be set up at Hassan, Raichur and Dharwad within the next 5 years time. Infrastructure development in the Growth Centres inclusive of captive power plants will be undertaken with the active participation of Private Sector;

The Package of Incentives and Concessions for Industrial Investment will be restructured suitably to ensure that the entrepreneur of the State is not placed in advantageous position. Backward areas of the State will also be reclassified suitably to remove the existing anomalies;

Single Window Agencies both at the State and the District level will be streamlined and strengthened to ensure that decisions taken by the Single Window Agency are implemented by all concerned departments and agencies within the stipulated time frame. Besides this, High Level Committees under the Chairmanship of

Chief Minister/Industries Minister will be constituted to closely monitor the implementation of large industrial projects.

LARGE AND MEDIUM INDUSTRIES -

The schemes under Large and Medium Industries are divided into:-

1. Investment in Infrastructural Institutions,
2. Investment in Public Sector Undertakings,
3. Incentives and Concessions.

1. INVESTMENT IN INFRASTRUCTURAL INSTITUTIONS:-

Karnataka Industrial Areas Development Board (KIADB)

Karnataka Industrial Areas Development Board, is playing a vital role in accelerating the industrial development in the State by providing basic infra-structural facilities such as Land, Water, Power, Housing, Common Facilities etc., KIADB will be the Nodal Agency for development of Growth Centres i.e., Hassan, Dharwar and Raichur, which have been selected in consultation with the Government of India. An exclusive Export Oriented Industrial Zone is being developed near Bangalore. Infrastructural facilities for the proposed Mangalore Oil Refinery and other downstream projects will be provided at Mangalore by the Board. Considering the importance of well developed infrastructure requirement, a sum of Rs.3425.00 lakhs for the 8th plan and Rs.485.00 lakhs for the annual plan 1992-93 is proposed. A sum of Rs.1500.00 lakhs

for 8th and Rs.300.00 lakhs for 1992-93 is also proposed as Government of India share.

2) Karnataka State Industrial Investment and Development Corporation (KSIIDC).

Karnataka State Industrial Investment & Development Corporation is an agency for promotion of large and medium industries in the State. The Corporation provides escort services for the projects cleared in the State Level Single Window Agency for speedy implementation of the projects. The Corporation has been designated as Nodal Agency for providing assistance to Non-Resident Indians for establishing industrial projects in the State.

An outlay of Rs.3425.00 lakhs for 8th plan and Rs.595.00 lakhs for 1992-93 is proposed towards investment and market borrowings for the Corporation to provide equity support to joint sector projects and providing financial assistance to projects in Medium Sector.

3) Karnataka State Financial Corporation (KSFC):-

KSFC provides assistance to small and medium industries. The Corporation has also formulated special schemes for Technician's Scheme, Scheduled Caste/Tribes and Backward Classes, Women and Physically Handicapped entrepreneurs, Assistance for diesel generation sets, equipment finance scheme, Seed Capital Assistance, Soft Loan Scheme etc., The Corporation has a decentralised structure of functioning with regional offices and branch offices all over the State.

An outlay of Rs.2000.00 lakhs for 8th plan and Rs.500.00 lakhs for 1992-93 is proposed towards equity participation and loan of the Corporation.

4) Karnataka State Electronics Development Corporation (KEONICS):-

Electronic Industry is a rapidly growing industry. Karnataka continues to be one of the leading State contributing 20% of electronic goods production in the Country. KEONICS has been working for the promotion of electronic industries in the State, by participating in the joint venture in the state and providing infra-structural facilities required for the industry.

KEONICS has established an Electronic City at Bangalore and it is proposed to establish such Electronic Cities at Mysore and Dharwad in association with KIADB.

Joint Venture Companies produce Hybrid Micro Circuits, Mini Computers, Micro Processing based systems, Printed Circuit Boards, TV Picture Tubes (Black & White), Telephone Instruments and Process Control Instruments.

An outlay of Rs.600.00 lakhs for 8th plan and Rs.110.00 lakhs for the year 1992-93 is proposed.

5) Government Tool Room & Training Centre, (GTTC):-

GTTC is one of the premier institutions in the Country devoted to industries of technological excellence in the field of tooling. GTTC has been serving the industry by providing high quality tools as well as

training highly skilled personnel in tooling discipline. Tool Room facilities are needed for the up-grading technological levels in the industry.

The capabilities of the Centre have been enhanced and up-graded in tooling the machining areas. The proposed Mysore Centre is being funded under DANIDA assistance. An outlay of Rs.700.00 lakhs to 8th plan and Rs.200.00 lakhs for 1992-93 is proposed.

6. Central Institute of Plastics Engg. Technology (CIPET):

A sum of Rs.225.00 lakhs for 8th plan and Rs.45.00 lakhs for 1992-93 is proposed. This also attracts equal share from Government of India.

7. Entrepreneurial Development Institute (EDI):-

Entrepreneurial Development Institute is being established, with the following objectives at Dharwar.

- a. To identify, select, motivate, develop and train potential local persons in the State;
- b. To plan and systematically organise Entrepreneurship Development Programme (EDP) at various places in the State;
- c. To provide technical managerial and technological expertise and know-how to the entrepreneurs;
- d. To improve, support and strengthen the existing EDP activities in the State;
- e. To provide extension service to the trained entrepreneurs and self-employed personnel.

It is proposed to establish the Institute in two places i.e., I Phase in a rented building and II phase by constructing suitable buildings with hostel facilities.

An outlay of Rs.30.00 lakhs for 8th plan and Rs.18.00 lakhs for 1992-93 is proposed for Phase I and II.

8. Centre for Technology Development (CTD):-

CTD at Bangalore has been registered as a Society under the Societies Registration Act, recently. The Centre will provide opportunities for the local entrepreneurs for interaction and acquiring new technologies and also to get the best equipments/instruments for their experiments and research. This centre will also provide for the personnel and technology from the developed Countries.

An outlay of Rs.25.00 lakhs for 8th plan and Rs.5.00 lakhs for 1992-93 is proposed.

9. Exhibition Complex:-

There is a need for establishing permanent Exhibition Complex at Bangalore wherein industrial products manufactured in Karnataka will be permanently displayed for the benefit of buyers. The Exhibition Complex will be established in the outskirts of Bangalore and facilities will be provided as done in India International Trade Fair, Pragati Maidan, New-Delhi.

This will be promoted in association with Chamber of Commerce and Industries, Karnataka Small Scale Industries Association and other leading industrial houses.

An outlay of Rs.100.00 lakhs for 8th plan and Rs.30.00 lakhs for 1992-93 is proposed.

II. Investment in Public Sector Undertakings:-

1. Mysore Paper Mills Limited (MPM):-

The Mysore Paper Mills Limited, Bhadravathi have taken-up a forestation project (Social Forestry) in collaboration with Overseas Development Agency, United Kingdom. The Company has also completed the construction of Sugar Mill in order to make use of the bagasse as raw material for the manufacture of writing/printing paper and reduce the dependance on conventional raw material i.e. Bamboo, Wood and Eucalyptus. The Company intends to implement the forestry project Phase-II for which an outlay of Rs.1689.00 lakhs for 8th plan and Rs.327.00 lakhs for 1992-93 is proposed.

2. Karnataka Soaps & Detergents Limited (KS&DL):

Karnataka Soaps and Detergents Limited, Bangalore is one of the premier company manufacturing soaps and detergents. A sum of Rs.250.00 lakhs for 8th plan and Rs. 50.00 lakhs for 1992-93 has been proposed towards rehabilitation package.

3. The Mysore Lamp Works Limited (MLM):-

The Mysore Lamp Works Limited, Bangalore, has a successful track record on profitability and growth except for the periods during 1985-86 and 1986-87 due to general set back in the lamp industry. The company has several projects on hand for modernisation diversification and expansion. The company intends to improve the manufacturing operations by modernisation addition of machines, process innovation to increase the productivity, manufacture of new products of energy saving/lite sufficient lamps and enlarging research and development activities. A sum of Rs.125.00 lakhs for 8th plan and Rs.45.00 lakhs for 1992-93 is proposed.

4. The Mysore Paints & Varnishes Limited (MP&VL):-

The Mysore Paints & Varnishes Limited, Mysore (erstwhile) The Mysore Lac & Paints Works Limited) is a premier company manufacturing indelible ink, paints and other allied products. The company intends to manufacture Hitech products viz., insulated coatings and marine paints. A sum of Rs.25.00 lakhs for 8th plan and Rs.5.00 lakhs for 1992-93 is proposed.

5. Karnataka Vidyuth Karkhane Limited (KAVIKA):-

Karnataka Vidyuth Karkhane Limited, Bangalore has taken-up the modernisation programme, which includes manufacture of aluminium conductors for captive use at a cost

of Rs.95.00 lakhs. In order to strengthen the existing production facilities the company has drawn up a phased modernisation programme. An outlay of Rs.25.00 lakhs for 8th plan and Rs.5.00 lakhs for 1992-93 is proposed.

6. The Visveswaraya Iron & Steel Limited, (VISL):-

The Visveswara ya Iron & Steel Limited, Bhadravathi has been taken over recently by Steel Authority of India (SAIL), a Government of India Enterprise. The Company has introduced voluntary retirement scheme, as per the terms of Agreement with the SAIL.

An outlay of Rs.500.00 lakhs for 8th plan and Rs.70.00 lakhs for 1992-93 is proposed.

7. New Government Electric Factory Limited, (NGEF):-

New Government Electric Factory Limited, Bangalore has been manufacturing a wide range of transformers, switch gear, rotating electrical machines, special motors, D.C. Machines, alternators, pumps, power rectifiers, thyristor convertors, invertors, diodes, thyristors power blocks etc. An outlay of Rs.600.00 lakhs for 8th plan and Rs.190.00 lakhs is proposed for 1992-93.

8. Karnataka Implements & Machinerics Corpn Ltd, (KIMCO):-

The Karnataka Implements & Machinerics Cop, Ltd., Bangalore has been building bus body required for Karnataka State Road Transport Corporation and other State Owned Corporations. The company has two manufacturing divisions ie. one at Bangalore and another at

at Hassan. The Company has proposed to modernise the existing production facilities at both the places. An outlay of Rs.400.00 lakhs for 8th plan and Rs.100.00 lakhs is proposed for 1992-93 towards retirement package.

9. Vija yanagar Steel Plant:

A provision of Rs.200.00 lakhs is proposed for 8th plan. and Rs.100.00 lakhs for Annual Plan 1992-93.

10. Mysore Electrical Industries Limited:-

The Mysore Electrical Industries Limited was taken over by the Government by the acquisition of 25% of the shares held by the Public in January 1979. The balance 48% is held by the Central Financial Institutions like U.T.I., L.I.C., I.C.I.C.I. Further a loan of Rs.50.00 lakhs given by the State was also converted to equity in March 1985 raising the share of the State Government to 69%.

The MEI is engaged in the manufacture of transformers, circuit breakers etc. The Company's fresh rehabilitation programme envisages IDBI's assistance to clear the loan of Rs.700.00 lakhs from Commercial Banks and up-dating of the technology and acquisition of technical collaboration for manufacture of vacuum circuit breakers. An outlay of Rs.125.00 lakhs for 8th plan and Rs.25.00 lakhs for 1992-93 is proposed.

III. Incentives and Concessions:-

The main objectives of the Industrial Policy is to promote industries in the State, specially in the backward areas - identified by the State Government as well as the Central Government. The revised package of incentives and concessions has been recently announced.

Under the Incentives and Concessions, two schemes viz., 1) State Subsidy and 2) Development Loan are covered.

A provision of Rs.7575.00 lakhs towards State Subsidy for 8th plan and Rs.1500.00 lakhs for 1992-93 and Rs.250.00 lakhs towards development loan/sales tax concessions for 8th plan and Rs.150.00 lakhs for 1992-93 is proposed.

Publicity for New Incentives:-

A provision of Rs.25.00 lakhs is also proposed towards the new scheme publicity for the new incentives for 8th plan and Rs.5.00 lakhs for 1992-93 is proposed.

Incentives to Entrepreneurs for Starting New Industries:-

One of the incentives offered by the State Government for starting new industry in the State is refund of Sales Tax paid by New Industries on raw materials purchased by it. This concession was for a period of first Five Years from the date of the Industry goes on into production. This concession was discontinued by issue of Notification and this was challenged in the Supreme Court. As per the judgement of Supreme Court, the withheld incentive has to be paid to the industries. A sum of Rs.25.00 lakhs for 8th Plan and Rs.10.00 lakhs for 1992-93 is proposed.

HANDLOOMS AND TEXTILESI. HANDLOOMS

Handloom Industry in Karnataka occupies an important place, which provides employment to nearly half a million people in the state. There are 83395 handlooms in Karnataka as per the latest Census and the details are given below:-

Co operative fold	--	10126
Corporation fold	--	14395
Private/Independent/ Master weavers.	--	58874
		<hr/>
		83395

Assistance to weavers is rendered under the Corporate Sector as well as the Co operative sector, through Karnataka Handloom Development Corporation and Apex Handloom Co-operative Societies respectively. The following are the on-going schemes envisaged for the benefit of the weavers.

- a. Living-cum-worksheds,
- b. Market Development Assistance
- c. Rebate during National Expos,
- d. Thrift Fund Scheme,
- e. Training of Handloom Weavers,
- f. Modernisation of Looms and accessories
- g. Preloom and Postloom facilities.

Apart from the above, KHDC., has established Export Oriented Silk Project at Mysore and intends to establish a modernised silk Wet Processing Plant , loom coverage for minorities and Women Export Oriented Cotton Project. at Bhagyanagar, Raichur District. Also, an Institute for advanced training for handloom weavers is being set up at

Hubli, Dharwar District and Banahatti, Bijapur district in order to upgrade the skills of the weavers for taking up new lines of production apart from manufacturing Janatha cloth, Sarees and Dhoties, so that their dependency on Government, Scheme for livelihood will be minimised. KHDC., is also keen to take over the Intensive Woollen Handloom Development Project Production Centres of the erstwhile Woollen Apex Society.

1. REBATE ON SALE OF HANDLOOM CLOTH:

This is a common scheme both under Co operatives and Corporate Sectors. Government of India are conducting National Handloom Expo(Mini and majors) and All India Trade Fair in the different parts of the country. The Co-operative Societies including Apex Societies are eligible to participate and sell their handloom goods in these expos. The rebate of 20% is allowed by Central Government as subsidy which is shared equally both by Central and State Government. Now a separate Directorate for Handlooms and Textiles has been created in the State and with the result a special emphasis has been given for the development of handloom. The defunct/sick society are being encouraged for revival. With the result more and more societies are expected to participate in the National Handloom Expo and make more turn over. Keeping the past experience in view, the allocations are made for 8th Plan. The Karnataka Handloom Development Corporation also participates in Handloom Expo.

A sum of Rs.170.00 lakhs for 8th Plan and Rs.50.00 lakhs for 92-93 is proposed.

2. SURVEY OF HANDLOOMS:

A Cell has been functioning in the Directorate to monitor the survey/census of handlooms for which a provision of Rs.13.00 lakhs for 8th Plan and Rs.3.00 lakhs for 92-93 is proposed towards establishment charges.

3. TRAINING OF HANDLOOM WEAVERS:

With a view to impart advance training, our State Government is sponsoring 15 candidates every year to Indian Institute of Handloom Technology, Salem to undergo training for a period of 3 years. Stipend of Rs.200/225/250 is being paid per month for the trainees in 1st, 2nd and 3rd year respectively. We have also proposed to provide other basic inputs like books etc., to the trainees for successful completion of training programme. A sum of Rs.5.00 lakhs for 8th Plan and Rs.1.00 lakh for 92-93 is proposed.

3. THRIFT FUND SCHEME FOR WEAVERS:

This scheme is implemented both under Co operatives and Corporate Sectors. In order to enable the weavers to have financial facilities in the form of loan, a portion of their wages is deducted as subscription to the fund and an equal amount is contributed by the Government. The scheme is in operation since 1980-81. A sum of Rs.75.00 lakhs for 8th Plan and Rs.15.00 lakhs for 92-93 is proposed.

4. WORKSHED SCHEME:

It is common to both Co operatives and K HDC. This scheme has been introduced as a Centrally Sponsored Scheme to provide workshed and Living-cum-workshed to the members of the Primary Weavers Co-operative Societies. Both Central and State Government are equally contributing the funds under this scheme. An

amount of Rs.3,000 is being provided as subsidy per beneficiary for construction of workshed in both urban and rural area. Subsidy of Rs.3,000, 5,000 and 6,000 are also being provided for construction of Living-cum-workshed at an estimated cost of Rs.9,000/-, 13,000/- and 15,000/- respectively.

A provision of Rs.55.00 lakhs for 8th Plan and Rs.13.00 lakhs for 92-93 is proposed.

6. SUBSIDY TOWARDS INTEREST FOR HANDLOOM WEAVERS(CO-OPS)
NABARD

This scheme has been introduced to reimburse the portion of interest on cash credit limit borrowed by Primary Weavers Co-operative Societies from District Central Banks (under NABARD Refinance Scheme). The maximum percentage of interest being reimbursed is 3%.

An outlay of Rs.28.00 lakhs for 8th Plan and Rs.5.50 lakhs for 92-93 is proposed.

7. NCDC SCHEMES- HANDLOOMS:

The 3 Apex Societies of Cotton, Woollen and Silk in Karnataka provide necessary inputs to the Primary Weavers Co operative Societies and purchase finished products from Primary Societies. The State Government or the State Co-operative Banks first release the funds to the beneficiary societies and thereafter get the funds from the NCDC

An outlay of Rs.25.00 lakhs for 8th Plan and Rs. 5.00 lakhs for 92-93 is proposed.

8. MARKETING DEVELOPMENT ASSISTANCE:

This scheme refers to both Co operatives and Corporate Sectors. This scheme has been introduced from 1.4.89 by the

CENTRAL Government in lieu of Special rebate scheme, share capital assistance and managerial grants. Under the Marketing Development Assistance the eligibility of assistance to primaries and Apex Societies has been fixed during the year 89-90 itself and there are about 54 societies availing this assistance. The Government of India has been requested to liberalise certain conditions so as to enable the State Government to cover other Co-operatives also. The KHDC is also covered under this scheme. The Government of India is contributing 50% of the sanctioned amount.

A provision of Rs.767.00 lakhs for 8th Plan and Rs.213.00 lakhs for 92-93 is proposed.

9. NEW DESIGNS AND TRENDS:

This is a new scheme introduced for providing assistance to the Apex Societies for implementation of latest design as per the market trend. The latest designs as per the market trend are to be known to the weavers and implemented by the Apex Societies for the benefit of the weavers. Practical training will be implemented to the weavers of Primary Societies for a period of 15 days at Weavers Service Centre, Bangalore and Indian Institute of Handloom Technology, Salem. During the training period, the weavers will be provided stipend with accommodation and travelling allowance.

An outlay of Rs.10.00 lakhs for 8th Plan and Rs.2.00 lakhs for 92-93 is proposed.

10. MANAGEMENT AND TRAINING TO THE SECRETARIES:

The Secretaries of the Primary Co-operative Societies

will be given intensive training in the co-operative training College at Bangalore for a minimum period of six weeks on all aspects of management. Free boarding and accommodation will be provided during the training period to these Secretaries.

An outlay of Rs.5.00 lakhs for 8th Plan and Rs.1.00 lakhs for 92-93 is proposed.

11. PUBLICITY AND PROPOGANDA:

At present, the financial position of the Apex Handloom Co-operative Societies is very weak. The Apex Societies (cotton, silk and woollen) are to be provided with funds for organising publicity and propoganda for their products through media m such as news papers, AIR and Doordarshan.

An outlay of Rs.5.00 lakhs for 8th Plan and Rs.1.00 lakhs for 92-93 is proposed.

12. AMALGAMATION OF APEX SOCIETIES:

It has been decided to amalgamate three apex level co operative institutions, such as cotton, silk and woollen and the bye-laws are being finalised. An outlay of Rs.25.00 lakhs for 8th Plan and Rs.30.00 lakhs for 92-93 is proposed.

13. ENFORCEMENT CELL:

It has been proposed to establish Enforcement Cell in the Directorate, in order to ensure that powerlooms do not indulge in the manufacturing of 22 items of handloom articles, in accordance with the guidelines issued by Government of India. This is to ensure that items actually reserved for production under handloom sector are not encroached upon by

the decentralised sector of powerlooms and mill sector.

An outlay of Rs.10.00 lakhs for 8th Plan and Rs.2.00 lakhs for 92-93 is proposed.

14. PRICE FLUCTUATION FUND:

Yarn prices are subject to frequent fluctuation, thereby causing problem to the weavers. To overcome this problem it has been proposed to create a price fluctuation fund.

An outlay of Rs.30.00 lakhs for 8th Plan and Rs.6.00 lakhs for 92-93 proposed.

18. INTENSIVE WOOLLEN HANDLOOM DEVELOPMENT PROJECT:

KHDC has been nominated as nodal agency for implementation of Janatha Woollen Cloth scheme in the State. The Corporation is taking over the production centres of the erstwhile Intensive Woollen Handloom Development Project run by the Woollen Apex Society. The woollen weavers would be requiring modernisation and training assistance apart from regular supply input and marketing assistance. It is proposed to create infrastructure by opening production sub-centres. An outlay of Rs.50.00 lakhs for 8th Plan and Rs.10.00 lakhs for 92-93 is proposed.

20. MODERNISATION OF LOOMS(KHDC):

The weaver members of KHDC are being assisted under this scheme for providing modernised looms and accessories with 1/3 subsidy and 2/3 loan component. The expenditure is being equally shared by Central and State Government. Modernisation of looms is essential for upgrading the skills of weavers and improving the economic conditions by enhancing the productivity. A provision of Rs.65.00 lakhs for 8th Plan and Rs.13.00 lakhs

for 92-93 is proposed.

21. CSS EXPORT ORIENTED SILK PROJECT:

This is a Centrally Sponsored Scheme sanctioned in the year 1988-89 with the total project outlay of Rs.212.40 lakhs with 1000 loom coverage. The project implementation period is 4 years, pattern of assistance of the project is 2/3 loan and 1/3 grant with 50% matching assistance from Government of India. A provision of Rs.50.00 lakhs for 8th Plan and Rs.10.00 lakhs for 92-93 is proposed.

22. LOOM COVERAGE FOR UNEMPLOYED WOMEN(STEP)

A provision of Rs.12.00 lakhs for 8th Plan and Rs.3.00 lakhs for 92-93 is proposed.

23. EXPORT ORIENTED COTTON PROJECT AT BHAGYANAGAR,
RAICHUR DISTRICT

Export Oriented Cotton Project envisages loom coverage of 1,000 at a total cost of Rs.99.07 lakhs. The funding pattern is 2/3 loan and 1/3 grant, with 50% matching share from Government of India. An outlay of Rs.50.00 lakhs for 8th Plan and Rs.10.00 lakhs for 92-93 is proposed.

24. ADVANCE TRAINING INSTITUTE, HUBLI/BANAHATTI:

Karnataka Handloom Development Corporation has proposed to set up Advance Training Institute at Banahatti, Bijapur dist Hubli, Dharwad district with the aim to upgrade the skills of 12,000 handloom weavers from out of existing handloom weavers in a span of 20 years.

Imparting training for weavers will have to be continued till their skills are upgraded. The training will be of residential nature and during the training the weavers will be given

given stipend. An outlay of Rs.120.00 for 8th Plan and Rs.44.00 lakhs for 92-93 is proposed.

II. POWERLOOMS

1. SHARE CAPITAL INVESTMENT :

The rural artisans are to be encouraged to organise powerloom Co operative Societies for providing financial support to the rural artisans to make use of the raw-materials and marketing assistance. For this purpose the Share Capital Assistance has to be provided to powerloom weavers to the extent of their paid up share capital by the Government in order to increase the borrowing capacity of the members of the society. The members will borrow financial assistance from financing banks and other agencies, for which an incentive in the form of Share Capital/Assistance has to be made available. A sum of Rs.5.00 lakhs for 8th Plan and Rs.2.00 lakhs for 92-93 is proposed.

2. DYE-HOUSE(LOAN AND GRANT):

The yarn required for weaving has to be dyed before weaving, for which the weaver societies will find it convenient if they possess dye house of their own. The assistance is provided in the form of loan towards the cost of the building and term loan bearing normal rate of interest payable in 10 annual instalments. The grant is also eligible for purchasing of Dye House equipments under the scheme. A sum of Rs.5.00 lakhs for 8th Plan and Rs.2.00 lakhs for 92-93 is proposed.

3. COLLECTIVE WEAVING CENTRES:

The Collective Weaving Centres are necessary for the places where the powerlooms artisans are concentrated and the

powerloom co operative societies are found viable. This scheme is implemented under the Co operative sector to provide better working condition for weavers, who have no sufficient place in their houses. The Co operative societies having the sites are eligible for Collective Weaving Centres. The scheme is proposed to be implemented with the building loan and grant components. A sum of Rs. 10.00 lakhs for 8th Plan and Rs. 2.00 lakhs for 92-93 is proposed.

4) PRELOOM PROCESSING UNIT:

The process of Doubling, Twisting, Warping and Beaming has to be done before actual weaving is taken-up which are called as preloom operations. These preloom operations are done and yarn/warp beam is supplied for weaving to the members. The scheme will be given to societies, where looms are working that are more than 100 in number. The scheme is aiming at the removal of the middle men and providing loan facilities for the poor weavers under Powerloom sector. By establishing the preloom processing unit poor weavers are kept free from the clutches of master weavers. An outlay of Rs. 15.00 lakhs for 8th Plan and Rs. 4.00 lakhs for 92-93 is proposed.

5. CENSUS OF POWERLOOMS:

The Textile Commissioner, Bombay, has instructed the concerned State Governments to undertake the Powerloom Census. In order to have the basic information on investment, production and employment under the Powerloom sector, conducting of census is essential. Based on the basic data, the schemes for the development of powerloom sector could be formulated. The census work proposed to be initiated from the year 1991-92 and it is meant for salary and remuneration of staff appointed

for the census purpose. A provision of Rs.10.00 lakhs for 8th Plan and Rs.2.00 lakhs for 92-93 is proposed.

6. ESTABLISHMENT OF POWERLOOM COMPLEX:

The New Textile Policy has opened up a field for growth and development of Powerlooms in Karnataka. According to the policy, powerlooms may be allowed to grow in backward areas satisfying population criteria of less than 5 lakhs. The earlier procedure of obtaining textile loom permits have been comparatively simplified by vesting the powers with the State Textile Authority, for issue of the loom permits. Apart from this there is a move to strengthen the powerloom service centres to enable them to effectively give service to weavers.

A Powerloom ~~exi~~ complex will be established in places where there is concentration of powerloom weavers. Such complexes could be started at Chikkodi, in Belgaum district and Doddaballapur in Bangalore district. A study was made by Technical Consultancy Services Organisation of Karnataka (TECSOK) during April 1987 for establishment of powerloom complexes in Karnataka, which consists of three preloom processing units, 1111 weaving units (600 looms) and one postloom processing unit at a cost of Rs.640.33 lakhs, out of which State Government share will be Rs.283.56 lakhs and the balance of Rs.356.77 lakhs to be obtained as term loan from the financial institutions. It is suggested that the powerloom complex be implemented by Karnataka State Textiles Private Limited (KSTPL) under the guidance of TECSOK. A sum of Rs.35.00 lakhs for 8th Plan and Rs.10.00 lakhs for 92-93 is proposed.

NEW SCHEMES1. COMPUTERISATION:

The number of applications received for the registration of powerlooms in the State are increasing due to liberalised Textile Policy. Procurement conversion and selling again in the Mill sector is also increasing Handloom Sector consequent to the formation of new Directorate is expected to expand. To have effective system of control and monitor it is proposed to instal Computer during 1992-93. A provision of Rs.2.00 lakhs is proposed for this.

2. INTEREST SUBSIDY

Karnataka Handloom Development Corporation is covering 30 to 40 thousand handloom weavers under organised sector. Karnataka Handloom Development Corporation is assisting weavers by way of supplying raw-materials and marketing arrangement. It is suggested that 3% subsidy on the interest of the working capital borrowed by nationalised Bank could be extended to Karnataka Handloom Development Corporation also like facility extended to Co operative sector. An outlay of Rs.60.00 lakhs is proposed for 1992-1993.

3. STATE LEVEL EXHIBITIONS

Government of India is organising exhibition/ Expos at the national level where all handloom sector organisations in the country would participate. It is proposed to organise exhibitions within the State to meet the increasing demand of the rural population. A budget provision of Rs.8.00 lakhs is proposed for 1992-93.

4. AWARDS TO OUTSTANDING WEAVERS

It is necessary that the best talented weavers producing varieties of fabrics and designs be recognised

and this motivation would encourage large number of people to contribute for the sector. Rs.2.00 lakhs is proposed during the year 1992-93.

5. PUBLICITY AND BROUCHERS

The handloom sector is lagging behind from adequate publicity and propoganda. To create awareness and to propogate various schemes of Handlooms, Powerlooms and Textiles in the State a provision of Rs.2.00 lakhs has been proposed during 1992-93.

6. SETTING UP OF INSTITUTE OF HANDLOOM TECHNOLOGY

Government of India has been emphasising for a strong base for handloom training to impart intensive skills on the lines of Indian Institute of Handloom Technology, Salem. It is proposed to set up one Institute in Karnataka. This project would also be financed by Government of India and a budget provision of Rs.300 lakhs is proposed for the Institute. Rs.20.00 lakhs is proposed during 1992-93.

7. SETTING UP OF TRAINING AND RE-TRAINING CENTRE FOR MILL SECTOR

Karnataka is having 44 Textile Mills both in the Co operative and private sector and one mill in Government sector. The productivity of the Mill depends largely on the availability of skilled workers in the Mills. There is no institution for training and re-training the work force in the Mill sector. Therefore it is proposed to open a branch of SITRA in Karnataka to assit mill sector. For this a provision of Rs.5.00 lakhs is made.

8. EXPORT ORIENTED READY MADE GARMENTS PROJECT

Tamilnadu is having a well organised Hosiery Complex set up at Tirapara. The Complex is meeting not only domestic demands but also exporting their products

considerably to other countries. Steps have been taken to establish a Hosiery Complex on the line of Tirupura, in Karnataka at a suitable location. A provision of Rs.10.00 lakhs is proposed for this project for 1992-93.

9. ASHAJYOTHI SCHEME

Government of Karnataka have decided to provide 5000 living-cum-workshed/workshed for the handloom weavers of the State during the year 1992-93. To provide better working condition, Government have agreed to provide two lighting point facilities to these houses. Hence provision of Rs.16.00 lakhs is provided for the year 1992-93.

10. INVESTMENT IN TEXTILE MILLS - KSTPL/MTM:

Government of India, under the new Textile policy have proposed to take up rehabilitation/modernisation of the Textile mills. Government of Karnataka intends to undertake the same through KSTPL. An amount of Rs.100.00 lakhs is provided for the year 1992-93.

11. BINNY LTD.

A sum of Rs.33.00 lakhs is proposed towards interest subvention in rehabilitation package of the Company for the year 1992-93.

HANDICRAFTS

Karnataka is well known for the rich heritage blessed with a multitude of arts and crafts and is one of the leading States in the field of handicrafts in the Country. With a view to encourage craftsmen, the Karnataka State Handicrafts Development Corporation Limited (KSHDC) has set up emporia within and outside the State for display and sale of handicraft articles and also craft complexes/Rural Marketing and Service Centres/Production Centres to provide facilities and services to the artisans. The Corporation has also been running raw-material depots for supply of raw-materials required for the artisans at reasonable prices.

1. Celebration of All India Handicrafts Week:-

This is an annual feature sponsored by the All India Handicrafts Board. It is proposed to give state Awards every year to the outstanding craftsmen who have contributed substantially to the enrichment of the traditional crafts in the State. A sum of Rs.7.00 lakhs for 8th plan and Rs.3.00 lakhs for 1992-93 is proposed.

2. Share Capital Investment:-

KSHDC is engaged in both developmental and commercial activities in the handicrafts sector. The Corporation requires share capital investment with a view to increase the borrowing capacity. A sum of Rs.75.00 lakhs for 8th plan and Rs.20.00 lakhs for 1992-93 is proposed.

3. SUPPLY OF SANDALWOOD AT CONCESSIONAL RATES:-

The Corporation has been entrusted with the task of procurement and distribution of sandalwood at concessional rates to the sandalwood artisans in the State by Government of Karnataka. The Corporation has been procuring sandalwood from the Government depots of the Forest Department and distribute the same to the sandalwood carvers and turners, who are holding identify cards issued by the Industries and Commerce Department. This scheme has gone a long way in improving the socio-economic conditions of the craftsmen. The Corporation has established sandalwood raw-material depots at Bangalore, Mysore, Sagar and Sirsi for the distribution of sandalwood to the artisans in the respective areas. The scheme of supplying sandalwood at 75% subsidised rates is proposed to be continued during the 8th Five year Plan. A sum of Rs.140.00 lakhs for 8th plan and Rs.35.00 lakhs for 1992-93 is proposed.

4. Craft Complexes:-

Craft Complexes are established at places where there is a concentration of craftsmen. Ramanagaram is one of such place. A provision of Rs.7.00 lakhs for 8th plan and Rs.2.00 lakhs for 1992-93 is proposed.

5. Maintenance of Existing Craft Complex & Other Centre:-

At present the Corporation is maintaining Craft Complexes at Channapatna, Bangalore, Mysore and Bidar and Procurement Centre at Kinhal and Navalgund. There is a necessity that a provision for maintenance of the se centres/complexes has

has to be made. A sum of Rs.30.00 lakhs for 8th plan and Rs.8.00 lakhs for 1992-93 is proposed.

6. Raw Material Subsidy to Bidriware Articles/
Silver Zinc:-

This is an on-going scheme and Government has provided raw-material subsidy for the year 1989-90. There are more than 100 Bidriware artisans concentrated in Bidar. Since Bidri Craft is languishing and the articles do not sell well due to high price, it is necessary to ensure that the artisans are not affected adversely. Silver and Zinc are supplied to the Bidriware artisans at the craft complexes established by the Corporation at Bidar. By supplying the raw-material at 50% subsidised rate, the economic conditions of the artisans will be improved marginally. A sum of Rs.10.00 lakhs for 8th plan and Rs.3.00 lakhs for 1992-93 is proposed.

7. Domestic and Export Promotion:-

The exports of the Corporation are increasing every year.

Among the State Handicrafts Corporations, KSHD Corporation is one of the leading exporters. The Corporation exporting mainly to U.S.A., U.K., Japan and European Countries. The Corporation has been participating regularly in the Trade Fairs Overseas conducted by Trade Development Authority/Trade Fair Authority of India, New-Delhi, in order to increase the volume of exports. It is very essential that

the Corporation should be well equipped to deal with exports with cata-logues and folders, Development of new designs, participating in overseas exhibitions and installation of modern communications like facsimile machine etc. A sum of Rs.10.00 lakhs for 8th plan and Rs.2.00 lakhs for 1992-93 is proposed.

8. Training Institutions:-

The Corporation has established Craft Complexes at various place for different crafts in Karnataka. It is felt necessary to import advance training in the crafts like Rose-wood, Lackerware, Sandalwood etc., A sum of Rs.10.00 lakhs for 8th plan and Rs.3.50 lakhs for 1992-93 is proposed.

9. Establishment of Sandalwood Craft Complex at Sorba:-

The Corporation has established Craft Complexes at Sagar, Sirsi and Kumta for the alround development of sandalwood craft. The artisans of goraba at present getting the raw material from the sandal wood raw-material depot at Sagar and supplying the finished items to the sandal wood craft complex, Sagar. The artisans of Soraba are visiting Sagar Centre 2 to 3 times in a month and they are finding it difficult especially women artisans (around 60 nos.) to visit Sagar frequently.

The establishment of S.W.C.C. will help in the timely supply of raw material to the artisans of Soraba

and also in procurement of finished items. The artisans will be able to get the payments from this centre immediately. Establishment of Craft Complex at Soraba will also improve our procurement and as well the sale of the Corporation. A sum of Rs.10.00 lakhs for VIII Plan and Rs. 3.00 lakhs for 1992-93 is proposed.

10. Rebate to lesser known crafts:

The KSHDC is running three lesser known crafts viz., Minhal Toys Centre, Havalgund Carpet Centre and Bronze production Centre, Bangalore, by giving raw materials and labour and the annual sales turn over of these centres is Rs. 3,47,000/-.

The KSHDC is finding it difficult to procure the items from these centres and market them through the outlets, within the nominal service charges, 20% rebate on sale of crafts to make the centres commercially viable is proposed. An outlay of Rs. 1.00 lakh for VIII Plan and Rs.0.50 lakhs for 1992-93 is proposed for this.

COIR INDUSTRIES:

1. Share Capital Investment:

The Karnataka State Coir Development Corporation Ltd., (KSCDC) and the Karnataka State Central Coir Co-operative Development and Marketing Society Limited are the two Apex institutions are charged with the responsibility of development of

Coir industries in the State. To meet the increased working capital requirement and take up other extension servicework for promotion of Coir Industry, it is proposed to provide share capital assistance to these two organisations. A sum of Rs. 80.00 lakhs for VIII Plan and Rs. 22.00 lakhs for 1992-93 is proposed.

2. Rabate on sale of Coir Products:

The Government of India and Government of Karnataka, share the rebate of 20% given on the sale of Coir products on 50:50 basis. Since the size of operation of Karnataka State Coir Development Corporation and Coir Federation and Primary Coir Co-operatives on the marketing side is increasing every year, correspondingly, the rebate given by Government must also be increased.

An amount outlay of Rs. 20.00 lakhs for VIII Plan and Rs. 4.00 lakhs for 1992-93 proposed.

3. Training and supply of Tools and equipments for Coir Products manufacturing:

The Coir artisans are presently making use of traditional method of manufacturing. This method is not economical and qualitative. The training is essential to upgrade the skills. About 2,500 persons are proposed to be trained during the VIII Five Year Plan. Stipend at the rate of Rs. 250/- per month for a period of six months will be provided in twenty centres, besides meeting the recurring expenditure for conducting the training programme.

After training, tools and equipments will have to be provided to the artisans. The improved tools and equipments not exceeding Rs. 10,000/- per trainee are proposed to be supplied to these artisans along with the supply of service facilities extended to them.

An outlay of Rs. 10.00 lakhs for VIII Plan and Rs. 3.00 lakhs for 1992-93 is proposed.

4. Production and procurement Centres:

To create forward and backward linkages between the artisans and the industries, it is necessary to establish production and procurement centres in the coir belt areas for the benefit of artisans. The coir yarn will have to be converted into further products in these Centres by installing the looms, and framing etc. These Centres will work as nucleus Centres for proper development of Coir industries in the State. In these centres advance training is also provided to artisans to work on improved looms

An outlay of Rs. 25.50 lakhs for VIII Plan and Rs. 12.00 lakhs for 1992-93 is proposed.

5. Coir Show-Rooms / Emporia:

To create proper market for the coir products in the State, Karnataka State Coir Development

Contd.

Corporation and Coir Apex Society should take up establishing Ten Showrooms / Emporia, in addition to strengthening of the existing Showrooms / emporia. An outlay of Rs. 10.00 lakhs of VIII Plan and Rs. 2.00 lakhs 1992-93 is proposed.

G. Co-operativisation - Coir Board Schemes:

Government of India has introduced a Scheme with a view to assisting the State Government in its efforts to encourage the co-operatives in the Coir Industry by providing the Share Capital Loan, Managerial and marketing assistance apart from assistance for modernisation.

The expenditure has to be shared between the State Government and the Coir Board on 50:50 basis. In the VII Plan the State Govt. had sanctioned Rs. 8.00 lakhs on 50:50 basis out of which an amount was sanctioned to Coir Apex Society and the remaining amount of Rs. 5,38,800/- was sanctioned to 15 Primary Coir Co-operative Societies.

An outlay of Rs. 15.00 lakhs for VIII Plan and Rs. 3.00 lakhs for 1992-93 is proposed.

C. O. 5: KARNATAKA STATE KHADI & VILLAGE INDUSTRIES
BOARD.

The functions of the Board is to organise, develop and regulate Khadi & Village Industries in the State, render financial, technical and other necessary assistance for developing Khadi and Village Industries in the rural areas and thereby tackle the problem of unemployment and raise the standard of living of rural artisans. The Board has been extending financial assistance for the development of village industries such as village oil industry, carpentry, blacksmithy, sisil fibre, village leather industry, processing of cereals and pulses, cottage-mat weaving, hand-made paper industry etc., for intensive development in view of the potentialities existing for these industries in the State, besides covering Khadi Industries in all the districts. The State Government has been providing funds to the Board under Plan Schemes to make payment of special rebate on khadi sales every year to the societies as well as meeting the establishment charges of the Board, and to maintain the establishment charges of the Board, and to maintain the establishment of Gobar Gas Cell Project Officers and Special Tahasildars (recovery). The Regional Training Centres have been proposed for upgrading

the skills of the artisans and to impart training to the Office bearers of the Societies/Institutions. One Regional Centre is being set up at Bijapur to start with. The Board is obtaining assistance from Khadi & Village Industries Commission. The Board is also envisaging to establish electronic industries, in rural areas wherever possible. An outlay of Rs.800.00 lakhs for VIII Plan and Rs.220.00 lakhs for 92-93 is proposed.

SMALL SCALE INDUSTRIES:-

Development of Small Scale Industries play an important role in National Economy. An outlay of Rs.400.00 lakhs for VIII Plan and Rs.113.00 lakhs for 92-93 is proposed.

1. GRANT-IN-AID TO CSIR POLY TECHNOLOGY TRANSFER CENTRE, BANGALORE

On the request of the State Government, a Poly-technology Transfer Centre has been started at Bangalore and is catering to the needs of the entrepreneurs for obtaining technical know-how, developed by the laboratories established under Council for Scientific and Industrial Research, Government of India. The process available through National Research Development Corporation are disseminated through this centre for the benefit of entrepreneurs. An outlay of Rs.8.00 lakhs for VIII Plan and Rs.2.00 lakhs for 92-93 is proposed.

2. GRANT IN AID TO REGIONAL MAINTENANCE AND SERVICE CENTRE, BANGALORE (PEENYA):-

On the request of the State Government, a Regional Maintenance and Service Centre has been established at Peenya Industrial Area, Bangalore by National Productivity Council and this Centre provides training for the Foreman to maintain the machinery and equipments in the small and medium industries. Also the NPC., Regional Office, Bangalore undertakes consultancy and inplant studies for the benefit of the industries. An outlay of Rs.10.00 lakhs for VIII Plan and Rs.3.00 lakhs for 92-93 is proposed.

3. GRANT IN AID TO TECHNICAL CONSULTANCY SERVICES ORGANISATION OF KARNATAKA (TECSOK), BANGALORE.

TECSOK has been jointly promoted by the Directorate of Industries and Commerce, Karnataka State Financial Corporation, Karnataka State Industrial Investment and Development Corporation, Karnataka State Small Industries Development Corporation. TECSOK is rendering useful services to the industry and also guiding the entrepreneurs by preparing project reports and conducting industry oriented studies. It also advise the Government on matters pertaining to industrial development. An outlay of Rs.40.00 lakhs for VIII Plan and Rs.10.00 lakhs for 92-93 is proposed.

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4. GRANT IN AID TO TECSON FOR ENTREPRENEURIAL DEVELOPMENT PROGRAMME.

At present TECSON has Seven District Officers who are conducting Entrepreneurial Development Programmes and disseminate various information regarding viable projects to entrepreneurs covering all the 20 Districts in the State. An outlay of Rs.12.00 lakhs for VIII Plan and Rs.5.00 lakhs for 92-93 is proposed.

5. GRANT IN AID FOR PUBLICITY AND PROPAGANDA - PARTICIPATION IN EXHIBITIONS.

The Directorate of Industries and Commerce is participating in Exhibitions within and outside the State and also abroad. Dasara Exhibition at Mysore and Trade Fair Authority of India at Pragathi Maidan, New Delhi are the annual features wherein the State Government is participating in these exhibitions. The State Government is also participating in Trade Fairs for projecting the image of the State by displaying various products manufactured in SEI Sector, handlooms, handicrafts, leather, coir etc., The Sectoral Corporations are also participating for business promotions thereby the products would be exported for other Countries. An outlay of Rs.123.00 lakhs for VIII Plan and Rs.30.00 lakhs for 92-93 is proposed.

6. RENOVATION OF EXHIBITION STRUCTURE AT NEW DELHI:

The State Government has constructed a permanent exhibition structure at Pragathi Maidan, New Delhi as India International Trade Fair Authorities are organising exhibitions both domestic and international, throughout the year in the Pragathi Maidan, New Delhi. The exhibition structure need renovation in 5 years in order to give a facelift as many States have been renovating the exhibition structure of their State owned building periodically. An outlay of Rs.20.00 lakhs for VIII Plan and Rs.6.00 lakhs for 92-93 is proposed.

7. STANDARD AND QUALITY CONTROL LABORATORY OF BUREAU OF INDIAN STANDARDS:

Bureau of Indian Standards has set up a testing Laboratory in Peenya Industrial Area, Bangalore, in association with Karnataka Small Industries Development Corporation which has provided land and building. The loan has been raised through IDBI for obtaining machinery and equipment required for the purpose. The loan has to be repaid to IDBY by KSSIDC. An outlay of Rs.12.00 lakhs for VIII Plan and Rs.8.00 lakhs for 92-93 is proposed.

8. EXPORT PROMOTION ACTIVITY:

Visveswarayya Industrial Trade Centre is handling the matters pertaining to export promotion. The Centre has been conducting training programmes for

for the benefit of exporters and prospective entrepreneurs besides Organising new product exhibitions at important places. An outlay of Rs.4.00 lakhs for VIII Plan and Rs.19.00 lakhs for 92-93 is proposed. Out of this Rs.15.00 lakhs is for the revitalisation of V.I.T.C.

9. GENERALLY SPONSORED SCHEME OF SEED MONEY FOR REVIVAL OF SMALL SCALE SICK UNITS:

The scheme envisages providing seed/margin money for rehabilitation of sick units which have been taken up for rehabilitation by the term lending institution in consultation with banks who have provided working capital loan. An outlay of Rs.100.00 lakhs for VIII Plan and Rs.20.00 lakhs for 92-93 is proposed. This also attracts equal contribution from Government of India.

10. COMPUTERISATION:

It is proposed to computerise the data available in various sections in the Directorate of Industries and Commerce in order to provide information whenever required for the Government for taking policy decisions and also to furnish information to various agencies. An outlay of Rs.5.00 lakhs for VIII Plan and Rs.2.00 lakhs for 92-93 is proposed.

11. STATE AWARDS:

Some of the products manufacture in the SSI Sector deserve appreciation and the best industrial units in different categories will be considered for State Award. An outlay of Rs.4.00 lakhs for VIII Plan and Rs.2.00 lakhs for 92-93 is proposed.

12. CONDUCTING OF STUDY REPORTS:

Certain category of industries require indepth study to identify and tackle the problems faced by them so that corrective measures could be taken at the Government level. Study of Agarbathi Industry has been taken up recently. Similar studies could be undertaken. An outlay of Rs.3.00 lakhs for VIII Plan and Rs.2.00 lakhs for 92-93 is proposed.

13. TESTING CENTRE:

Government of India has established 4 Regional Testing Centres at 4 Metropolitan Cities of the country viz., Calcutta, Delhi, Bombay and Madras for testing of raw-materials and finished products as per the Bureau of Indian Standards and buyers' specifications. These Testing Centres are providing testing facility in the field of mechanical, metallurgical, chemical, electrical products. The Development Commissioner (SSI), Government of India has suggested to the State Government to establish testing centre in Karnataka as it is proposed to provide about 10 States, at the rate of one centre

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to each State during 91-92. The land and building of the proposed State testing centre will be provided by the State Government and necessary machinery and testing equipments will be provided by Government of India. The running expenses will also be borne by the Government of India. The approximate land required for setting up such a Centre is three acres; covered area required will be approximately 4,000 Sq. Mtrs. The estimated cost for setting up, excluding the land will be Rs.2.1 Crores including the cost of air conditioning diesel generating set, power and water supply etc. An outlay of Rs.50.00 lakhs for VIII Plan and Rs.20.00 lakhs for 92-93 is proposed. This attracts equal contribution from Govt. of India.

14. PUBLICITY AND BROCHURES:

A provision of Rs.4.00 lakhs for VIII Plan and Rs.4.00 lakhs for 92-93 is proposed for under a scheme of "PUBLICITY AND BROCHURES" to give wide publicity in the developmental activities of the Department.

DISTRICT INDUSTRIES CENTRE:

The Dist. Industries Centre programme is a Centrally Sponsored one, which is being implemented by the State Government as per the guidelines issued by Govt. of India from time to time. This

programme was launched in May 1978. All the Districts in Karnataka have been covered under this Scheme.

The main objective of DIC programme is to develop Small Industries that will create employment opportunities, promote decentralisation and dispersal of industries, and develop agro-based auxiliary industries. The DICs conduct Techno-Economics Survey for the development of Districts.

DIC Central Cell:

A monitoring cell has been functioning in the Directorate to co-ordinate the activities of all DICs and review the functioning of District Industries Centres of the Districts. A provision of Rs.40.00 lakhs for VIII Plan and Rs.18.00 lakhs for 92-93 is proposed as the State share only. This includes the expenditure in organising of Conferences, Seminars and Campaigns, at the District Level and State Level by the DICs and the Directorate.

CONSTRUCTION OF DIC BUILDINGS:

DIC buildings in Districts have been completed and construction of the buildings in the remaining

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Districts are in progress, except Bangalore. Suitable sites are yet to be identified in 2 other Districts Bangalore (Urban) and Bangalore (Rural). It was targetted to provide own building in all the Districts by the end of Seven Plan period. As the construction of DIC Buildings is in progress, there is necessity of making provision for VIII Plan for the DIC building including the expansion. A provision of Rs.40.00 lakhs for VIII Plan and Rs.40.00 lakhs for 92-93 is proposed.

DICs at DISTRICT LEVEL

District Industries Centres are functioning in all the 20 Districts of the State. Offices are established at District Head Quarters and Sub-Divisional Head Quarters.

Consequent on the formation of Zilla Parishads, the activities under the Village, Cottage and Tiny Industries and the implementation of RIP/RAP promotional Schemes have been transferred to the Zilla Parishads along with the staff, who are looking after all these programmes. The Functional Manager (RVI) will be implementing all the schemes coming under the review of Zilla Parishads on behalf of the Directorate of Industries and Commerce. Supporting staff along with one Assistant Director (EI) and District Weaving Supervisor are also working under

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Zilla Parishads for implementation of the DIC Schemes and other promotional schemes also. A provision of Rs.960.00 lakhs for VIII plan and Rs.217.00 lakhs is proposed for 92-93, to meet the salary and other recurring expenditure pertaining to staff.

LEATHER BASED INDUSTRIES.

The Karnataka Leather Industries Development Corporation, Bangalore is implementing the following schemes for the development of Leather based industries in Karnataka. An outlay of Rs.200.00 lakhs for VIII Plan and Rs.60.00 lakhs is proposed for 92-93.

1) INVESTMENT IN SHARE CAPITAL OF KARNATAKA LEATHER INDUSTRIES DEVELOPMENT CORPORATION LIMITED (LIDKAR).

To increase the production from various production centres, the purchase of machinery and equipment is necessary, and to increase the borrowing capacity of the Karnataka Leather Industries Development Corporation Limited (LIDKAR),. An investment in the share capital of the company by the State Govt. is necessary. An outlay of Rs.50.00 lakhs for VIII Plan and Rs.10.00 lakhs for 92-93 is proposed.

2) ESTABLISHMENT OF EXPORTS.

The Corporation is procuring the finished goods manufactured by the local artisans and small leather units and the same is marketed

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through the emporia. At present there are nineteen such outlets. In order to increase the procurement/sales of the products manufactured by the artisans and small units, it is proposed to establish five more outlets. An outlay of Rs.10.00 lakhs for VIII Plan and Rs.200 lakhs for 92-93 is proposed.

3) MANAGERIAL GRANTS FOR ESTABLISHMENT OF RAW-MATERIAL DEPOTS:

To provide quality leather at reasonable rates at the door steps of rural artisans, the corporation has opened thirty four raw-material depots at various places, on no profit no loss basis. The overhead charges for managing these depots have been increasing. It is proposed to cover 1000 fresh artisans, in addition to 5000 already covered. An outlay of Rs.40.00 lakhs for VIII Plan and Rs.10.00 lakhs for 92-93 is proposed.

4) CELEBRATION OF LEATHER CRAFT WEEK:

In order to popularise leather products manufactured by rural artisans and small industries, it is necessary to organise exhibition-cum-sale film show etc., and to allow discount for attracting more customers. An outlay of Rs.5.00 lakhs and Rs.1.00 lakh for 92-93 is proposed.

5) INTEGRATED LEATHER CRAFT COMPLEX

The Corporation has established Ten footwear complexes and four tanning complexes at various places where there is concentration of artisans under the Dutch Assisted Project. These complexes consists of living-cum-worksheds and common facility centre buildings. The common facility centres are not fully equipped with necessary machineries. There is a need to install machineries for manufacturing quality footwear and leather. An outlay of Rs.37.00 lakhs for VIII Plan and Rs.17.00 lakhs for 92-93 is proposed.

6) DEVELOPMENT CENTRE FOR WOMEN:

It is proposed to train 30 women candidates in the line of manufacture export oriented leather goods and to engage them for the period of five years and subsequently to encourage them to start their own units with the assistance from the banks. The Corporation will render marketing assistance. To start a training centre for this purpose, an outlay of Rs.15.00 lakhs for VIII Plan and Rs.4.00 lakhs is proposed for 92-93.

7) REBATE ON SALE OF FOOTWEAR AND LEATHER GOODS:

The Corporation is purchasing footwear and leather goods manufactured by the ruralartisans and the quality of these goods cannot be compared with those manufactured by multi-national or big companies viz-,

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Bata, Carona etc., which are having highly mechanised units. In order to encourage the hand made products, it is necessary to provide rebate on sale of footwear and leather goods during the specified periods covering exhibitions and festivals. An outlay of ₹.20.00 lakhs for VIII Plan and ₹.5.00 lakhs for 92-93 is proposed.

8. ESTABLISHMENT OF TESTING FACILITIES CENTRE:

Quality is the motto of LIDKAR. In order to compete with the private sector industries, the latest designs will have to be transferred to the artisans by conducting training programmes. This can be achieved only by equipping artisans/LIDKAR with quality testing machines to meet the market demand. It is proposed to establish testing facilities. An outlay of ₹.5.00 lakhs for VIII Plan and ₹.1.00 lakh for 92-93 is proposed.

9. COLLECTION OF HIDES AND SKINS:

At present, the hides and skins are collected by the middle men or agents in the villages and mostly they are sent outside the State. The flayers are hardly getting any returns. There is a need to set up a collection network of hides and skins, so that the flayers not only get good price, but also that tanneries located within the State will be assured of continuous supply of hides and skins. An outlay of ₹.13.00 lakhs for VIII Plan and ₹.5.00 lakhs for 92-93 is proposed.

10) ESTABLISHMENT OF KARNATAKA INSTITUTE OF LEATHER TECHNOLOGY (KILT):

LIDKAR has given considerable impetus for the developmental activities. These developmental activities would naturally require a ~~xxx~~ number of trained manpower to provide technical assistance and management in the industry. Besides providing manpower to the leather industry, it is imperative that the students will have to be trained to become entrepreneurs and for self-employment.

With the considerable demand for qualified leather technologists in the leather industry a need is felt to set up a training institute to train personnel in both leather technology, footwear and leather goods. LIDKAR has rightly decided to set up an Institute at Diploma level in Bangalore. A provision of 2.5.00 lakhs for VIII Plan and 3.5.00 lakhs for 92-93 is proposed.

EMPLOYMENT PROMOTION AND TRAINING PROGRAMME

1) ANCILLARY DEVELOPMENT PROGRAMME:

The scope for ancillarisation of industries in the State, as medium and large industries are existing in Bangalore, Mysore, Dharwad, Belgaum, Tumkur and other important places. The programme envisages identification of components for ancillarisation, preparation of project reports, giving publicity through advertisement in news papers,

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selection of entrepreneurs, conducting of buyers and sellers meet etc., An outlay of Rs.40.00 lakhs for VIII Plan and Rs.9.00 lakhs for 92-93 is proposed.

2) MODERNISATION OF TRAINING CENTRES:

Under the scheme, the expenditure relating to running Industrial Training Centres, at N.P. Kendra, Bangalore to rehabilitate the Beggars by imparting training in various crafts is met by department. An outlay of Rs.10.00 lakhs for VIII Plan and Rs.6.00 lakhs for 92-93 is proposed.

DUTCH ASSISTED PROJECTS:

RURAL SMALL AND MICRO ENTERPRISES DEVELOPMENT PROGRAMME - II PHASE DUTCH PROJECTS:

The Indo-Dutch Project Management Society (IDPMS) has, on behalf of the Government of Karnataka, has prepared the proposals for a Rural Small and Micro Enterprises Development Programme and has submitted the same to the Government of Karnataka for their consideration and for onwards transmission, through the Government of India to the Government of the Netherlands for their consideration and approval. An outlay of Rs.77.50 lakhs for VIII Plan and Rs.50.00 lakhs for 92-93 is proposed.

INDUSTRIAL ESTATES:-1) KARNATAKA SMALL SCALE INDUSTRIES DEVELOPMENT CORPORATION LIMITED - INVESTMENT.

Keeping in view the Industrial Policy of the State, the Karnataka State Small Industries Development Corporation has been constructing industrial sheds and providing infrastructural facilities within the industrial estates in order to encourage the entrepreneurs to set up industries conveniently. A sum of Rs.550.00 lakhs for 8th Plan and Rs.200.00 lakhs for 92-93 is proposed.

2) KARNATAKA SMALL INDUSTRIES MARKETING CORPORATION LIMITED (KSIMC) - INVESTMENT:

The KSIMC is extending marketing assistance to small scale industries in the State and also advance payment upto 75% to SSI Units after the supplies are made to the buyers. The KSIMC has obtained loans from IDBI and other financial institutions to make this payment to the SSI Units to facilitate raising further funds and increasing marketing assistance. It is proposed to provide share capital assistance of Rs.50.00 lakhs for 8th Plan and Rs.20.00 lakhs for 92-93.

INDUSTRIAL CO-OPERATIVES:-(a) Share Capital Investment:-

The Industrial Co-operative Societies consists of poor artisans who belong to the weaker sections of the society and have no capacity to subscribe fully towards the share capital. Due to meager share capital contribution, the society will be having less borrowing power. In order to increase the borrowing power and also to have a wider share capital base to enable the society to raise adequate working capital, share capital assistance is necessary. An outlay of Rs.25.00 lakhs for 8th plan and Rs.8.00 lakhs for 92-93 is proposed.

(b) Working Capital Loan

Some of the Industrial Co-operative Societies are not in a position to raise working capital loans for production purpose. Hence, the working capital loan would help them for undertaking production activities and also serve as margin money to enable them to raise adequate loan from the financial institutions. An outlay of Rs.40.00 lakhs for 8th Plan and Rs.16.00 lakhs for 92-93 is proposed.

(c) Managerial Grant:-

In view of the weak financial position of the Industrial Co-operatives, to enable them to have a paid Secretary particularly in initial stages, it is proposed to assist such societies at the rate of Rs.5,400/- p.m. Rs.3,600/-p.m. and Rs.1,800/- p.m.

continuously for three years. The excess amount, if any will have to be met out of the societies' funds and from 3rd year onwards the society should be able to meet the salaries themselves. A sum of Rs.10.00 lakhs for 8th Plan and Rs.4.00 lakhs for 92-93 is proposed.

(d) Revitalisation of Industrial Co-operatives including Handloom Co-operatives:-

A programme of revitalisation of Weaver's Co-operative Societies and Industrial Co-operative Societies is envisaged for which district level Committees have been formulated. It is proposed to identify viable societies for revitalisation and suitable assistance will be given in the form of interest free working capital or special share capital contribution not exceeding Rs.1.00 lakh per society. It is expected that in each district there may be 10 societies and 2 societies per year per district could be considered for giving assistance under the scheme. An outlay of Rs.25.00 lakhs for 8th Plan and Rs.16.00 lakhs for 92-93 is proposed.

SPECIAL COMPONENT PLAN:

The Special Component Plan is a Centrally Sponsored Scheme which is operated by the concerned Boards and Corporations viz., Karnataka Leather Industries Development Corporation, Karnataka Handloom Development Corporation, Karnataka State Khadi and Village Industries Board, Karnataka State Coir Development Corporation Karnataka State Handicrafts Development Corporation and Coir Federation.

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Training will be imparted to the Scheduled Caste Candidates in selected crafts, besides providing supply of tool kits for pursuing the crafts after completion of the training. This will help the craftsmen in acquiring skill from the units and to take up self-employment ventures. An outlay of Rs.485.00 lakhs for 8th Plan and Rs.110.00 lakhs for 92-93 is proposed.

PROJECT PROPOSAL FOR U.N.D.P. ASSISTANCE:-

Following project proposals of the Department of Industries and Commerce have been prepared by the concerned executing agencies for obtaining financial assistance under the UNDP Country Programme - IV (April - 1990 - March 1995) and they are placed before the State Level Co-ordination Committee for consideration and clearance of Externally Aided Projects.

- i) R&D Centre for Clay Roofing Tiles, Bricks and other Heavy Clay products (KSFC/GTTC and a separate registered body).:
- ii) Establishment of an Integrated Design Centre for Textile and Clothing sector (TECSOK and Associations of Textile and clothing industry):-
- iii) Apiculture R&D Project (Apiculture Wing of Department of Industries and Commerce, Bee-keepers' Societies, State Khadi and Village Industries Board, Zilla Parishads):
- iv) R&D Centre for Tyre and Non-Tyre Industry (Vikrant Tyres Limited):
- v) Establishment of Training Centres (Sevakendras) for Radialization of Truck Tyres (Vikrant Tyres Limited):

- vi) Technology Upgradation, Modern Quality Control and Testing Centre with Applied Technological Research for Newsprint/paper (Mysore Paper Mills Limited) :
- vii) Infrastructure Development for Integrated Experiment Research Farm/Effluent Exploitation(Mysore Paper Mills Limited) ;
- viii) Human Resource Development Technology Training Development & Entrepreneurial Development Institute(Mysore Paper Mills Limited) :
- ix) Training-cum-Production Centre for CAD/Cam Applications in Tooling (GITC. Bangalore) :
- x) Establishment of Testing Facility Centres (KSSIDC) :
- xi) Establishment of Entrepreneurial Development Institute for strengthening and Training of Self-employed in Karnataka(TECSOK) and
- xii) Development of Infrastructural facilities in some of the Major Industrial Areas in Karnataka(KIALB)

A lumpsum provision of Rs.70.00 lakhs for 8th Plan and Rs.20.00 lakhs for 92-93 is proposed.

SETTING UP PILOT PROJECTS WITH NABARD ASSISTANCE:-

A Pilot Project has been proposed to be taken up under the handlooms, leather and coir sectors. NABARD will act as a catalyst in providing financial assistance to the beneficiaries after completion of their training from the respective organisations. The financial assistance will be provided in the form of loan from the Nationalised Banks under the guidance of NABARD. NABARD will act as a forward and backward

linkage wherever the institutions could not do so. Identification of the beneficiaries will be done through the Zilla Parishads who will be meeting the expenditure on training under TRYSEM Programme.

An outlay of Rs.43.00 lakhs for 8th Plan and Rs.12.00 lakhs for 92-93 is proposed.

17. GROUP INSURANCE SCHEME FOR WEAVERS & OTHER ARTISANS IN KHADI AND VILLAGE INDUSTRIES SECTOR:-

In the Industrial Field, Social Security is for the workers who generally belong to poor class exposed to several risks like invalidity, death, old age, unemployment etc., They do not have resources to face the risks of suffering from sickness, disablement due to accidents on duty etc., It is the duty of the State to provide security or provision through the agency of the State called Government against the above contingencies known as social security. This will promote the efficiency and we are of the work and also enables the workers to face the risks.

Under the Group Insurance Scheme of LIC., risk of file upto Rs.5,000/- will be provided with annual premium of Rs.50/- per member. Out of which 50% cost of premium i.e. Rs.25/- will be met out of the Social Security Fund set up by LIC., under the scheme of Group Insurance for Artisans, the sectors of Handlooms, Handicrafts, Coir and Khadi and Village Industries are covered. A provision of Rs.80.00 lakhs

for 8th Plan and Rs. 55.00 lakhs for 92-93 is proposed.

18. COMPREHENSIVE LAND USE MANAGEMENT PROJECT (CLUMP):-

The aim of the comprehensive Land Use Management Project is to use the land, forest, water and animal husbandry resources in a proper and better methods to improve the above areas and living standards of the people without any affect on einvironmental condition.

The implementation of the project would result in significant increase in production based on the market potential. When the backward and forward linkages are effectively established with the project implementation, local raw material and manpower resources would be brought together in full. The measures for their mutual and purposeful exploitation should be through setting up of gainful rural industries.

The main objectives of rural agricultural industries component are (i) to enable maximum utilisation of local agricultural output resources for creation of additional employment and (ii) promotion of balanced land regional development.

The scope of the component includes (i) provision of 1055 Living-cum-Worksheds, 412 industrial sheds, setting up of 850 produce based agro industries like pulses processing, coir products, chilli

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powder, fibre rope making, mat weaving etc.,
(ii) 135 raw material and skill based industries
(brick, kiln, bamboo and cane works, basket making
etc., (iii) 910 traditional skilled based units
and (iv) 60 demand based industrial unit.

Fifteen Mandals spread over 5 focus districts
of Bellary, Chikkamagalur, Dharwar, Hassan and
Raichur in Karnataka are covered under the project.
A provision of Rs.10.00 lakhs for Sth Plan and
Rs.2.00 lakhs for 92-93 is proposed.

DISTRICT SECTOR SCHEMES:-

The District Sector Schemes are implemented by the Functional Manager (KVI) in the Zilla Parishads. The District Sector Schemes can be classified into Handlooms, Coir, Industrial Co-operatives, Employment Promotion, District Industries Centre including Special Component Plan and Tribal Sub-Plan

3) Collective Weaving Centres:

The scheme is implemented in Co-operative Sector to provide better working condition for weavers who donot have sufficient place to work in their houses. The Weavers Co-operative Societies having their sites are eligible for construction of collective weaving centres. The scheme can be operated with the following components:-

- a) Building Loan - 100% loan without grant.
- b) Equipment - 50% loan and 50% grant.

Managerial grant is also admissible for 4 years on tapering basis of 100%, 75% ^{50%} and 25%.

A sum of Rs. 91.80 lakhs for 8th Plan and Rs. 18.36 lakhs for 92-93 is proposed.

2) Housing Colony:-

To provide better living conditions to weavers who do not have houses, the primary handloom weavers co-operative societies are provided with an assistance in the form of loan (75%) and grant (25%) to construct houses for their members. Each house costs about

about Rs.40,000/- and in a colony 10 to 20 houses are built for the weaver members. An outlay of Rs.189.00 lakhs for VIII Plan and Rs.57.80 lakhs is proposed for 1992-93.

3) Big Dye House:-

The yarn required for weaving is to be dyed before weaving. It will be convenient if the weaver societies possess a big dye house to provide dyed yarn to its members. The assistance is provided in the form of loan towards the cost of the building and term loan bearing normal rate of interest repayable in annual equal instalments, the grant is also eligible for the purchase of dyeing equipment under the scheme. A sum of Rs.37.80-lakhs for VIII-Plan and Rs.7.56-lakhs is proposed for 1992-93.

4) Improved Appliances:(50:50)

Improved types of looms and accessories are required to help the weavers to increase the efficiency and earning capacity. The societies will be provided with financial assistance to the extent of 75% of the cost of the improved appliances. An equal matching contribution is also made available from Government of India. The scheme is operated on the basis of 2/3 loan and 1/3 grant. A sum of Rs.29.50 lakhs for VIII Plan and Rs.5.90 lakhs for 92-93 is proposed.

5) Training of Handloom Weavers:-

In order to enable the weavers to weave attractive designs by using improved techniques, training is necessary and it is being provided to the weavers by paying Rs.150/- p.m. as stipend. The selected trainees are provided with training in weaving and designing etc., A sum of Rs.60.35 lakhs for VIII Plan and Rs.12.07 lakhs for 92-93 is proposed.

6) Managerial grant to Primary Handloom Weavers Co-operative Societies: (50:50) :-

The newly formed Co-operative Societies will not be having sufficient finance to pay salary to the Secretary and other staff. To enable the societies to run on economic lines, managerial grant is provided for appointment of paid secretaries on tapstoring basis as under:-

1) 100% first year	Rs. 5,400/-
2) 66 2/3% 2nd year	3,600/-
3) 33 1/3% 3rd year	1,800/-

A sum of Rs. 2.30 lakhs for VIII Plan and Rs. 0.56 lakhs for 92-93 is proposed.

7) Assistance in Primary Weavers Co-operative Societies:-

Assistance in the form of share capital is being provided to Primary Weavers Co-operative Societies in the form of investment so as to enable the societies to increase the borrowing capacity and strengthen the share capital base. A sum of Rs. 8.00 lakhs for VIII Plan and Rs. 1.60 lakhs is proposed for 92-93.

8) Loans towards Share Capital to Handloom Weavers:-

In order to bring more weavers under the Co-operative Sector, loans will be provided to the weavers to the extent of 90% of the share value subject to the maximum of Rs. 1,000/- repayable in 10 annual equal instalments. A sum of Rs. 15.55 lakhs for VIII Plan and Rs. 3.11 lakhs for 92-93 is proposed.

9) Assistance to Coir Societies:-

There is potential for promotion of Co-operative Entrepreneurs under the coir sector, especially in rural areas. In this sector, the women folk would be engaged in manufacture of coir products so as to supplement their income. To encourage coir industries and organise the Co-operative Societies to have institutional support, assistance is provided in the form of share capital, managerial grant and loan to Coir Co-operative Societies. A sum of Rs.13.55 lakhs for VIII Plan and Rs.2.71 lakhs for 92-93 is proposed.

10) Apiculture:-

Karnataka, with its forest and agro horticultural wealth, has great potential for honey production. A major portion of natural resources for honey production still remained untapped in the State. It is estimated that 20 to 25% of bee-keeping area in India is in Karnataka, and large part of it is in Malnad Zone, where bee-keeping is practiced as a subsidiary occupation. To encourage progressive farmers and horticulturists, training programmes are conducted in bee-keeping, and after the training bee-hive boxes are provided at subsidised rates. A sum of Rs.161.90 lakhs for VIII PLAN and Rs.27.98 lakhs for 92-93 is proposed.

11) DIC Establishments:-

Consequent on establishment of Zilla Parishads in the State, District Sector Schemes are transferred to Zilla Parishads and they are implemented by the Officers and Staff of DICs working under the control of Zilla Parishads. The promotional schemes, viz.,

Rural Artisans Programme and Rural Industries Programme

As a part of District Sector Schemes are also being implemented by the Pilla Parishads. A sum of Rs. 828.10 lakhs for VIII plan and Rs. 153.62 lakhs for 92-93 is proposed.

12) Industrial Co-operatives:-

The rural artisans are encouraged to organise crafts Co-operative Societies for providing industrial support to rural artisans for making use of raw materials and marketing assistance. The craft Co-operative Societies are provided with share capital assistance, working capital loan and managerial grant, in order to provide impetus to the artisans. A sum of Rs. 129.90 lakhs for VIII Plan and Rs. 25.98 lakhs is proposed for 92-93.

13) Seed/Margin Money: (50:50)

As per the guidelines of Government of India, the seed/margin money is provided to entrepreneurs to set up tiny industries with the assistance of banks and other financial institutions. A maximum of Rs. 40,000/- per unit is provided based on the project cost as soft loan at concessional rate of interest.

A sum of Rs. 392.05 Lakhs for VIII Plan and Rs. 70.41 lakhs for 92-93 is proposed.

14) Interest Subsidy for Artisans - Grants:-

Int-est subsidy on interest paid over and above 7% upto a maximum of 5% is provided to artisans who obtain composite loan upto Rs. 25,000/- from financial institution to establish their own small and tiny units. A sum of Rs. 32.70 lakhs for VIII Plan and Rs. 6.54 lakhs for 92-93 is proposed.

15) Special Component Plans:-

Under this scheme, training to the Scheduled Caste Youth in selected crafts, supply of tool kits and construction of living-cum-workshops have been taken up. Apart from this, other related activities for the economic upliftment of down trodden, especially for SC/ST are being undertaken. A sum of Rs.509.00 lakhs for VIII Plan and Rs.96.00 lakhs is proposed for 92-93.

16) Tribal Schemes:-

The people belonging to tribal community are given training in crafts, such as cane and bamboo works, mat weaving carpentry, general engineering, manufacture of ayarbatia, tailoring, etc., after the completion of training, they are also supplied with necessary tool kits to enable them to carry on the occupation. At the feasible place, the tribal people are also provided with living-cum-workshops. This particular scheme is confined to four districts, namely: Mysore, Kodagu, Dakshina Kannada and Chikmagalur. A sum of Rs.29.00 lakhs for VIII Plan and Rs.6.00 lakhs is proposed for 92-93.

NEW SCHEMES:-

A sum of Rs.119.00 lakhs for VIII Plan and Rs.23.80 lakhs for 92-93 is proposed for the following two new Schemes.

1. Conducting Training in manufacture of Leather fancy goods by Lidkar:

An outlay Rs. 10.00 lakhs for 8th Plan and Rs. 2.00 lakhs for 1992-93 is proposed.

2. Strengthening of Training Institutes under Industries Department.

This is a new scheme wherein through the District sector, Artisans will have the opportunity to update their skills and new Artisans will be trained. The scheme takes into consideration both provision of stipend as well as supply of raw materials and modernisation of equipment in the Artisan Training Institutes. The proposed stipend given will be commensurate with Centrally Sponsored Schemes and raw materials will be as per requirement of the crafts. The Scheme will cover 21 Artisans Training Institutes and 8 branches in 17 Districts and will cover varied crafts like Carpentry, Blacksmithy, Cotton Weaving etc., having Self Employment potential. An amount of Rs. 21.80 lakhs for Annual Plan 1992-93 and Rs. 109.00 lakhs for the 8th Plan is proposed.

CENTRAL SECTOR SCHEME (100% BY GOVT. OF INDIA):-

Under the Central Schemes assisted by the Government of India (in the village and Small Industries Sector), a sum of Rs. 475.00 lakhs for VIII Plan and Rs. 705.00 lakhs for 1992-93 is proposed.

1) Central Plan Scheme for Conducting Census of S.S.I. Units in the State:-

The Department of Industries and Commerce is conducting the census-cum-sample survey of SSI. units to obtain basic information regarding the number of S.S.I. units Data with regard to establishment, employment, investment, production etc. in the State is being collected.

The main objective of the scheme is to evaluate and identify the areas for taking policy decisions in the various categories of industries. The provision is purely for establishment charges. A sum of Rs.75.00 lakhs for VIII Plan and Rs.15.00 lakhs for 92-93 is proposed.

2) Pre-loom and Post-loom Facilities:-

Creation of Preloom and Post-loom processing facilities in the Handloom Sector is very important, both from the point of view of supply of sized beams to weavers and providing ready market for the handloom goods by giving better finish to the woven cloth. Government of India makes available 100% loan assistance in this scheme. A sum of Rs.200.00 lakhs for VIII Plan and Rs.50.00 lakhs for 92-93 is proposed.

3) N.C.D.C. Scheme (Handlooms) 100% Re-imbusement:

National Co-operative Development Corporation is assisting the Co-operative Sector in the State in respect of coverage of Handloom Weavers in the Co-operative field by extending share capital assistance for existing society and other facilities to the Weavers. A sum of Rs.50.00 lakhs for VIII Plan and Rs.10.00 lakhs for 92-93 is proposed.

4) Loom Coverage under Minority Development Programme:

There is a large number of concentration of weavers belonging to Minority Community in northern Karnataka Districts. The Government of India scheme is for extending assistance to handloom weavers of Minority Communities in the form of

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Share Capital/Loan without matching share from State Government. A sum of Rs.150.00 lakhs for VIII Plan and Rs.30.00 lakhs for 92-93 is proposed.

Social Security and Welfare - Saree and Dhoties Scheme:

The subsidised Saree Dhoti scheme is being implemented from October 1985 by the Karnataka Handloom Development Corporation Ltd., Bangalore. The scheme envisages distribution of Saree and Dhoties to Weaker Sections at subsidised rates and covers all families in rural areas with an annual income below Rs.3,500/-. The identified families have been issued with Green Cards. Male and Female members above age of 19 years in the identified families are eligible to receive Dhoti and 2 Meters Shirt material and a Saree and a blue piece, respectively every year at subsidised rates. The distribution is made to male beneficiaries at subsidised rate of Rs.23/- per set (Rs.15/- upto January 1980) and to Female beneficiaries at Rs.20/- per set (Rs.12/- per set upto January 198). The scheme generally covers 32 lakhs families in Rural areas and the eligible beneficiaries are 41.26 lakhs men and 41.31 lakhs women. The scheme has two-fold objectives viz., ^{providing} ~~providing~~ cloth to weaker sections at affordable price and marketing support to large number of handloom weavers. The scheme is closely linked to the development of handloom schemes in the State. A sum of Rs.3200.00 lakhs for VIII Plan and Rs.575.00 lakhs for 1992-93 is proposed.

VISHWA

Continuous Rural Productive Employment Programme in Karnataka under the name of VISHWA was launched on Oct. 2nd 1991 by the Hon'ble Prime Minister Sri.P.V. Narasimha Rao. Government of Karnataka in order to achieve the twin objectives of generation of sustainable employment and alleviation of poverty have identified Rural Industrialisation as a major strategy. The Industrial Policy of the State also lays major emphasis on development of rural industries in tiny and small scale sector. Special thrust under Vishwa for rural industrialisation has been formulated in order to provide assistance and support to the artisans and entrepreneurs both in the organised sector and un-organised sector.

It is very well understood that small enterprises do not have access to continuous supply of raw material, technical know-how and access to marketing and marketing channels. Besides these small enterprises if and when they gain access to such inputs and linkages it is at a high cost. Under Vishwa the problems of access to supply of raw material, technical know-how and marketing are being tackled and forms a main feature of the programme.

If a successful and sustainable rural industrialisation programme has to be launched, it is necessary that these neglected unorganised sector is

provided with due attention by the Government particularly in the areas of training, infrastructure, supply of raw materials credit and marketing of finished products.

It is in this background that the Government have proposed to implement a CONTINUOUS RURAL PRODUCTIVE EMPLOYMENT PROGRAMME under the name ' VISHVA '.

OBJECTIVES:

The Major objectives of the programme are:

1. Providing continuous and productive employment to a large segment of population and mainly in rural areas;
2. Providing a strong marketing support for the goods and services produced in the rural sector assuring quality of the products and reasonable returns to the producer;
3. Enlargement of activities of employment promotion in the sectors like weaving (Handloom), Handicrafts, Leather and Coir Sector, Silk, Animal Husbandry and Fisheries, Agro, Horticulture, Food processing, Housing and Building Materials etc.
4. Providing Institutional support for training, procurement of raw materials and finance to ensure that the activities result in generation of sustainable levels of income of at least Rs.700 to Rs.800 p.m. for each beneficiaries.

5. Better utilisation of processable and export potential;
and
6. Revival and strengthening of the Sick Tiny Scale
Units already established.

In order to achieve the above objectives Government has adopted the following strategies.

1. To create additional employment opportunities for a minimum of 5 lakh persons in the rural areas;
2. Promote additional 85,000 cottage and Village Industrial units;
3. Revive 25,000 Sick units in the Tiny and SSI sector in rural areas;
4. Promote 44,000 units under Coir, Leather, Handloom, Sericulture and Handicrafts in the Organised sector;
5. Provide training for development and upgradation of skills appropriate for continuous productive employment;
6. Providing raw material, technical service and quality control to units set up under the programme;
7. Marketing of finished goods under VISHWA through KSIMC and MSIL.

The proposal envisages establishment of over 1.07 lakh units in the unorganised sector with an employment potential of over 4.90 lakhs in the next five years.

In the organised sector, the proposal envisages establishment of over 44,000 Units with an employment potential

of over 1.13 lakhs in the next five years. " The anticipated investment is about Rs.570 crores with an anticipated " turnover (Sales value) of more than Rs.2000/- crores year by the end of 5th year (Details as per Annexure - I). Initially the programme will be implemented in 261 villages spread over 206 Rural Assembly Constitutencies leading to establishment of 2236 Tiny and Cottage Industrial Units benefitting around 7000 beneficiaries with a total investment of Rs.1014 lakhs

The estimated Government support required is about Rs.224 crores for activities like;

1. Strengthening of the training institutes;
2. Providing margin money assistance to marketing agencies like KSIMC., DSMS., TPAMCS. etc.
3. Providing margin money assistance to development agencies;
4. To strengthen infrastructure like equipping the existing common worksheds and building of new common worksheds; and
5. To provide interest subsidies wherever required.

TARGET GROUP:

1. Persons in the age group of 18-35 with or without formal education.
2. Persons who are unemployed or under-employed.
3. Persons in the rural areas.
4. Rural Youths already trained under the existing scheme like IRDP., TRYSEM, DWCRA, SCP, SEP.
5. Motivated persons who have the aptitude and ability to set up micro enterprises.
6. Special Consideration will be given to women and SC/ST Persons.

ACTIVITIES:

1. All activities which involve value addition and processing of the products can be taken up under VISHWA.
2. Production and manufacturing activities in Coir, Leather, Handicrafts, Handloom, Sericulture (Post Cocoon Activity), milk processing and packaging of fruits and vegetables is treated as organised sector under VISHWA. These activities will be supported by the State Development Corporations and Organisations.
3. All other activities not included above will fall under unorganised sector viz., Village Industries, agro-based processes, forest based activities, construction, textiles, rural energy etc.

The proposal envisages utilisation of existing schemes for training like TRYSEM, DWACRA., SEP, SCP, NRY, JRY and IRDP with active co-operation of the Rural Development Panchayat Raj Department, Housing and Urban Development Department, Social Welfare and Labour Department, Zilla Parishat and other concerned Departments.

The facilities/infrastructure available in the existing schemes like IRDP, TRYSEM, RIP JRY etc., will be utilised first. If there is any gap in requirement of funds after utilising existing schemes, funds will be made available from VISHWA Schemes.

Villages already identified under RIP programme of KSFC. is taken into consideration and KSFC will be fully involved. The credit requirements for the various projects will be fully tapped from the State Level Financial Institutions and Commercial Banks, with refinance from NABARD & SIDBI.

Financial assistance from the Government is proposed to be utilised mainly to support the following activities;

- a) Training beneficiaries wherever necessary;
- b) Strengthening training infrastructure and setting up of new training centres wherever required;
- c) Strengthening of the District Supply and Marketing Societies and Karnataka Small Industries Marketing Corporation to enable them provide full support to the beneficiaries in supply of raw materials and marketing of finished products;
- d) Strengthening of the implementing agencies with margin money wherever required to take care of additional coverage to be extended to the beneficiaries; and
- e) Conduct of studies, market survey and other evaluation studies to ensure that the programme is implemented to achieve the objectives and to introduce corrective measures wherever required.

In order to ensure effective implementation of this Programme, and to curtail delays in ~~matrix~~ sanction of schemes or release of fund Government has set up the following Committees.

1. High Level Policy Review Committee under the Chairmanship of Chief Minister to give policy guidelines and set goals, provide continued budgetary/financial support to the Programme, to issue necessary guidelines and directions in order to remove any hurdles and impediments;

2. State Level Empowered Committee for Inter Departmental Co-ordination and Sanction of Schemes under the Chairmanship of Commissioner and Secretary Commerce and Industries Department to identify and decide the schemes and projects to be implemented under the

programme; to approve the pattern of financing and sanction of schemes.

3. State Level Committee for Implementation and Monitoring of the Programme with Commissioner. ID. & Director of Industries and Commerce as Chairman.
4. District Level Committee for implementation of the programme at District level under the Chairmanship of The Chief Secretary, Zilla Parishat/Deputy Commissioner.

A monitoring Cell in the Department of Industries and Commerce has been set up with Additional Director of Industries and Commerce (VISHWA) as incharge .

In order to assist the State level Vishwa Cell, the State Level Committees for sanction of schemes and monitoring the following cells are also established.

Technical Cell for standardisation of Projects:

1. Technical Cell consisting of representatives of TECSOK, SISI and KSFC.
2. Marketing Cell consisting of representatives of MSIL., KSIMC., TECSOK and representatives of implementing agencies.
3. Technical Cell on Pricing: It is e

It is envisaged that for assisting 1.54 lakh units so as to provide additional employment for a minimum of 5 lakh persons in rural areas the institutional finance required is as under:

	Persons to be employed (in lakhs)	Institutional finance required (in crores)	
		Term Loan	Working capital
1st year	0.40	45	90
2nd year	1.05	105	210
3rd year	1.10	125	250
4th year	1.20	135	270
5th year	1.25	160	320

The schemes like IRDP/SEP/SEEUY/SEPUP/Bank Priority Sectors are being envisaged to be utilised to meet the Term Loan and Working Capital requirement of the Units promoted under VISHWA. About 80% of the total units promoted is under the Cottage and Village Industries sector for which NABARD re-finance is available. Remaining 15% units are under the Tiny and SSI Units which are eligible for SIDBI finance.

An outlay of Rs.10000.00 lakhs for 6th Five Year Plan and Rs.2000.00 lakhs for the Annual Plan 1992-93 is proposed.

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ANNEXURE-I TO GOVERNMENT ORDER NO. GI 77 SCI 91

Dt: 17-9-1991

ANNEXURE - I

SUGGESTED TARGET UNDER CRPEP IN FIVE YEARS

UNORGANISED SECTOR

Sl. No.	SECTOR	UNITS (Nos.)	EMPLOYMENT
1.	VILLAGE INDUSTRIES	16,936	1,17,480
2.	AGRO/FARM SECTOR	7,458	42,412
3.	ANIMAL HUSBANDRY / FISHERIES *	22,412 *	1,14,686 *
4.	FOREST BASED INDUSTRIES	6,082	20,418
5.	CONSTRUCTION AND ALLIED ACTIVITIES	4,279	67,959
6.	SERVICE SECTOR @	9,297 @	31,375 @
7.	LIGHT ENGINEERING	2,370	18,735
8.	RURAL ENERGY SECTOR *	13,533 *	28,558 *
9.	REVIVAL AND UPGRADATION OF TINY AND VILLAGE INDUSTRIES	25,000	50,000
	TOTAL	1,07,482	4,91,623

* POTENTIAL WILL HAVE TO BE REASSESSED.

@ POTENTIAL IN THIS SECTOR IS MORE,
TARGET WILL BE REWORKED.

ANNEXURE TO GOVERNMENT ORDER NO. CI 77 SSI 91. Dt: 17-9-1991.

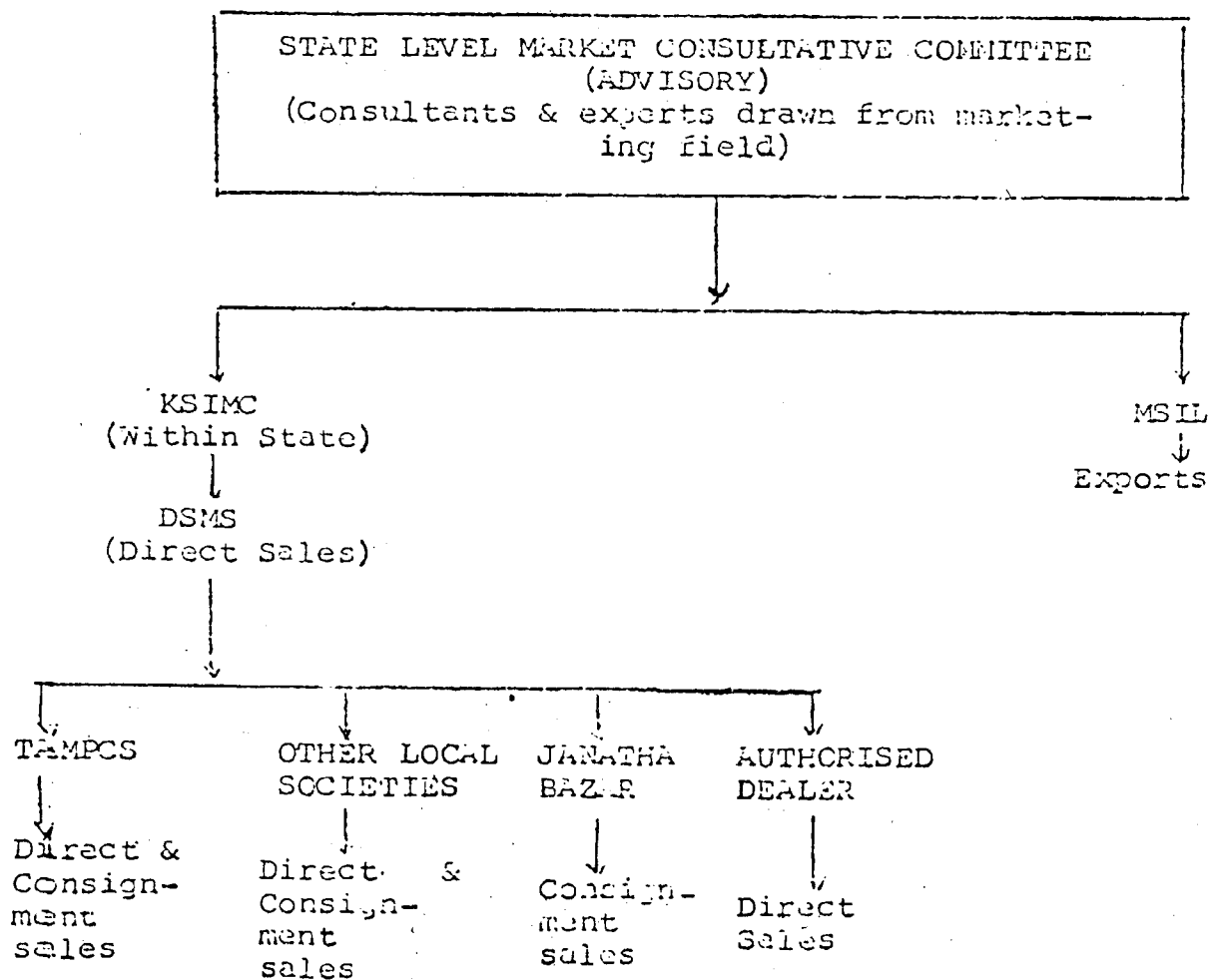
ANNEXURE - I (Contd. 2)

SUGGESTED TARGET UNDER CPREP IN FIVE YEARS ORGANISED SECTOR

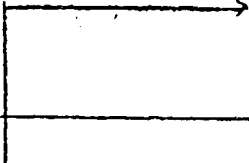
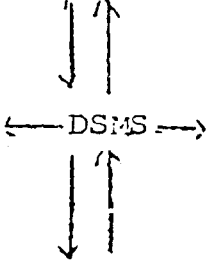
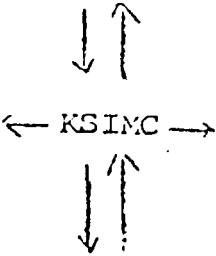
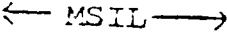
TARGET

Sl. No.	SECTOR	UNITS (NOs.)	EMPLOYMENT
1.	HANDLOOM DEVELOPMENT CORPORATION (KHDC)	22,250	50,500
2.	HANDICRAFT DEVELOPMENT CORPORATION (KSHDC)	2,500	2,500
3.	COIR DEVELOPMENT CORPORATION (KSCDC) (PRODUCTION, PROCUREMENT & TRAINING CENTRES)	150 (COIR COMPLEXES)	22,500
4.	LEATHER INDUSTRIES DEVELOPMENT CORPORATION (LIDKAR)	15,615	22,000
5.	SERICULTURE	990	16,400
	TOTAL:	44,505	1,13,900

SUGGESTED MARKETING SET UP UNDER VISHWA PROGRAMME



MARKETING AGENCIES AND THEIR ROLE FOR VISHWA PRODUCTS

Pre-production Support	Organisation	Post-production activity
	<p>Industry Enterprise Manufacturers</p>	<p>Products (Manufacturers)</p>
<p>Supply of Raw-materials+ Technical Assistance</p>		<p>Procurment of products market- ing locally through local dealers or direct to end users surplus to be sold to KSIMC</p>
<p>Training DSMS Staff Financial Assistance to DSMS Coordinate the Activity of DSMS</p>		<p>Procure products from DSMS Transport Stock Distribution through- out the State Surplus to be sold to MSIL</p>
<p>Give indent for items of interest help planning Advance funds (Against L/C)</p>		<p>Export Market Sales outside the State</p>

XII. SERICULTURE

- 1.1 Introduction: In Karnataka Sericulture Industry has been in practice for more than 200 years and has been contributing for 60% of the country's total raw silk production. Sericulture being an agro-based rural industry plays an important role in alleviating unemployment and rural poverty. Sericulture generates 12-13 man years of direct employment annually per one hectare in mulberry cultivation, silkworm egg production, silkworm rearing, reeling and twisting. A well managed one hectare irrigated mulberry can easily generate a net income of about Rs. 40,000. In a year about 5 crops can be taken under tropical conditions which ensures periodic income at short intervals. Women play an important role in silkworm rearing and cocoon reeling as the activity is family oriented cottage industry. About 55% of the people in this industry are women.

Presently in the State about 1.49 lakh hectares constituting about one percent of total cultivable area of the State are under mulberry cultivation. About 3,12,988 families in about 17,145 villages are engaged in mulberry cultivation and silkworm rearing.

- 1.2 Brief Review of the VII Five year plan and annual plan 90-91 and 91-92 :

Due to various effective development programmes undertaken right from First five year plan, the cocoon and silk production which was only 11,800 and 727 tonnes respectively at the beginning of the first plan has increased to 57,721 tonnes of cocoon and 6076 tonnes of raw silk at the end of the 7th plan. This growth has been achieved by providing required infrastructure and ensuring supply of disease free silkworm layings to the Sericulturists. The State is providing the required infrastructural support to the Sericulturists by establishing 95 Silk Farms, 81 Government Grainages, 150 Technical Service Centres, 20 Model Chawki Rearing Centres, 1841 Chawki Rearing Centres, 4 Training Schools, 59 Cocoon Markets, one Main Silk Exchange with 5 branches, 5 Filatures, one Twisting and Weaving Unit, 9 Training-cum-production reeling centres and 21 Mini Filatures and 13 Reeling Complexes. There are 693 Licensed Seed Preparers also. The Silk cocoons produced in the State is processed in about 22,389 reeling Basins and 26,020 charakas by about 12,138 private reelers located in rural areas. Besides this, there are about 1,25,000 Twisting spindles, 23,000 Silk Powerlooms and 22,722 Silk Handlooms operated by private entrepreneurs.

The State was able to achieve a production of 57,271 tonnes of cocoons and 6076 tonnes of raw silk by the end of 7th plan with the development programmes

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carried out during 6th and 7th plan periods by implementing the World Bank assisted "Karnataka Sericulture Project". Earlier the Sericulture activity was limited to 5 Southern Districts of the State, but after successful implementation of the World Bank assisted Project, the Sericulture activity has been extended to non-traditional areas covering other districts. The other achievements by implementing "Karnataka Sericulture Project" are supply of good quality silkworm eggs from the Model Grainages, young silkworm rearing in Chawki Rearing Centres, advise through extension staff of Technical Service Centres, there was an increased production per 100 layings and protection to cocoons by providing warehousing facilities in cocoon markets, evolution of newer races of silkworm and varieties of mulberry and improved technology in farm management. The project has also helped in exposing the technical staff and the scientists to the technology and research developed in the sericulturally advanced countries besides obtaining expert advise from Japanese Scientists.

An incremental area of 3,500 hectares as against targetted area of 2,650 hectares was brought under mulberry cultivation in the year 1990-91, besides increasing the silk production by about 137 metric tonnes and generating employment to about 18,128 families. During the year expenditure incurred was Rs. 2708.08 lakhs as against an outlay of Rs. 3168.48 lakhs.

During the year 1991-92 outlay provided is Rs 3392 lakhs. As against a target of 4013 hectares till end of October 3,300 hectares has been brought under mulberry cultivation. Silk production till end of October is 3,399 metric tonnes as against annual target of 6,938 metric tonnes. Out of 3,399 metric tonnes Bivoltine silk production is 101 metric tonnes.

1.3 Highlights of the VIII Five year plan and annual plan 92-93 :

During implementation of the "Karnataka Sericulture Project" it was found, to steer the industry in the right direction, still certain gaps exists and they would require immediate attention. The main emphasis would be given on the following:

1. To increase the productivity per unit area from 662 Kgs to 763 Kgs per hectare in irrigated area and 200 Kgs to 230 Kgs per hectare in rainfed area and to reduce the renditta from 9.25 to 8.5 and 11.25 to 10.5 under irrigated and rainfed conditions respectively.

2. To increase the raw silk production by about 3150 tonnes (Total production of about 10,040 metric tonnes per year)-as detailed in the table hereunder:

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Year	Cocoon production	Silk production
1992-93	70,957	7,685
1993-94	76,988	8,575
1994-95	82,897	9,510
1995-96	86,125	9,910
1996-97	87,205	10,040

1.4 Details of proposals for VIII Plan 1992-93 and annual 92-93 :

In order to achieve the above objectives it is programmed to strengthen the seed production organisation, namely, P2 Farms, P2 and P1 Grainages, Chawki Rearing Centres in the seed area, advisory services besides planting mulberry in an additional area of 25,000 hectares, of which 4,829 hectares will be brought under mulberry cultivation in the year 1992-93.

To strengthen the processing facilities by credit support to entrepreneurs for establishing charaka and cottage basins for reeling and for establishing twisting and weaving units.

To strengthen the local research.

To generate incremental employment to about 3,25,000 work years. Majority of the people would be from economically weaker sections of the society. During the years 92-93 incremental employment will be generated to 6300 man years. Under National Sericulture Project (Karnataka Sericulture Project-II) during VIII five year plan period incremental employment will be provided to 415 manyears of which during the year 1992-93 employment will be provided to 217 manyears.

One other important strategy for the Eighth five year plan is production of about 850 metric tonnes of bivoltine silk. To achieve this target, since it is a risk involved scheme in converting the farmers from rearing of multi x Bi. hybrids to slightly difficult rearing of bivoltine hybrids, it is proposed to support this programme by price incentive. Incentive support is a very important until, production and marketing of Bivoltine cocoon and silk reaches an optimum level.

During the VIII Five year plan emphasis is also given for upgrading the reeling technology by providing regular advisory services and encouraging establishment of better processing units, the multi-end reeling units. Reeling sector is pivotal for the development of the

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of the industry as recommended by the sub-group on Sericulture constituted by the Ministry of Textiles.

The above programmes/schemes will be implemented during Eighth Plan period by continuing the scheme taken up under "Karnataka Sericulture Project" and through the second World Bank project "National Sericulture Project - Karnataka - Phase-II". The main components of the National Sericulture Project (KSP-II) and outlays of the project are as follows:

Sl No.	Components	Physical	Financial (Rs. Million)
A.	<u>D.O.S INFRASTRUCTURE</u>		
1.	P2 Farms (Nos)	16	53.70
2.	P2 & P1 Grainages (Nos)	08	35.55
3.	Chawki Rearing Centres (Seed areas) (Nos)	50	33.15
4.	Technical Service Centres (Nos)	96	117.11
5.	Technical Service Centres (Reeling) (Nos)	18	16.61
6.	New Training Schools (Nos)	02	12.98
7.	Strengthening of Training schools (Nos)	04	49.63
8.	Strengthening of Cocoon Markets (Nos)	06	20.67
9.	Cocoon Markets (Seed areas) (Nos)	02	4.23
10.	Dry Land Cultivation (ha)	370	0.50
11.	Privatisation of CRCs	1316	39.22
12.	Working capital to Grainages.	10	12.00
13.	Incremental administration		36.89
14.	KSSDI Research		14.54
	Sub-Total		445.77
	Physical contingency		48.30
	Price contingency		146.18
	TOTAL		641.25
B.	<u>CREDIT:</u>		
	On Farm		413.00
	Processing		129.00
	TOTAL		1183.25
	<u>OUT OF D.O.S. COMPONENT</u>		
	From World Bank	Rs.441.68	(68.88%)
	From S.D.C.	62.40	(9.72%)
	From State Government	137.17	(21.40%)

The outlay proposed under VIII Five year plan is 128.28 crores including Rs. 7.9 crores under State sector and Rs. 5.18 crores under Zilla Parishad for Special Component Plan and Rs.34 lakhs for tribal sub-plan. Out of the total outlay of Rs.128.28 crores, outlay for National Sericulture Project (Karnataka Sericulture Project-II) is Rs. 43.825 crores. Schemewise outlay for the VIII Five year plan and annual plan 92-93 is furnished in Annex-I. The Karnataka Sericulture Project-II envisages strengthening of the breeding stations (P2 Farms, P2 and P1 Grainages), strengthening of extension services including advisory services for reeling technology, strengthening of training schools for providing training in all aspects of reeling, establishment of Chawki Rearing Centres in seed area, support for privatisation of chawki Rearing Centres and dry land mulberry cultivation. Besides it also supports providing working capital to the 10 Model Grainages established under Karnataka Sericulture Project-I and support to the Karnataka State Sericulture Development Institute.

The other important programmes envisaged during the VIII Five year plan are:

1. Disease control programme:

Silkworms which are domesticated are easily susceptible to diseases caused by virus, Bacteria, Fungus and Nosema bombycis. Sericulturists loose silkworm crops on account of these diseases. There have been outbreak of diseases and loss of all crops on large scale in sericulture villages. If mass disinfection is not undertaken the population of pathogen would increase and spread to all the rearing houses in the villages and also to the mulberry garden. To arrest this, thorough mass disinfection of all the rearing houses and rearing equipments of the Sericulturists has to be undertaken by the Department. The silkworm is also attacked by a Dipteran insect, the uzifly. Damage caused by this insect is considerable. The estimated loss due to uzifly infestation is about 20%. The measures advocated to prevent and control the uzifly infestation are:

1. Use of Nylon net
2. Use of Uzicide

Besides the maggots of the uzifly which fall from the cocoons in the Coccon Market have to be collected and destroyed.

2. Training, Publicity, Exhibition, Study tour, Books and periodicals, subsidy for construction of rearing/reeling sheds/machineries:

To provide required advisory services through Audio-visual aids, by organising field days, exhibition and by providing adequate training in garden and rearing

management, prevention and control of diseases and the system of plantation, harvesting and marketing of cocoons and cocoon reeling. Independent rearing houses particularly for rearing, bivoltine silkworms is a must. Strengthening of reeling activity in new areas is being given priority to ensure systematic growth of the sericulture industry in those areas. To promote these activities subsidy will be given for construction of rearing houses and reeling sheds.

3. Supply of Saplings :

Mulberry is mainly propagated through cuttings. This has resulted in large number of gaps resulting in the reduction in the plant population in a unit area. The gestation period is about 5 months. To ensure that all the plants planted sprouts and do not fail, besides reducing the gestation period to 3 months, it is programmed to raise mulberry saplings in Government Silk Farms and to supply the saplings to the Sericulturists.

4. Incentive for Bivoltine cocoons and Silk:

During the VIII Five year plan, it is planned to increase the Bivoltine cocoon and silk production. By end of the VIII Five year plan the annual production target of Bivoltine silk is 850 metric tonnes. It is also necessary to ensure that adequate quantity of Bivoltine seed cocoons is produced. Rearing of Bivoltine silkworms involves risks since they are more prone to diseases and need careful attention and improved practices. To encourage the sericulturists to take up Bivoltine silkworm rearing and Bivoltine cocoon reeling it is proposed to provide incentives to them.

5. Co-operative societies :

To support the development of the industries through Co-operative organisations (both by NCDC and Co-operatives) it is programmed to organise Co-operative societies for both rearing and reeling.

6. CLUMP

Under the project, sericulture will be taken up in 14 mandals of 5 Districts in about 740 hectares with an outlay of Rs.6.002 crores. This project is spread over a period of 4 years. In 5 mandals of 2 Districts it is programmed to introduce silk reeling units.

Under the project it is proposed to provide assistance for supply of rearing equipment, construction of rearing houses through credit programme, assistance to SC sericulturists, besides infrastructure facilities such as Chawki Rearing building would be constructed to rear the young silkworms under hygienic condition and the farmers will be trained in mulberry cultivation and silkworm rearing.

Outlay provided during the VIII Five year plan is Rs. 6.00 crores, of which Rs.1.20 crores is towards Special Component Plan under CLUMP.

7. Special Component Plan and Tribal Sub-Plan :

Sericulture industry which plays an important role in alleviating unemployment and rural poverty plays a major role in the upliftment of the farmers belonging to SC and ST. Programmes such as Community Development Centres, Irrigation facilities, training, supply of mulberry saplings, supply of rearing and reeling equipments are proposed to be implemented during the VIII Five year plan. Outlay set apart for Special Component Plan is Rs. 12.55 crores and for Tribal sub-plan the outlay set apart is Rs. 0.34 crores.

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ABSTRACT OF SCHEMES AND OUTLAY

Sl. No.	Name of the scheme	Outlay (Rs. in crores)	
		Eighth plan	Annual plan 92-93
1.	Farms	1.122	0.175
2.	Karnataka Sericulture Project- World Bank Assistance- Phase-I	0.005	0.005
3.	K.S.P - W.B.A - Phase -I, Civil works including Cold storages	0.050	0.050
4.	Control of Diseases and pest (uzi)	0.300	0.060
5.	Incentives for Bivoltine Rearers and Reelers	10.254	1.095
6.	Buildings - Minor works	3.250	0.450
7.	Capital works under Sericulture industry	0.850	0.200
8.	Publicity, Exhibition, Study tour, books and periodicals.	0.620	0.100
9.	Special component plan	6.170	1.420
10.	Bonus to cocoons produced in Mysore saeed area	7.170	1.200
11.	Loans for establishment of Co- operative Filature factories (NCDC)	0.050	0.050
12.	Margin money to Filature Co- Operatives (NCDC)	0.050	0.050
13.	KSP - World Bank Assistance, Phase- II, Salaries & Operation cost	32.225	7.255
14.	KSP-WBA Phase-II, Civil works	11.350	5.040
15.	KSP-WBA - Phase-II, Special conve- yanance advance to Employees of Sericulture Department.	0.250	0.100
16.	Grant-in-aid to KSSDI	1.221	0.200
17.	Maintenance Cold Storage Plants	2.442	0.400
18.	CLUMP	4.800	0.420
19.	CLUMP -Special Component Plan	1.200	0.100
STATE SECTOR TOTAL		83.379	18.37
ZILLA PARISHAD SECTOR		45.000	8.50
TOTAL		128.379	26.87
Special Component Plan Under Z.P.Sector		5.180	0.98
Tribal sub-plan under Z.P. sector-		0.340	0.06

XIII.E - MINING

The State has been carrying out systematic survey and assessment of various minerals in different parts of the State. Emphasis has been on copper ores, ferrous group of minerals, bauxite, limestone and other refractory and industrial non-metallic minerals. These activities have been carried out under the changing conditions in mineral technology and new discoveries made through the Mineral Development Schemes during the plan periods. The progress achieved during the 7th plan periods are briefly indicated below:

During the 7th plan period, the following Mineral Development Schemes were in operation:

- A. Survey and Assessment of Ferrous Minerals in the State.
- B. Exploration of Sulphide Zones in the State.
- C. Exploration of Laterite Deposits.
- D. Survey and Assessment of Ornamental Stone in the State.
- E. Lime and Limestone Industries in the State.
- F. Survey and Assessment of Refractory Raw-materials in the State.
- G. Exploration of Precious and Semi-Precious Stones in the State.

Progress achieved.

During 7th Five year plan period ending 1989-90, the progress achieved by regional scale is 19,500 Sq.kms. large scale mapping is 4075 hectares prospecting by opening of pits and trenches is 1700 cu.mts. of excavation and under diamond drilling exploration, 22,000 m. of drilling. Further, during the year 1990-91 the progress achieved under plan schemes is 5506 sq. kms. of regional survey, 500 hectares of large scale mapping and 4375m. of diamond drilling exploration for various minerals.

The investigations carried out during the 7th plan period have brought to light some promising iron ores, containing high values of titanium and vanadium in parts of Mysore District and deposits of low grade chromite in parts of Hassan District. Preliminary survey indicates copper and sulphide mineralisation in parts of Bijapur and Dharwad Districts. Diamond drilling exploration has established copper mineralisation at deeper levels at Ingaldhal. Vast resources of limestone in parts of Chitradurga, Gulbarga and Bijapur Districts have been demonstrated through drilling exploration. Semi-precious quality ruby corundum areas have been indentified in parts of Mysore, Mandya and Tumkur Districts. Under refractory scheme promising deposits of magnesite and steatite have been located in Mysore, Bellary, Dacoga and Tumkur Districts. Important deposits of pink porphyry, multi-coloured granite, black granite and grey granite have been located in parts of Bangalore, Kolar and Mysore districts.

For the plan period as a whole the physical progress has been in excess of the targets indicated in the plan programme. The ^{existing} target (34,000 r.) could not be fully achieved due to shortage of spares. The methodology adopted in mineral exploration during 7th plan period has proved satisfactory.

PROJECTS AND SCHEMES FOR 8TH PLAN

Mineral exploration and identification of mineral and ore resources precisely in relation to changing trends in the corresponding industries is a continuous process. This involves continuation of the projects or schemes over a few years. This is also partly due

to the nature of the geological investigations. In view of this and necessity for identifying new group of minerals and deposits, the schemes of the 7th plan period have been continued in order to fulfill the commitment of implementation of mineral survey, exploration and investigation of uncovered areas in the State. It is intended to take up investigations under 6 new schemes under plan involving an outlay of Rs.145.00 lakh for the 8th plan period. And the two schemes which are on-going schemes under plan involves an outlay of Rs.205 lakhs.

Budget for the 8th plan period:

The budget for the 8th plan period is Rs.350.00 lakhs. The split up details are:

- A) Continuation of on-going schemes : Rs.205 lakhs
 B) New schemes : Rs.145 lakhs.
- (i) Survey and assessment of sand deposits.
 - (ii) Geophysical/Aeromagnetic survey and investigation of mineral deposits.
 - (iii) Ceramic and glass mineral deposits.
 - (iv) Establishment of publication wing in the Department.
 - (v) Creation of mineral conservation cell in the Department.
 - (vi) Environmental geological wing of the Department.

ON-GOING SCHEMES

1. Strengthening of the Mineral Wing of the Department of Mines and Geology.

This scheme was implemented during 1990-91 by restructuring the Department without sanction of any additional staff. The outlay provided was utilised

for creating infrastructure facilities like opening of the check-posts, establishment of the new district offices etc. After restructuring of the Department and observing the progress made, it has been found necessary to strengthen the Department, so as to have effective conservation of the minerals by proper administration at the district and taluk level. A provision of Rs.200 lakhs has been made towards strengthening of the mineral wing of the Department, out of which recurring expenditure will be Rs.180.00 lakhs and Rs .20.00 lakhs will be towards non-recurring expenditure.

2. Training of officers and staff of the Department:

This scheme proposed to give training to officers and staff of the department in advanced techniques and administrative measures. This schemes has been sanctioned by the Government. The budget allocation is Rs.5.00 lakhs for the 8th plan period.

NEW SCHEMES

1. Survey and Assessment of sand deposits in the State:

Vast reserves of sand is found in the State. However they have not been categorised into constructional and industrial sands. There is an indiscriminate use, and erosion of due revenue to Government. It is necessary to categorise sand for effective use and conservation. Hence the scheme is proposed with budgetary outlay of Rs.35.00 lakhs for 8th plan period.

2. Geophysical/Aero magnetic survey and Investigation of mineral deposits in the State.

Geophysical/Aeromagnetic survey methods are effective tools in deciphering the extent, size and shape of concealed mineral deposits and also of partially exposed ore bodies. The knowledge will greatly help in planning further intensive exploration and specific targeting. As such the scheme has a budget outlay of Rs.35.00 lakhs for the 8th plan period.

3. Investigation of Ceramic and glass minerals in the State:

Ceramic and glass industries in the State is not very well established because of the reasons of non-availability of correct and scientific information of the minerals used in the ceramic and glass industry. There are good number of clay and quartz deposits which have to be explored in detail. The investigation of these minerals is all the more important because of the proposed Vijayanagar Steel Plant. The scheme has an outlay of Rs.25.00 lakhs for the 8th five year plan period.

4. Establishment of publication wing in the Department of Mines and Geology:

The Department over the years has accumulated enormous technical data generated as a result of various mineral and groundwater explorations. Synthesis and publication of these data are vital for future exploration, programmes, development of any mineral deposit/industry or groundwater area etc. This would also facilitate exchange of knowledge among professional organisations. Hence the scheme has an outlay of Rs.15.00 lakhs for 8th five year plan period.

5. Creation of Mineral Conservation Cell of the Department of Mines and Geology:

It has been decided to open mineral conservation cell in the Department during 8th plan period. This scheme finds methods utilising minor mineral rejects and assess associated valuable minerals from major and minor mineral rejects, for improving the quality of processed ores/minerals. In this connection, it has been informed that many State Government Departments of Mines and Geology have already opened such cells and started functioning on the above lines. This cell will not only conduct surveys and suggest ways and means to preserve the valuable mineral rejects but also interact closely with Indian Bureau of Mines in this task. Apart from field monitoring, the cell would also carry out mineral beneficiation tests to suggest means for improving the quality of minerals/rejects.

Financial implication for the scheme during 8th five year plan period is Rs.20.00 lakhs,

6. Environmental Geological Wing of the Department:

Importance of preservation of environmental/ecological conditions in and around extensive mining and quarrying areas are vital for planned development and exploitation of mineral wealth. The study of environmental impact of establishment of industries, atomic and thermal plant require special attention. This new scheme has a budget outlay of Rs.15.00 lakhs for the 8th five year plan period.

8TH FIVE YEAR PLAN AND PROPOSALS FOR ANNUAL PLAN
1992-93. BUDGET OUTLAY (STATE SECTOR).

Sl. No.	Name of Scheme	(8th Five year Plan) Proposed out-lay for 1992-97.	(R. in lakhs) Proposed out-lay for 1992-93.

Budget Head: <u>2853 Non-Ferrous Mining & Metallurgical Industries:</u>			
A. <u>On-going Plan Schemes:</u>			
1.	Strengthening of the Mineral Wing of the Department of Mines and Geology.	200.00	30.00
2.	Training of Officers and Staff of the Department	5.00	1.00
B. <u>New Schemes under Plans:</u>			
1.	Survey and Assessment of Sand deposits in the State	35.00	3.00
2.	Geophysical/Aero Magnetic Survey & Investigation of Mineral deposits in the State	35.00	25.00
3.	Investigation of Ceramic & Glass minerals in the State	25.00	3.00
4.	Establishment of Publication Wing in the Department	15.00	3.00
5.	Creation of Mineral Conservation ^{Cell} of the Department of Mines and Geology.	20.00	3.00
6.	Environmental Geological Wing of the Department	15.00	2.00
	TOTAL	350.00	70.00
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DIRECTOR OF MINES AND GEOLOGY.

XIII-E, Karnataka State Bureau of Public Enterprises

1) There are 61 Public Sector Enterprises in the State which are either statutory organisations or enterprises in which the share of the State Government is more than 51% of the total paid-up share capital. The classification of these Public Sector Enterprises under different categories are as given below.

<u>Category</u>	<u>No. of PSEs</u>
1. Development Enterprises	19
2. Service Enterprises	8
3. Marketing Enterprises	5
4. Production Enterprises	22
5. Companies formed under Special Status.	4
6. Deemed Government Companies	3

	61

2) The three major areas of operation of the Karnataka State Bureau of Public Enterprises are: (i) Recruitment and Training of the executives of the Public Sector Enterprises; (ii) Investment Appraisal-examination of the proposals relating to the investment of Rs.50.00 lakhs and above of the Public Sector Enterprises; and (iii) continuous Monitoring of the performance of the Public Sector Enterprises.

3) During the VII Plan period, 25 indepth studies were conducted with an outlay of Rs.14.69 lakhs as against a programme of 28 indepth studies with an outlay of Rs.23.59 lakhs respectively.

4) Under Training 169 programmes were organised with an outlay of Rs.22.48 lakhs as against a target of 219 programmes with an outlay of Rs.36.93 lakhs. Rs.6.99 lakhs were spent as against a programme of Rs.19.38 lakhs under Machinery and Equipment.

5) Further during 1990-91, 2 indepth studies were conducted and 24 Training Programmes were organised. The expenditure incurred under the following three Schemes are given as follows:

TABLE-I

Rs. in lakhs

Sl. No.	Name of the ongoing Scheme	Outlay	Expr. incurred
1	2	3	4
1.	Payment of Professional and Special Services	4.00	3.10
2.	Training	5.00	6.75
3.	Machinery and Equipment	2.00	0.94
	Total	11.00	10.79

6) Further during 1991-92 upto ends of October 1991 the Programme and progress under each scheme is given below.

Rs. in lakhs

Sl. No.	Name of the Scheme	Outlay for 1991-92	Expenditure incurred upto Oct. 1991.
1.	Payment of Professional and Special Services	5.00	1.43
2.	Training	5.00	1.58
3.	Machinery & Equipment	3.00	0.51
Total		13.00	3.52

7) During the year 9 Training Programme were organised in collaboration with reputed institutions.

For the VIII Five Year Plan i.e., 1992-97 Karnataka State Bureau of Public Enterprises has prepared a programme for an outlay of Rs.75.00 lakhs as communicated by the Planning Department through D.O. letter No.PD 102 CEP 91 dated 14.11.91. The details of the proposed outlay under different heads/Schemes are given below;

TABLE-II

Rs. in lakhs

Sl. No.	Name of the on-going Scheme.	proposed outlay for the year 92-97	Total
1.	Research and Development (Professional and Special Services)	20.00	20.00
2.	Training	40.00	40.00
3.	Other Expenses (M&E)	15.00	15.00
Total		75.00	75.00

I. RESEARCH AND DEVELOPMENT: One of the major functions of the Bureau is to monitor the performance of the Public Sector Enterprises in the State on periodical basis and recommend to Government such action as may be necessary for the improvement of the Public Sector Enterprises. In pursuance of this, the Bureau has been operating the Computerised Monitoring Information System with a view to monitor the performance of the Public Sector Enterprise. The monitoring process will indicate areas of weakness in the Management function in Public Sector Enterprises which require further detailed study. These studies go into all aspects of the physical and financial performance of the Public Sector Enterprises in question and suggest remedial measures to improve their overall performance. These studies are entrusted by the Bureau to reputed organisations.

8) During VIII Plan period, Karnataka State Bureau of Public Enterprises has planned to take up about 40 Indepth studies with an approximate outlay of Rs.20.00 lakhs by reputed consultants.

9) Besides taking up Indepth Studies, the K.S.B.E. also brings out various publications viz. Annual Reports on the performance of Public Sector Enterprise, bringing out 'STATE ENTERPRISE'. Quarterly Magazine and other Publications useful to the Public Sector Enterprises.

10) II TRAINING: Bureau conducts Training Courses and Seminars for the benefit of the executives of Public Sector Enterprises at different levels in several lines of activities and specialisation to improve their management skills and other capabilities. These Training Programmes are organised by the Bureau in collaboration with reputed Institutions and individual consultants.

It also conducts In-house Training Programme specially for the executives of particular Public Sector Enterprises, not only to familiarise them with the advanced techniques available in various fields, but also to evolve a system in adopting such advanced techniques suited to their environment for better productivity and profitability.

11) An outlay of Rs.40.00 lakhs is proposed with a plan to conduct 190 Training Programmes during the VIII Five Year Plan period i.e., 1992-97.

12) III. OTHER EXPENSES: Bureau has proposed to upgrade the existing Computer System by increasing the capacity of the existing system by purchasing a new PC-AT Computer and also a high speed printer for the implementation of the revised Monitoring Information System for compiling the data required for the preparation of Annual Reports and Quarterly Reports of the Bureau and operation of executive placement service for the benefit of the Public Sector Enterprises. It has also proposed to incur certain amount for the development of Soft-ware by specialist firms in the market and on the annual servicing of the Computer, its maintenance and purchase of stationeries etc.

13) Besides the above, the Bureau is planning to get the office equipments like photo copier, film projector and public address system for conducting Training courses and seminars for the benefit of the executive of Public Sector Enterprises.

14) An outlay of Rs.75.00 lakhs is earmarked for the Eighth Five Year Plan period i.e., for 1992-97 for the above purpose.

BRIEF WRITE UP ON THE

ANNUAL PLAN 1992-93

(i) RESEARCH AND DEVELOPMENT:

15) During the year 1992-93 Karnataka State Bureau of Public Enterprises has Planned to identify continuous loss making public sector enterprises and to take up 8 indepth studies by reputed institutions with an intention to improve the performance of Public Sector Enterprises. An amount of Rs.4.00 lakhs is earmarked to meet the expenditure on this account.

(ii) TRAINING:

16) Bureau has programmed to conduct 25 Training Programmes for the Middle and Senior level executive personnels for better production and management in Public Sector Enterprises by reputed organisations and expert consultants in various fields like Management, Production and Computerisation etc.

17) An outlay of Rs.8.00 lakhs is proposed during the year 1992-93 by the Bureau for arranging these Training Programmes.

(iii) OTHER EXPENSES:

(Machinery and Equipment)

Monitoring Information System is being developed under Computer. Hence the existing system is to be get improved. To upgrade the existing Computer System, Bureau has planned to purchase a low PC-AT Computer and also a high speed Printer. Hence an amount of Rs.3.00 lakhs is earmarked to meet the expenditure for the above purpose.

XIV.A. PORTS & LIGHT HOUSES

The Karnataka Ports and Inland Water Transport Department functions in the field of Nautical Technology with the objective of -

- i) conservancy, management and development of Ports for safe, efficient and faster handling of cargo imported / exported and safe Navigation at all times and all tides;
- ii) management / operation of the ferries and Inland waterways in the State with special emphasis on the safety to life and property aimed at providing and improving communication network in the backward rural areas.

The State has a maritime coastline of 287 Kms which runs along Uttara Kannada and Dakshina Kannada Districts comprising thirteen Minor Ports and 1 Major Port at New Mangalore. Out of the thirteen Minor Ports under the control of State Government, nine ports viz .- Karwar; Belekéri; Tadri; Honnavar and Bhatkal in Uttara Kannada and Kundapura; Hangarkatta; Malpe and Mangalore Old Port in Dakshina Kannada District have been taken up for intensive development under Plan programme in consideration of their relative importance and import / export traffic potential. Karwar Port, is functioning as an All Weather Port. The remaining eight Minor Ports are functioning as fair weather Lighterage Ports with the development schemes already executed. All these Ports have all the basic facilities such as cargo handling facilities; transit sheds; office buildings; staff quarters; navigation aids; water supply and electricity. In addition, the Department has acquired Tugs for towage services and cranes for cargo handling, and a dredging unit for maintenance dredging and a water barrage for supply of potable water to ships at anchorage and at berths.

Consequent to the developments, the Ports in the State have now handling capacity in the order of 12 lakhs tonnes per annum comprising both foreign and coastal cargo traffic.

REVIEW OF SEVENTH FIVE YEAR PLAN AND ANNUAL PLANS 1990-91 & 1991-92

The Seventh Five Year Plan outlay for development of Ports was Rs. 2800.00 lakhs. During the Seventh Five Year Plan the priority was for completion of on-going schemes spilled over from sixth Five Year Plan for development of Karwar Port. The 1st stage development under implementation during the Sixth Plan and Seventh Plan involved provision of the general cargo berths, capital dredging, construction of transit sheds, Procurement of crane and Tug; Navigational Aids and Other matching facilities etc.

The Old Mangalore Port was managed by an autonomous body till 1980. Hence till the commencement of Seventh Plan no developments were contemplated.

During the Seventh Five Year Plan considering the immediate needs due to growing demand by the fishing community and shippers to provide additional improved facilities in view of the steep increase in the traffic and decrease in the depth of water in the Navigable channels at the Port, this Port was included in the Seventh Five Year Plan for development at an estimated cost of Rs. 12.50 crores. The main items and work included were construction of wharf, breakwaters, dredging and other matching facilities.

The total of yearwise allocation in the Seventh Five Year Plan period was Rs. 2113.00 lakhs and the expenditure incurred was Rs. 960.00 lakhs. Out of this, the expenditure for development of Karwar Port was

Rs. 792.00 lakhs and Mangalore Port was Rs. 155.00 lakhs.

In the Annual Plan, 1990-91 a total outlay of Rs. 309.00 lakhs was provided for development of Ports. A total sum of Rs. 202.96 lakhs was spent for development of Ports during the year 1990-91.

The problems in availability of cement, technical problems in undertaking underwater rock blasting and dredging at the Ports situated at the mouths of the rivers, non-availability of suitable dredgers for some peculiar types of difficult dredging at some ports etc., were some of the chief bottlenecks faced during the Seventh Plan & 1990-91 in the development of these ports.

The allocation provided during 1991-92 is Rs. 350.00 lakhs. Out of this, an amount of Rs. 160.00 lakhs is proposed to be spent on Karwar Port, Rs. 181.00 lakhs on Old Mangalore Port and the balance amount of Rs. 9.00 lakhs would be spent for development of other minor Ports.

EIGHTH FIVE YEAR PLAN AND ANNUAL PLAN 1992-93

During Eighth Five Year Plan an Outlay of Rs. 1750.00 lakhs for development of Ports has been proposed. In this provision of Rs. 230.00 lakhs is for procurement of dredger; a crane and a survey launch and Rs. 360.00 lakhs for dredging and the remaining outlay is mainly for construction of wharves; breakwaters and other matching facilities.

The broad thrust during the Eighth Five Year Plan will be to concentrate on completion of on-going schemes spilled over from Seventh Five Year Plan for

Karwar and Karwar and Mangalore Ports. The Development schemes proposed during the Eighth Five Year Plan for Karwar Port will focus on the efficient utilisation of facilities already created to cater to the increasing traffic needs as projected by NCAER and further anticipated more traffic with the establishment of Project Seabird; Nuclear Power Station at Kaiga and Konkan Railway.

The Eighth Five Year Plan aims to respond to the needs of the shipping interests and fishing community to improve the depths over sand bar and channel by constructing suitable breakwaters at Karwar and Old Mangalore Ports and also aims to construct shallow draft wharves at Malpe and Belekeri Ports.

The schemes proposed to be included in the Eighth Five Year Plan with the proposed outlays are indicated as below.

1. DIRECTION AND ADMINISTRATION

A provision of Rs. 5.00 lakhs is made for strengthening technical and administrative wings of the Department due to increased activities of the department during the Seventh Plan and proposed developments in Eighth Plan. It is proposed to procure 2 Jeeps for efficient implementation of plan scheme works at an estimated cost of Rs. 5.00 lakhs.

2. DEVELOPMENT OF KARWAR PORT

An outlay of Rs. 460.00 lakhs is proposed for development of Karwar Port. Some of the schemes such as construction of along-side cargo berth, capital dredging, construction of Transit shed and staff

quarters contemplated in the 1st Stage Development of Karwar Port have been completed during Sixth and Seventh Plan periods.

The balance works such as construction of southern breakwaters, construction of administrative office, workshop included in the 1st stage Development which could not be taken up for various reasons are proposed as spill-over schemes in Eighth Plan and will be completed besides improving the depths and widths of the Channel etc. by undertaking dredging and underwater rock blasting.

DEVELOPMENT OF MANGALORE PORT (OLD)

An allocation of Rs. 940.00 lakhs is proposed for development of Mangalore Port (Old). The first Stage development of the Mangalore Port envisages to develop the Port for providing 255 metres long wharf to cater to 4.3 metres draft sailing vessels, 2 break waters, dredging; essential buildings and other matching facilities. The work on construction of wharf has been commenced from June 1989. The work on construction of Breakwaters has been commenced from January 1991 and the work is in progress. Dredging is the main component of this project which will be commenced when the construction of wharf and Breakwaters are nearing completion. For undertaking dredging tenders have already been invited. The spill-over schemes will be completed with the provisions made during the Eighth Plan.

4. DEVELOPMENT OF KUNDAPURA PORT

An outlay of Rs. 75.00 lakhs is proposed for development of Kundapura Port. Due to insufficient

depth of water available at sand bar it is proposed to provide shore protection works to train the flow and to maintain the minimum depth in the channel during all times.

The provision made in the new schemes are for sub soil investigation and model studies including Hydrographic survey and to provide shore protection works to train the flow and to undertake dredging for safe Navigation.

5. DEVELOPMENT OF HONNAVAR PORT

An outlay of rs. 75.00 lakhs is proposed for development of Honnavar Port. Due to insufficient draft available at the sand bar, frequent boat accidents are being occurred and there are many instances of loss of lives and properties. It is proposed to train the flow of water from river by providing shore protection works initially. Also provision is made for dredging for safe Navigation of the Port.

6. DEVELOPMENT OF BELEKERI PORT

An outlay of rs. 90.00 lakhs is proposed for this Port. There are growing demands by the shippers to provide improved facilities in view of the steep increase in the ore traffic through this port. The streamers calling at this port are mainly foreign going ones. This Port is one of the main ore exporting port in the State. In consideration of the above, provisions have been made for sub soil investigation, hydrographic survey, construction of 100.00 metres long wharf and dredging etc.

7. DEVELOPMENT OF TADRI PORT

An outlay of rs. 2.00 lakhs is provided. This port

has been declared as one of the important ship breaking ports and sand exporting by coastal sailing vessels. The provision is to provide hard surfacing to wharf area.

8. DEVELOPMENT OF BHATKAL PORT

This is one of the Main fishing port in the Stage. A provision of Rs. 5.00 lakhs is made for sand stone dredging.

9. DEVELOPMENT OF HANGARAKATTA PORT

This is one of the important sailing vessel traffic port. During Eighth Plan a provision of Rs. 8.00 lakhs has been made to construct R.C.C. jetty.

10. DEVELOPMENT OF MALPE PORT

An outlay of Rs. 85.00 lakhs is proposed to the Malpe Port. This Port has been developed as an important fishing harbour under Centrally Sponsored Schemes. In addition, there is a growing improvement in the sailing vessel traffic of construction materials like granite stone, metal, sand, steel, cement etc. to Lakshadweep Islands through this Port. It is proposed to construct a wharf of 100 metres long and carry out sub soil investigation, dredging etc.

In the Annual Plan 1992-93 a sum of Rs. 350 lakhs is proposed to be allocated for development of following Ports in the State.

Sl.No.	Name of the Port	Allocation proposed (Rs. lakhs)
1.	Karwar	214.00
2.	Honnavar	0.50
3.	Kundapur	0.50
4.	Belekeri	1.00
5.	Bhatkal	0.50
6.	Tadri Port	0.50
7.	Malpe	0.50
8.	Hangarkatta	0.50
9.	Old Mangalore Port	132.00
	Total -	<u>350.00</u>

Dredging at different Ports, construction of Administrative Office Building and guest house at Karwar Port, Construction of Breakwaters at Old Mangalore Port, etc. are the highlights of the Annual Plan 1992-93.

ESTIMATES EMPLOYMENT GENERATION DURING EIGHTH PLAN

The above schemes would generate direct on site employment of about 10,84,850 man days and generate indirect wage employment to the tune of about 14,28,000 man days.

XIV - B.1

B.ROADS AND BRIDGES

SEVENTH FIVE YEAR PLAN

During the Seventh Five Year Plan an amount of Rs.127.10 crores was earmarked for the development of Roads and Bridges in the State. Out of this Rs.46.20 crores is for the State Sector Schemes and the balance amount of Rs.80.90 crores is for Zilla Parishad Sector Schemes. The yearwise grant and expenditure during the Seventh Plan is as shown below:

	Rs. Crores	
<u>Year</u>	<u>Grant</u>	<u>Expenditure</u>
1985-86	24.33	24.34
1986-87	31.00	28.48
1987-88	26.00	22.48
1988-89	30.66	24.86
1989-90	<u>30.66</u>	<u>32.76</u>
Total:	<u>142.65</u>	<u>132.92</u>

Out of an expenditure of Rs.132.92 crores for Seventh Plan, Rs.35.11 crores is spent on State Sector Schemes and the balance amount of Rs.97.81 crores is on Zilla Parishad Sector Schemes, including an expenditure of Rs.51.91 crores for development of rural roads.

XIV - B-1

XIV - B.2

The Physical targets and achievements during the Seventh Five Year Plan in respect of following major schemes are as follows:

Sl. No.	Name of the Scheme	Unit	Seventh Plan	
			Target	Achievement
I. STATE HIGHWAYS AND MAJOR DISTRICT ROADS:				
a.	Formation and Improvements to roads.	Kms.	790	494
b.	Asphalting of roads.	Kms.	520	481
c.	Bridges	Nos.	200	150
II. ZILLA PARISHAD SECTOR SCHEMES:				
a.	Formation and Improvements to roads.	Kms.	800	1059
b.	Asphalting of roads	Kms.	400	502
c.	Bridges	Nos.	100	332
d.	Minimum Needs Programme	Nos.	600	408
e.	Halli Heddari	Nos.	100	123
f.	Sethubandana			
g.	Master Plan for Rural Roads, 1st Phase CD Works	Nos.	1300	1073
h.	Approach roads to Harijanwadas	Kms.	700	1056
i.	Tribal Sub-Plan	Kms.	90	125

ANNUAL PLAN 1990-91:

The provisional expenditure was Rs.3681.79 lakhs. Out of this Rs.1033.94 lakhs is for State Sector Schemes and Rs.2647.85 lakhs for Zilla Parishad Sector Schemes.

ANNUAL PLAN 1991-92:

During 1991-92 the likely expenditure would be Rs.5027.67 lakhs. Out of this Rs.1150.00 lakhs for State Sector Scheme and the balance amount of Rs.3877.67 lakhs is for Zilla Parishad Sector Schemes.

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EIGHTH FIVE YEAR PLAN

Transport is an essential economic infrastructure for the rapid development of any region. Development of Roads and Bridges play an important role for location of Industry, development of backward areas, decentralisation of economic activities, better distribution of the projects both industrial and agricultural, better maintenance of law and order and defence. It is pre-requisite for Economic and social development.

Karnataka State is served with all the 4 type of transport viz., Waterways, Airways, Roadways, and Railways. However, the Waterways, the Airways and Railways are inadequate. Roadways occupy predominant role in the transport system in Karnataka.

During the Eighth Five Year Plan, it is proposed to take up construction of Express ways or atleast 4 lane or 2 lane roads on State Highways having heavy density of Road density of Road Traffic.

It is therefore required to draw a Road Development Programme pin pointing various growth centres, corridors of Industrial and Agricultural growth to take up road development during the Eighth Five Year Plan and Annual Plans.

Considering the financial restraints, it may not be possible to develop all the existing State Highways, we have to identify the high density corridors of Industrial and Agriculture growth and Develop the same in the first phase. We have identified some Districts in the State Like, Bangalore Dakshina Kannada, Dharwar, Mysore, Belgaum, Raichur which are undergoing rapid Industrialisation, resulting

in heavy traffic density on some of the leading to these districts which call for further development of roads to 4 lane standards to smmothen the flow of traffic.

In this direction, the Central Government have already taken steps to 4 laning the National Highways in the State and the National Highway No.4, is already converted into 4 lane from Bangalore for a length of about 30 Kms.

The Districts mentioned above account for 76.61% of the total industries in the State. Bangalore District alone has 39.71% of industries.

The following heavy density corridors on State Highways, have been identified which connect different district head quarters where there is substantial industrial growth etc., as already mentioned.

1. Bangalore-Mysore road via Mandya.
2. Bangalore-Mysore road via Kanakapura.
3. Yelahanka-Hindupura road.
4. Mysore-Gundlupet road.
5. Mysore-Buntwal road via Hunsur.
6. Hospet-Mangalore road.
7. Raichur-Bachi road via Lokapur and Yeraghatti.
8. Bangalore-Anekal road via Bannerughatta.
9. Belgaum-Yellapur road.
10. Highway connecting Sindhanoor-Raichur with Bachi.
11. Bidar Humvad.
12. Bangalore-Magadi-Huliyurdurga road.
13. Highway connecting Jeewargi with Sankeshwar.

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The Bangalore Mysore road is a heavy density corridor with a PCV of about 19721 and is being considered for converting into express way.

The Other Highways mentioned above can be atleast thought of being developed into 4 lane roads/2 lane roads to relieve the traffic congestion and to allow for the smooth and rapid movement of both raw materials required for the factories located, but also to afford quick transportation to the industrial outputs and the agriculture outputs to the markets/ export centres.

However, due to the paucity of funds, the above roads cannot be taken up for improvements in one stretch.

The Eighth Five Year Plan outlay for Roads and Bridges is Rs.282.05 Crores out of this Rs.60.90 crores is for State Sector Schemes and Rs.221.15 crores earmarked for the Zilla Parishad sector schemes.

The Scheme-wise details of Eighth Plan outlay for Roads and Bridges are as shown below:

I. STATE SECTOR SCHEMES:

1. Formation and Improvements to Roads:

Forming and improving geometrics, widening and formation of existing roads, strengthening of sub-ways and the carriageway, widening the single lane carriageway to two lan carriageway etc., Towards this an outlay of Rs.17.10 crores is proposed and the target is 350 Kms.

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2. Asphaltting of Roads:

To provide asphalt surface to new and existing roads and to re-chip carpetting to the existing roads, an outlay of Rs.10.00 crores is proposed with a target to cover 300 Kms.

3. Bridges:

It is proposed to take construction of new Bridges/culverts, improvements to existing bridges and culverts on State Highways and major district roads. Towards this, an outlay of Rs.25.00 crores is proposed with a target to cover 150 bridges and culverts.

4. Railways Safety Works:

For construction of level crossings to over bridges and under bridges, on state highways and major district roads, an allocation of Rs.2.50 crores is proposed with a target to cover 6 over and under bridges.

5. Direction and Administration:

Establishment charges will be met out under this scheme and the outlay proposed is Rs.4.00 crores.

6. Machinery and Equipments:

In order to meet the requirement of purchase of new machineries and equipments for execution of works an allocation of 2.00 crores is proposed.

7. Surveys:

To collect field data required for the preparation of Roads and bridges projects, preparation of project reports design and estimates etc., a provision of Rs.0.10 crore is proposed.

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8. Roads Statistics:

To collect statistical data on roads and Bridges and publish reports, a provision of Rs.0.05 crore is proposed.

9. Plan Monitoring and Traffic Engineering:

To strengthen Traffic Engineering and Plan Monitoring Cell and to conduct engineering surveys and to detect defeciencies in road geometrics, collection of data on requirement of road science etc., and suggest suitable proposals, an allocation of Rs.0.10 crore is proposed.

10. Road Research:

To meeting the expenditure towards the road research work, undertaken by the Karnataka Research Station, a provision of Rs.0.05 crore is provided.

II. ZILLA PARISHAD SECTOR SCHEMES:

An allocation of Rs.221.15 crores is proposed under Zilla Parishad Sector Schemes. Out of this Rs.36.78 crores is for special component plan, Rs.3.23 crores for Tribal sub-plan and Rs.120.00 crores for MN.P. The following schemes are being taken up under Zilla Parishad Sector Schemes.

1. Formation and Improvements to roads:

To form new roads and to improve the existing roads.

2. Asphaltting of roads:

To provide asphalt surface to new and existing roads and re-chip carpetting etc.,

3. Bridges:

To take up construction of new bridges and culverts and improving the existing bridges and culverts.

4. Construction of roads in Sugar Factory Areas:

To take up construction and improvements to roads and CD works in Sugar Factory Areas.

5. Railway Safety Works:

For construction of Level Crossing and approach embankments to over bridges and under bridges on other district roads and village roads.

6. Minimum Needs Programme:

To provide all weather approach roads to villages having a population of 1000 and above.

7. Halli Heddari:

Under this scheme, it is proposed to provide approach roads to roadless villages having a population of less than 1000.

8. Master Plan for CD works:

Construction of CD works on Rural roads will be taken up under this scheme.

9. Sethubandana;

Under this scheme construction of cross drainage works will be taken up.

10. I.C.R.C. Roads:

Formation and improvements to existing I.C.R.C. roads with minor CD works to make them fair weather roads.

11. Approach roads to Harijanwadas:

All weather approach roads will be provided to Harijanwadas under special Component Plan.

12. Tribal sub-Plan:

All weather approach roads to tribal colonies/ areas are provided.

13. Construction of roads under Peoples Participation:

Under this scheme improvement/construction of rural roads will be taken up. In view of the limited resources available for roads and the great demand and need for construction by way of labour towards construction of roads is accepted. Wherever local people who are benefitted by the construction of roads come forward to participate in the construction by contributing labour component, such roads will get higher priority. The people's participation would be in the form of earthwork component upto a maximum of 25% of the estimated cost.

14. Asphaltting of roads in Village limits:

To provide asphalt surface within the village limits prevent dust nuisance and facilitate the rural traffic.

15. Direction and Administration:

To meet the establishment expenditure.

16. Machinery and Equipment:

To meet the requirement of purchase of new machinery and equipment for execution of road and bridge works.

17. Surveys:

For conducting surveys and for the preparation of project reports, designs etc.

ANNUAL PLAN 1992-93:

The total plan outlay for the year 1992-93 is Rs.5155.00 lakhs. Out of this Rs.1205 lakhs for State Sector Schemes and Rs.3950.00 lakhs for Zilla Parishad Sector Schemes.

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As against the outlay of Rs.3950.00 lakhs provided for Zilla Parishad Sector Schemes, the amount earmarked for the special component plan is Rs.657.00 lakhs, Tribal sub-plan is Rs.59.00 lakhs and Rs.2200 lakhs for Minimum Needs Programme.

In respect of State Sector Schemes, the amount provided is Rs.1205 lakhs for the year 1992-93.

The Schemewise break-up of outlay is as follows:-

Sl.No.	Scheme	(Rs.Lakhs) Proposed Outlay 1992-93
1.	Other road formation	330.00
2.	Asphalting of roads	250.00
3.	Bridges	450.00
4.	Railway safety works	50.00
	Total:	1180.00

SUPPORTING SCHEMES:

1.	Direction and Administration	85.00
2.	Machinery and Equipment	35.00
3.	Surveys	1.00
4.	Road Research	1.00
5.	Road Statistics	1.00
6.	Plan Monitoring and Traffic Engg.	2.00
	Total:	125.00
	Grand Total:	1205.00

PHYSICAL TARGETS-1992-93:

Name of the Scheme	Unit	Target 1992-93
1.Other road formation	Kms.	120
2.Asphalting	Kms.	150
3.Bridges	Nos.	60
4.Railway Safety Works	Nos.	1

KONKAN RAILWAY PROJECT

The Konkan Railway line is proposed from Mangalore to Bombay. A portion of railway line from Mangalore to Goa State Border via Udupi and Karwar comes in the jurisdiction of Karnataka State.

An agreement has been entered into between Government of India, Ministry of Railways and the State Governments. A joint venture company named 'Konkan Railway Corporation Ltd.,' is set up with an initial capital of Rs. 250.00 Crores with (15%) equity share of Karnataka State being Rs. 37.50 Crores, to be paid in 3 years. For the year 1990-91 it is Rs. 15.00 Crores. Yearwise break up is as follows:

1990-91	..	Rs. 15.00 Crores
1991-92	..	Rs. 15.00 Crores
1992-93	..	Rs. 7.50 Crores

An amount of Rs. 7.50 Crores is proposed in the Eighth Plan towards equity share of Karnataka. The entire amount is proposed to be provided during 1992-93.

NATIONAL HIGHWAYS

Development and maintenance of State Roads in the State under National Highways is brought about by implementing following schemes -

- 1) Works of Inter-State Importance which carry 100% Central Loan Assistance.
- 2) Works of Economic Importance with 50% Central Loan Assistance and balance 50% being met from the State Plan Funds.

RESEARCH SCHEMES

- 1) Central Plan Schemes on growth of Highway Traffic in different categories of Roads (100% Central Loan Assistance).
- 2) Studies on critical moisture content for evaluation of sub-grade strength for pavement (Scheme with 75% Central Aid).

WORKS COMPLETED DURING THE SEVENTH PLAN

During Seventh Plan one road work under Inter State Importance & three road works under Economic Importance have been completed.

INTER STATE IMPORTANCE

(a) ROAD WORKS

1. Improvements to Miriyan-Chincholi Road in Chincholi Taluk length of 15 KMs at an estimated cost of Rs. 9.50 lakhs is completed.

ECONOMIC IMPORTANCE

(a) ROAD WORKS

1. Improvements to Karwar-Hubli Road length of 7.75 KMs at an estimated cost of Rs. 35.00 lakhs is completed.

2. Improvements to Hubli-Sholapur Road length of 35 KM at an estimated cost of Rs. 200.00 lakhs is completed.
3. Improvements to Hospet-Mangalore Road length of 35 KMs at an estimated cost of Rs. 35.00 lakhs is completed.

ANNUAL PLAN 1992-93

One Bridge work under Inter State Importance, one road work and two bridge works under Economic Importance are likely to be completed during 1992-93.

BRIDGES

Construction of Bridges across Krishna River at Manjari on Gotur - Kagwad - Jewargi Sankeshwar Road in Chikodi Talu, Belgaum District is in progress. The estimated cost of the Bridge is Rs. 180.00 lakhs and is likely to be completed during the year 1992-93.

ECONOMIC IMPORTANCE

(a) ROAD WORKS

Development of Chickmagalur - Charmudi Section of Kadur - Mangalore State Highway length of 15 KMs at an estimated cost of Rs. 99.39 lakhs is in progress. The work will be completed during the year 1992-93.

(b) BRIDGE WORKS

1. Construction of Bridge across Hagari River on Bellary-Ananthapur Road is an progress. The estimated cost of the bridge is Rs. 115.27 lakhs. The work will be completed during the year 1992-93.
2. Construction of Bridge across Bhima river on Aghar-
ked - Mannur Road is in progress. The estimated cost

of the bridge is Rs. 92.49 lakhs. The work will be completed during the year 1992-93.

EIGHTH FIVE YEAR PLAN

The outlay proposed for National Highways is Rs.4010.00 lakhs for development of Hubli - Ankola Road which is an externally aided project with assistance from Asian Development Bank.

The works proposed under Inter State Importance and Economic Importance are important roads, connecting Inter States and Major areas of economic importance.

Under Inter State Importance scheme ten road works have been proposed with an estimated cost of Rs. 1100.00 lakhs.

Under Economic Importance Scheme, twelve road works have been proposed with an estimated cost of Rs. 1175.00 lakhs.

The works are to be approved by Government of India.

I. WORKS OF INTERSTATE IMPORTANCE PROPOSED

ROADS	Estimated Cost Rs. lakhs
1. Road from Somavarpet to Subramanya in Sulya and on to Kerala Border, Kodagu and Dakshina Kannada Districts.	100.00
2. Improvements to Road leading to Pandarapura from Zalki cross on NH-13 upto State Border, Bijapur District.	100.00
3. Improvements to road from Hagari on Bellary-Ananthapur Road leading to Adoni and onto Manthralayam upto State Border in Bellary District.	60.00

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4. Construction of approaches to Krishna Bridge near Manjari in Belgaum District.	100.00
5. Improvements to Hubli-Sholapur Road KM 22.5 to 72.5 in Dharwar District.	140.00
6. Improvements to Bangalore-Cuddapa Road in Bangalore and Kolar Districts Bad reaches.	50.00
7. Improvements to selected stretches of Belgaum-Aanguolium Road via. Jamboti Kanakumbi-Chorla Road in Belgaum District.	100.00
8. Improvements to selected stretch of Road from Tamilnadu border to Andhra Pradesh Border via. Kanakapura, Romanagar, Magadi, Solur, Somapur, Koratagere, Pavagada in Bangalore and Tumkur Districts.	150.00
9. Improvements to geometrics, widening and re-chip carpetting of selected reaches and installation of traffic safety measures like medians, Road sign boards, Destination Boards, etc., for Bangalore-Mysore Road. Section of Bangalore-Nilgiri Road.	200.00
10. Jagalur to Hagari Bommanahalli via. Ujjaini Kotlur.	100.00
Total:	1100.00

II. WORKS OF ECONOMIC IMPORTANCE PROPOSED

ROADS	Estimated cost Rs. lakhs
1. Improvements to selected stretches of Maddur, Huliurdurga, Kunigal, Tumkur, Koratagere Road.	100.00
2. Improvements to Kalasa-Kottigehar Mudlgere-Balehonnur, Shringeri Road (Pirgrimage Centre) in Chickmagalur District.	100.00

3. Improvements to Kadur-Channagiri-Davanagere Road in Chickmagalur, Shimoga, Chitradurga District.	150.00
4. Improvements to Road from Indi to Chikkamannur in Bijapur District.	100.00
5. Improvements to selected stretches of Tumkur-Honnavar Road in Tumkur and Shimoga Districts.	200.00
6. Improvements to selected stretches of Bijapur-Mudol Road via Jamakandi.	75.00
7. Improvements to selected stretches of Honnali-Shikaripura-Soraba-Siddapur onto Kunta, (on NH-17) in Shimoga and Uttara Kannada Districts.	125.00
8. Improvements to Road from Madhugiri-Gouribidanur-Gudibande to join NH-7.	75.00
9. Improvements to selected stretches of Nelamangala-Doddaballapur Road.	50.00
10. Improvements to Road from Nanjangud-Chamarajanagar (To join Tamilnadu Border).	60.00
11. Improvements to Road from Kollegal M.M.Hills via. Hanur and onto Tamilnadu Border.	65.00
12. Chitradurga to Jagalur via. Siddavandurga Herekabbigere-Chickkabbrigere Muddapura Bidrakere.	75.00
Total:	<u>1175.00</u>

3. ANKOLA-HUBLI ROAD ASIAN DEVELOPMENT BANK ASSISTANCE

The State Government has entered into agreement with Asian Development Bank for Loan Assistance to improve Ankola-Hubli Road in Karnataka. This Road starts from Karwar on National Highway No.17, wherein major port is being developed and Kaiga Atomic Plant and Naval base are proposed. The road continues via Hubli-

Bellary and joins Gooty on National Highway No.7 in Andhra Pradesh. This road runs across the State linking the West Coast to the East Coast of the Country.

The total length of the road is 422 KM, out of which the road upto Ankola is National Highway No.17. Out of the balance length, a length of 132.40 KM is proposed to be improved under Asian Development Bank Assistance. The cost of the project as approved is Rs. 4380.00 lakhs. The tenders for the works have been accepted and work order issued. The period of construction is four years and likely to be completed during the year 1994-95. A provision of Rs. 600 lakhs is made during 1991-92.

During the Eighth Five Year Plan an outlay of Rs. 3780.00 lakhs is earmarked for this work. The outlay proposed during 1992-93 is Rs. 600.00 lakhs.

The No. of mandays of employment generation out of State's contribution under Economic Importance would be 9,60,000 during the Eighth Plan period.

The No. of mandays of employment generation in respect of road work taken up under A.D.B. loan assistance would be 85,00,000 during the Eighth Plan period.

C. ROAD TRANSPORT

KARNATAKA STATE ROAD TRANSPORT CORPORATION

The State Road Transport Corporation has grown to be one of the leading Road Transport Corporations and ranks third by volume of its operations in the country. Besides providing efficient, adequate, well co-ordinated and troublefree transport services, the Corporation is endeavouring its best to provide well equipped Bus Stations, Depots and Wayside shelters to its commuters all over the State. The Corporation operates motor services which include long distance services within and outside the State besides operating city services in Bangalore and six other Cities. The extent of nationalisation of Passenger Transport Services in terms of area in Karnataka is 70%.

The Corporation to-day operates 7854 schedules with a fleet of 8906 buses, through a network of 92 Depots spread over the State. It operates 22.34 lakhs Kms. daily and carries about 56 lakh passengers every day. The average revenue per day is Rs. 139.81 lakhs.

During the year 1990-91 the Corporation was allowed to increase its fares which was given effect from 6.5.1990 which underwent a downward revision w.e.f. 5.6.1990. The rise in fares was off-set by the increase in the cost of inputs. The diesel cost increased by 25% from 15.10.1990 in the form of Gulf Surcharge. The prices of tyres, tubes and flaps and other petroleum products also increased by 20% from 25.7.1991. The M.V. Tax structure in Karnataka is very high. The present rate of M.V. Tax is 17% on the revenue. The State Corporation has been paying higher tax as compared to private operators. Added to this, the burden of Students'

concessions and concessions to various other categories of commuters has been steadily on the increase and is now estimates to be about Rs. 72.00 crores during the year. All these factors are causing a dent on the internal resources. The shortfall would have to be made good by the State Government by way of capital contribution/ Budgetary Support or grant of subsidy towards losses incurred due to social obligations so that the tempo of investment envisaged in the Plan does not suffer and the quality of transport services gets improved.

REVIEW OF SEVENTH PLAN AND ANNUAL PLANS 1990-91 AND 1991-92

The total outlay of the Corporation under the State Plan Scheme for the Seventh Plan was Rs. 85.00 Crores. The expenditure was Rs. 80.50 Crores. The Corporation added 2396 new vehicles under the State Plan Scheme against the target of 2537 vehicles. The shortfall in the addition of new vehicles was due to reduced plan outlay particularly during the last two years of the Seventh Plan period.

The Corporation had a capital expenditure programme of Rs. 55.06 Crores during the year 1990-91 of which the Plan resources constituted Rs. 36.31 Crores comprising Rs. 32.04 Crores as capital contribution from the State Government and Rs. 4.27 Crores as loan from LIC of India. The Corporation received in full its share of capital contribution of Rs. 32.04 Crores from the State Government upto the end of March 1991. It also availed a loan of Rs. 4.27 Crores from LIC of India upto the end of March 1991. It was able to add all the 764 new vehicles under the physical programme of the State Plan Schemes as contemplated during the year 1990-91.

Further the Corporation mobilised a loan of Rs. 16.38 Crores from IDBI. for purchase of chassis upto the end of March 1991.

The Corporation envisages a financial outlay of Rs. 79.20 Crores for the year 1991-92 of which the Plan resources constitute Rs. 14.70 Crores comprising Rs. 10.00 Crores as capital contribution from the State Government and Rs. 4.70 Crores as loan from LIC. Further the Corporation anticipates Rs. 25.00 Crores in the form of budgetary support and the balance resources are to be mobilised by raising loans from IDBI.

The physical target is to add 280 new vehicles out of the capital contribution from State Government and loans from L.I.C. Out of the Budgetary Support of Rs. 25 Crores, Rs. 10 Crores will be utilised for the capital expenditure on Land, Building and Plant and Machinery and the remaining Rs. 15 Crores will be utilised for adding another 286 new vehicles under the State Plan Scheme. With this the total physical target of new vehicles to be added under the State Plan would be 566 new vehicles.

EIGHTH FIVE YEAR PLAN & ANNUAL PLAN 1992-93

The Corporation proposes to add 7750 new vehicles during the Eighth Plan period, for augmentation of schedules and replacement of old vehicles. The capital outlay envisaged for the entire Corporation is Rs. 658.15 Crores of which the State Plan Scheme constitute Rs. 305.50 Crores. The capital outlay proposed to be received from the State Government is Rs. 98.00 Crores. Apart from this, the Corporation anticipates a loan of Rs. 31.90 Crores from L.I.C. under the State Plan Scheme and a Budgetary Support

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of Rs. 175.60 Crores during the Eighth Plan Period.

The Corporation envisages a capital expenditure programme of Rs. 100.28 Crores of which the plan outlay constitutes Rs. 46.62 Crores comprising Rs. 18.00 Crores as capital contribution from the State Government, Rs. 5.20 Crores as loan from L.I.C. of India and, Rs. 23.42 Crores in the form of Budgetary Support. The Corporation proposes to add 1450 new vehicles under its Corporate Plan during the year 1992-93. The expenditure towards purchase of chassis will be met through loans from IDBI, while the capital contribution/Budgetary Support from the State Government will be utilised for meeting the expenditure towards bus body building.

The details of proposals relating to Eighth Plan and Annual Plan 1992-93 are as follows.

CAPITAL RECEIPTS	Annual Plan 1992-93	(Rs. Crores) Eighth Plan
1) State Government	18.00	98.00
2) L.I.C. of India	5.20	31.90
3) Budgetary Support from the State Government	23.42	175.60
Total State Plan Schemes	46.62	305.50
4) Central Government	3.20	33.20
5) I.D.B.I.	50.46	319.45
Total	100.28	658.15

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CAPITAL EXPENDITURE	Annual Plan 1992-93	(Rs. Crores) Eighth Plan
1) State Plan Scheme		
a) Land	1.20	7.00
b) Buildings	10.78	73.03
c) P.M.E.	2.75	16.25
d) Body building cost of vehicles	31.89	209.22
Total State Plan Scheme	46.62	305.50
2) Purchase of chassis	53.66	352.65
Total (1 + 2)	100.28	658.15
 No. of chassis to be purchased & Bus bodies to be built	1450	7750

D. INLAND WATER TRANSPORT

The Development Policy with regard to Inland Water Transport (IWT) is designed among others to accelerate the tempo of water transport activities which are considered as the cheapest mode of transport and to modernise the existing ferries to ensure safety, on the lines recommended by the IWT Committee constituted by Government of India.

The development of I.W.T. is basically aimed at providing measures to ensure safety to men and materials by modernising existing ferries either by introducing mechanised boats built to standard design or by replacing the existing over-aged and primitive type of crafts. In the context of the programme for modernisation of ferries, more emphasis is laid on the safety factor, primarily aimed at preventing boat tragedies which are claiming heavy toll of human lives every year during monsoon when the rivers are in spate than on economic/commercial viability. Every attempts are however made and ways and means evolved to achieve economic viability to the extent practicable.

The Seventh Five Year Plan provided an outlay of Rs. 60.00 lakhs and the total of Annual Plan outlays during Seventh ^{Plan} was Rs. 49.94 lakhs against which an expenditure of Rs. 38.08 lakhs has been incurred.

Landing facilities such as ramps, jetties and passenger waiting sheds have been provided at some of the ferry points at an expenditure of Rs. 2.41 lakhs.

The Annual Plan 1990-91 provided an outlay of Rs. 9.00 lakhs and the expenditure incurred was Rs. 5.36 lakhs. Out of this, Rs. 4.86 lakhs has been spent on Direction and Administration and Rs. 0.50 lakh on acquisition of Dumb Wooden Boat.

The Annual Plan for 1991-92 provides an outlay of Rs. 10.00 lakhs. Out of this Rs. 8.50 lakhs is expected to be spent for making balance payments in respect of 2 Nos Dumb Wooden Boats, 3 Nos Fibre Glass boats and 3 Nos Steel Boats taken up for construction during the year 1990-91. Besides 18 Fibre Glass Boats with out-board engines from Customs & Central Excise Department, Nagapattinam of Tamil Nadu have been acquired during the year.

EIGHTH FIVE YEAR PLAN & ANNUAL PLAN 1992-93

The main components of the Eighth Plan strategy for development of IWT include modernisation of 6 ferry services with mechanised crafts, acquisition of one Mini LCT, purchase of Life-Saving-Appliances and purchase of 20 Fibre Glass Boats with out-board engines available with the Customs & Central Excise Department, Nagapattinam for replacing the existing out-moded and aged ferry crafts. Maintenance of assets acquired during the previous plans has also been provided in the Plan programme.

The Plan provides an outlay of Rs. 60.00 lakhs involving a capital component of Rs. 23.00 lakhs.

The Annual Plan for 1992-93 provides an outlay of Rs. 10.00 lakhs involving a capital component of Rs. 6.80 lakhs. It is intended to introduce 6 more mechanised ferry crafts in the scheme for modernisation of existing ferries. Also, it is proposed to acquire

20 Nos Fibre Glass Boats with Out Board engines available with the Customs & Central Excise Department, Nagapattinam for replacing the existing out-moded and aged ferry crafts and purchase of Life saving appliances and passenger facilities wherever necessary during the year.

TOURISMINTRODUCTION

Karnataka is a veritable treasure house of places of tourist attraction. It has hills, valleys, rivers, water falls and a long coastal line with attractive beaches. Wildlife, Bird Sanctuaries and historical monuments and temples galore - Bijapur, Aihole, Pattadakal, Badami, Hampi, Halebedu, Belur and Somanathpur. The list is almost endless. Keeping in view of this variety of natural wealth and places of historical importance, Karnataka should be able to attract a much larger number of tourists, both domestic and foreign. If this percentage has to increase, we will have to improve the infrastructure and take up aggressive publicity.

According to the estimates available as per the National Committee on Development of Tourism constituted by the Government of India, about 9% of the total number of tourists arrivals into the country visit the State. If this percentage has to increase substantially, the Department of Tourism will have to improve the infrastructure in a big way and take up publicity.

SEVENTH FIVE YEAR PLAN

An allocation of Rs.700/- lakhs was provided during Seventh Five Year Plan. During this five year plan, the Department under took development of various tourists spots in Karnataka by creating basic infrastructure facilities, Cottages at Halebidu, Moodabidri, Karkala, Tourist Homes at

Jogfalls, Gokarna, Talacauvery, Srirangapatna were completed and are functioning; Wayside facilities at Malekamanahalli Humnabad have been completed. Under Central Assistance i.e. Wayside facilities at Talkad, Jogfalls, Sringeri, Mulbagal, Belgaum, Tourist Complex at Hampi, Boating facilities at Ulsoor and Sankey in Bangalore and Flood lighting of important monuments were taken up. The Department brought out Karnataka Tourist maps, brochures on important tourist places, purchased televisions for Tourist Lodges, participated in exhibitions like TAAI Convention, Trade fairs, Dasara campaign etc., and extended hospitality to the travel agents and Photographers.

Keeping in view the increased activities, the Department has proposed for allocation of Rs. 69.01 crores during VIII Plan for promotion of Tourism in the State. The expenditure incurred during Seventh Five Year Plan is Rs. 525.95 lakhs.

BOTTLENECKS

Tourism as an industry and as a major contributor to the employment potential of the State has been recognised lately. Paripassu with this realisation, has increased the pecuniary allocation for tourism development. While the allocations for the tourism development in the Seventh Five Year Plan was increased, had there been sufficient human resources available, the inputs into the Tourism Sector should have brought out optimal levels of achievements. However, inspite of inadequacies of the human resources for implementation and management of Tourism sector, there has been enormous contribution to the field of employment and to the resources mobilisation of the State as already discussed in the paragraphs above.

The quantification of this in terms of the Karnataka framework is being assessed in the TECSOK survey already commissioned by the Department of Tourism. Thus, in view of the fact that tourism as an industry is a major tool in the planning exercise for employment generation and as it also brings in resource mobilisation to the State, there is an urgent and imperative need to adequately strengthen the human resources available for optimisation of outputs from the Tourism Sector.

The limitations of execution of building programmes is attempted to be overcome by using Karnataka State Construction Corporation and Karnataka Land Army Corporation as implementing agencies. Thereby, the quantum of infrastructure building organisations for the Department would be threefold as compared to the previous ones.

EIGHTH FIVE YEAR PLAN - 1992 - 97

Karnataka State has a rich tourist potential. Several segments of the Tourism Industry have not been exploited to the extent possible when compared to other states in the country, Development of Beach Resorts, Hill Stations, Wild Life Sanctuaries, Water Sport and Adventure Tourism need to have a pepup during the Eighth Five Year Plan. To elaborate, the vast sea beach treasure on the West Coast, many hill tops on the Western Ghats like Bababudangiri, Komangundi, Kodachadri etc., the new Wild Life Sanctuaries at Bhadra, Anshi, the Birds Sanctuary at Guduvu, Manlagadde etc., the lakes at Shanthi Sagar, Bhadra Reservoir, T.B.Dam, K.R.Sagar and the beautiful mountain peaks at Mercara and B.R.Hills, Kudremukh etc. which provides a big scope for trekking and rock climbing are proposed to be developed.

Tourism in recent years has come to be recognised as an Industry. Compared to the regular industry, tourism as an Industry has the following advantages:

1. It is a smokeless Industry and comparatively a lesser investment is required as potentials of Tourism already exist in the form of monuments, historical places, beach resorts etc.,
2. On the basis of the study conducted by the Department of Tourism, Government of India in 1987.
 - a) Over 6 million persons have been directly employed; 9 million indirectly employed in the tourist trade activities.
 - b) Tourism is extremely labour intensive with one of the highest labour capital ratio.
 - c) Tourism generates myriad opportunities in sectors like transportation, hotels, cottages, industrials, handlooms and handicrafts etc. In fact in hill stations, desert area, sea-side resorts and historical sites. Tourism is often the Sole sustainer of life.
3. Tourism earns over 2,400 crores in foreign exchange. Karnataka earns about 240.00 crores as foreign exchange out of tourism activities.
4. Tourism brings in 1.33 million people every year to India from all over the world generating more employment opportunities.
5. Tourism foreign exchange earnings also help in imparting a world more. From edible oils to life saving drugs, from cereals etc sophisticated plant and machinery from defence equipment to petroleum.
6. Tourism has been working far afield for the country.
 - a) Earning the highest NET Foreign exchange unlike others where export earnings are depleted by imports. Tourism import component is only 7%.
 - b) Helping fund almost 10% of the country's commodity imports.
 - c) Tourism's foreign earnings are only next to the import bill for fertilisers, edible oils, medicines and pharmaceutical products put together.

7. a) Tourism is the 2nd highest foreign exchange earner bringing in over Rs.2,400 crores per year to India.
- b) Accounts for as much as 20% of our foreign invisible earnings.
- c) Contributes 5% of our net national Income in both direct and indirect terms.
- d) Over 25% of a Tourist expenditure is on shopping essentially hand made items.
- e) Foreign tourists play an important role to spur growth of industries like jewellery, gems, carpets, textiles, handicrafts and leather goods, which earn the country nearly Rs.8,000 crores in foreign exchange.

ANNUAL PLAN FOR 1990-91 & 1991-92

The Budget allotment of the Department during the year 1990-91 was Rs.200 lakhs and during 1991-92, is Rs.220 lakhs under plan and the break-up figures for each of the schemes have been as follows:

<u>Scheme</u>	<u>Amount in lakhs</u>	
	<u>1990-91</u>	<u>1991-92</u>
1. Development of Beach Resort	4.00	4.00
2. Sports Tourism	17.00	17.00
3. Development of Airstrip	1.00	1.00
4. Tourist Lodges	10.00	10.00
5. Building (Maintenance)	5.00	5.00
6. Hampi Resurrection	3.00	3.00
7. Direction & Administration	2.00	12.00
8. Tourist Bureau	2.00	2.00
9. Tourist Publicity	38.00	38.00
10. Tourism Promotion	18.00	18.00
11. Tourism as an Industry	4.00	14.00
12. Capital & Outlay-Buildings	56.00	56.00
13. Share Capital to KSTDC/Jungle Lodges	40.00	40.00
Total	200.00	220.00

During 1990-91 the Department provided Tourist Facilities at Humnabad, Molalghatta, Soudhatti, SriSoyala, Mulbagal and Malokannahalli. The Department also conducted Music Festival at Bijapur and Dance Festival at Pattadakal. The Department brought out Multicoloured Tourist District Folders on Mandya, Chickmagalur, Shimoga, Gulbarga, Bijapur, Belgaum, Chitradurga, Kolar and on Adventure Tourism.

Under the Centrally Sponsored Scheme the Government of India sanctioned an amount of Rs.102/- lakhs to provide Tourist Facilities at Hunjuni, Lokapura, Banavasi, Bababudanjiri, Hampi Tourist Complex-II Phase, Shiradi, M.M.Hills and Bhimeshwari Fishing Camp.

A symposium & a workshop on Adventure Promotion and Adventure Tourism was organised during December,1990 at Bangalore jointly by the ETHNA, Department of Youth Services & Sports and Department of Tourism, Government of Karnataka. Several Adventure activities are being offered to the tourists for the first time in Karnataka.

The Department entrusted the work of a study report as "Socio-Economic Benefits of Tourism in Karnataka" to the TECSOK, the report has already been prepared. Another report for formulation of the perspective plan for the next Ten years to define the broad approaches, that the State must take towards the development of Tourism Industry, has almost been finalised by TECSOK.

During 1991-92, the Government of India has prioritized the following Nine(9) schemes for a Total cost of Rs.155.00 lakhs

i.e. Tourist Facilities at Chitradurga, Maravanthe, Kemmannagundi, Harangi, Halebid, Cholachagudda near Badami and Floodlighting of Temples at Nanjangud & Srirangapatna and Mohammed Gawan Madarasa at Bidar. The Department proposes to celebrate Hampi Festival, Karavali Festival during the course of the year.

The Department conducted Tourist Guide Training programme at Hampi during October, 91 and at Chitradurga during November, 91. The Department proposes to have such Tourist Guide Training Programme at Bijapur, Badami and Hassan during the course of the year.

The Department has produced three(3) video Films on Southern Circuit, Northern Circuit, Wild Life Circuit while the from Coastal Circuit will take off shortly.

TOURIST CENTRES

DEVELOPMENT OF BEACH RESORT

The West Coast in the State has a long stretch of beach treasure which remains unexploited. The places on the coast such as Belekere, Honnavar and the cluster of Villages extending from Kap to Mulki offer a tremendous scope for development of beach resorts. Government of India recently had assigned a company to study and report places on West Coast for an integrated development. The large areas of water front at Suratkal and Ullal also provides ample scope for development. The natural splendour at Maravanthe needs special mention for its unique location. The development of beach resort involves acquisition of lands, rehabilitation of one or two villages, developing the water front and construction of accommodation.

Hence, an allocation of Rs.20.00 lakhs is proposed for five years.

SPORTS TOURISM

This is one of the important activities related to Tourist infrastructure in the State. A number of youths both Foreign and Domestic of late have taken to this activity. There are a number of existing major lakes and reservoirs in Karnataka which provide an opportunity for Water Sports Complex. Mention can be made of Shanthisagar, Talakalale Dam, Badra reservoir, T.B.Dam, K.R.Sagar etc. It is proposed to introduce water skiing, Motor boats, water scooters etc., in these lakes. Proposals are underway to develop Madivala Tank, (Near Bangalore) K.R.Sagar and St.Mary's Island in Malpe in a big way to make them as weekend resorts for water sports and a floating restaurant with suitable design depicting the Architecture of Karnataka with provision of a platform to put up cultural programme and to serve dinner aboard. For all this, including the construction of boat club, Restaurant and Toilet facilities on main land with suitable Land-scaping.

This is a popular form of adventure tourism which is attracting a large number of tourists into the mountain regions of Himalayas, Uttarpradesh and Assam. Karnataka which is second to none in having great potential in its hilly region, such as western ghats and hill stations like Devagiri, B.R.Hills provides an ample opportunities for many prosperous rock climbers visitors interested in trekking. There are an innumerable number of Institutions in the State at present, sponsoring the above sports. It is proposed to recognise some of the leading

institutions and encourage them by giving a suitable subsidy. There is also proposals to start rock climbing Institute at Ramanagaram. A sum of Rs. 65.00 lakhs is proposed during the Eighth Five Year Plan.

DEVELOPMENT OF AIRSTRIPS

Important Tourist places like Gulbarga, Bidar, Bijapur, Hassan and Raichur have become increasingly popular as trade centres. In the vicinity of these places are spread over monuments which attract a large number of Tourists. Unfortunately as these are not connected by air, more foreign tourist are unable to visit due to lack of sufficient time. Even when a tourist visits a place like Bijapur and Badami has over night stay is hardly a day. By developing airstrips in the above places and connecting them by air more tourists can visit and their length of stay can be extended in the state. In addition to developing the above new air strips, it is also proposed to develop the existing Air fields at Mysore, Bellary, Belgaum and Mangalore. Hence, a Provision of Rs. 19.00 lakhs is provided during the Eighth Five Year Plan.

TOURIST ACCOMMODATION

TOURIST LODGES

A number of building programmes are completed each year under the centrally sponsored scheme and financed by the State Government. These buildings need to be furnished and put into use. Apart from this, the Department also is maintaining a number of lodges and canteens which need to given a face life periodically.

A number of projects under the centrally sponsored scheme such as Wayside Facilities, Restaurant and Toilet facilities in pilgrimage centres and Tourist Complexes are under completion. In addition to this during the Eighth Five Year Plan a large number of building activity in Hill stations, Beach resorts and historical and pilgrimage Centres have been proposed. The provision of Rs.73.00 lakhs is proposed for furnishing of the entire tourist infrastructure proposed during the Eighth Plan period.

BUILDINGS (ANNUAL REPAIRS)

Under this budget head, annually, several minor works are proposed as a part of the tourist accommodation facilities. The work involves development of land, fencing and minor repairs. The provision towards this has been included along with tourist lodges as indicated above.

DIRECTION AND ADMINISTRATION

DIRECTORATE OF TOURISM

A separate Department of Tourism was created during the year 1974, taking into consideration the enormous tasks of promotion and development of Tourism in the State. Although the work relating to development of infrastructure, tourism promotion, and travel trade has increased several folds from the date of inception, the Department has not been strengthened adequately for once. The several benefits accruing out of tourism development has been enunciated in the introductory paragraphs. Tourism brings in foreign exchange, provides employment opportunities and thus brings in considerable socio economic development to the State.

With the realisation of the fact that Tourism as an Industry is a major employment sector, as also is helpful in resources mobilisation in the state, the allocation for this sector has been increased several folds. The Central Government in view of Tourism sector being the single largest earner of foreign exchange, (in view of the adverse BOP position of the State) has stepped up the allocations in its programme new programmes intended to increase the Tourism potential of the States.

The State is also on the thresh-hold of quantum jump in its tourism activities with the slated implementation of the OECF project of more than Rs.110.00 crores. As a result in order to implement all these programme there is an imperative need to strengthen and restructure the organisation and hence the attempt to change the strategy of human resources management in the Department.

Thus it is envisaged to restructure, strengthen the entire organisation at the State, Divisional, district level and unit level offices, so that the Department functions effectively and cohesively. This is done keeping in view the implementation of the myrid number of the projects, programme and need to monitor and evaluate the project to be undertaken. The expenditure of Rs.100.00 lakhs programme on this account in the Eighth Five Year Plan works only 3.1%.

TOURIST PROMOTION AND PUBLICITYTOURIST BUREAU

As explained under Directorate of Tourism the Department has proposed for reorganisation of the Department by way of opening several Information Offices in the State. In addition, it is necessary to open offices in places of dis-embarkation of foreign tourists in big cities like Delhi, Bombay, Calcutta and Madras for diversion of foreign tourist traffic into Karnataka. The allocation is Rs.25.00 lakhs.

TOURIST PUBLICITY

Considering the size of infrastructure provided, in the earlier Five Year Plans, the Department had provided lesser grants for publicity. But with the existing facilities and what has been proposed during the Eighth Five Year plan, it is necessary to launch upon a planned publicity programme during the Eighth Five Year Plan. This programme will include the regular media campaign annually including advertisement in Doordarshan, production of audio visual, coloured folders maps and picture post cards.

The Year 1991 is being celebrated as Visit India Year. Government of India has identified 7 travel circuits in Karnataka. Publicity and marketing will have to be undertaken in selected areas outside the country. In order to reach the identified areas, publicity literature in international language will have to be got printed and distributed through overseas offices to Government of India, Air India and Indian Embassies. A signage system is being got done through M/s.National Institute of Design, Ahamedabad, which has to be implemented. This

includes sign boards, hoardings and direction boards in all places of tourist interest. In view of the comprehensive publicity programme envisaged it is proposed to allocate Rs.265.00 lakhs under this head during Eighth Five Year PLAN.

TOURIST PROMOTION

Government some time back had agreed in principle and had allocated a nominal sum of Rs.1.50 lakhs for starting the Karnataka Institute for Tourism and Hotel Management (KITH) for imparting training to guides, Tourism Department and KSTDC officials and all those engaged in the travel trade several craft courses basic foundation training diploma and post graduate courses are proposed for giving training to those graduates who have aptitude in Tourism. The Institute is proposed to be registered under the Registrar of Societies Act and necessary funds in the beginning is proposed to be provided by the Department for few years to make it self supporting by collecting fees from students. The courses to be run by KITH is to be organised with the assistance of the Central Food Nutrition College, Bangalore/Bangalore University.

The above organisation will also hold periodically a number of symposiums/workshops/conferences on Tourism to discuss objectives and promotional aspects for development of tourism in the State to make such recommendations coming out of the discussion held in the above Conferences/Seminars. An amount of Rs.50.00 lakhs is provided in the Eighth Five Year Plan for the above purpose.

TOURISM AS AN INDUSTRY

Private participation in the promotion of Tourism is very essential for proper integrated development of Tourism Infrastructure in the State. In order to give encouragement to private entrepreneurs the State Government has declared Tourism as an Industry. Five regions in the State namely Belgaum, Gulbarga, Bangalore, Mysore and West Coast have been identified for providing certain incentives to Private entrepreneurs who would construct accommodation facilities and run travel agencies in the above regions. The Department has further identified a list of places coming under the above regions for according incentives. Hence, a sum of Rs.100.00 lakhs is proposed during the Eighth Five Year Plan for the purpose.

SCHEME FOR RESURRECTION OF HAMPI RUINS

Hampi, the capital of Vijayanagar Empire, is being resurrected to bring it back to its past glory. The State and Central Archaeology have taken up excavation at Hampi and annually several archaeology findings are being excavated, conserved and preserved. Considering the magnitude of the potential, the Department of Tourism has to take up implementation of infrastructure facilities such as restaurant and toilet facilities accommodation and transport. A High Power Committee has been appointed by Government under the Chairmanship of the Hon'ble Chief Minister to oversee and issue guide lines from time to time for several sub committees appointed for specific purpose such as the research of the publicity committee and the Tourism Department for creating infrastructure facilities.

A Tourist Complex is under construction at Kamalapur which is being implemented in two phases. This facility will have, in addition to accommodation, a conference hall a small library and a visitor Centre. A sum of Rs.24.00 lakhs proposed during the Eighth Five Year Plan is towards the expenditure.

KARNATAKA TOURISM DEVELOPMENT PROJECT

OVERSEAS ECONOMIC CORPORATION FUND - JAPAN

The Department of Tourism has identified more than 200 places in the State for development. Considering the large area of the state and the financial resources development of these tourist spots are taken up on priority and in a phased manner. Moreover, there are a large number of important tourist spots both of National and International importance wherein the infrastructure facilities need to be developed. Mention may be made of Bijapur, Badami, Aihole, Pattadakal, Hampi, Bangalore, Mysore, Bidar, Gulbarga etc. At the instance of Government of India, the State Department of Tourism prepared a Karnataka Tourism development project which has been reposed for overseas financial assistance from Japan for 1992-93. There are 15 sub projects for which a total grant of ^{Rs.} 110.00 crore is anticipated by way of financial assistance. Only 80% of the funds granted from OECF Japan to Government of India is further passed on to the State Government under the usual terms and conditions. Hence, for the Tourism sub projects the Department has to provide Rs.10.00 crores as state's share during the Eighth Five Year Plan. Items proposed for development in the Tourism sub project are Wayside amenities, tourist

complex, Visitors Centres, transportation, accommodation, landscaping an Adventure and Sports Tourism and Human Resources Development etc. A sum of Rs.5,676.00 lakhs has been provided in the Eighth Five Year Plan for this project.

CAPITAL OUTLAY ON TOURISM - BUILDINGS (CONSTRUCTION)

Under this budget head, the Department have proposals for construction of infrastructure facilities in a number of places. Besides, under the tourism oriented infrastructure facilities for the first time the Department intends to develop hill stations in the State. This is essential in view of the fact that the two popular hill stations in the State namely Nandi hills and Kemmangundi are becoming over crowded during the season.

On the lines of the famous Surajkind, crasfts village in Harayana, the State Department of Tourism is proposing for start developing two such craft villages one near Bangalore and the other at Bidar. Karnataka the home town have sandalwood, Ivory and Inlay work, Bidriwork etc., can afford to have another craftsmen village, which would encourage local talent and provide a window for selling their crafts. Land for the creation of the village, landscaping and other infrastructure needs to be created. A sum of Rs.285.00 lakhs has been provided during the Eighth Five Year Plan.

With these allocations, 75000 & 16500 mandays of employment would be generated in the VIII Plan and Annual Plan 1992-93 respectively.

SHARE CAPITAL INVESTMENT TO KSTDC AND JUNGLE LODGES

A number of buildings constructed by the Department are handed over periodically to KSTDC for management. The maintenance, furnishing and minor repairs of these buildings are met by the KSTDC. In addition the Corporation also undertakes creation of star category hotels in big tourist spots in the State. They are also maintaining a large fleet of luxury tourist buses which are used for conducted and package tour. Purchase of new chasis for replacement and maintenance of the vehicles also forms part of the expenditure of the share capital proposed. The KSTDC is in need of a higher allocation during Eighth Plan to facilitate for completion of its unfinished hotel at Malpe. Jungle Lodges which is a subsidiary corporation on KSTDC is engaged in Wild Life Tourism. The Kabini Game Sanctuary at Karapur has made significant progress in promoting Wild Life Traffic to this Region. In addition, several new ventures have been started under these organisation such as the Fishing Camp at Bheemeshwari and Makalu. A recent addition is the Billigirirangana Game Reserve. Improvement accommodation, transport and creation of other facilities are envisated by the Corporation.

For investment in the above Corporations a sum of Rs.110.00 lakhs is proposed during the Eighth Five Year Plan.

CENTRALLY SPONSORED SCHEMECENTRALLY ASSISTED SCHEMES FOR TOURIST PROMOTION

The Department every year seeks Central assistance for the various Tourism Projects in Karnataka. The funding

pattern for these projects are on 80-20 basis i.e 80% being the Central component and 20% being the State Share. During 1990-91 the Government of India has sanctioned schemes worth of Rs.102.00 lakhs and during 1991-92 they have prioritized Nine(9) schemes at a total cost of Rs.155.00 lakhs. These schemes are being implemented through the agencies like, Central Public Works Department, Karnataka Land Army Corporation, Karnataka State Construction Corporation & State Public Works Department. Apart from these Government of India has also sanctioned an amount of Rs.8.61 lakhs to purchase of Watersports Equipments. The Department has already placed orders for procurement of these items through the various agencies. The Government of India has also sanctioned an amount of Rs.31.50 lakhs for bringing folders and for undertaking publicity for Hampi Festival. Apart from this an amount of Rs.10,44,425/- has also been sanctioned by the Government of India for the upgradation of the properties operated by the K.S.T.D.C. A sum of Rs.324.00 lakhs has been provided during the Eighth Five Year Plan.

Thus, Tourism Industry can be a major source of providing employment opportunities to the people and Act as an important Socio Economic Development Programme.

By the Very nature of its activities, apart from preserving the cultural traditions and the rich heritage of this state, the investment in this sector would have very little negative impact on the Ecological environmental equilibrium.

In view of this several facts of Tourism Industry which have been mentioned above it is obvious that investment in the Tourism Industry Sector can provide an effective manner of providing employment in millions to the people of Karnataka, give a fillip to the adjacent sectors of Food and Beverage Industry, services sector, transport sector, cottage Industry/Handicraft/Handloom/Small Scale Industry Sector and Travel Trade Sector as also earn several crores through taxes to the exchequer.

FOREIGN EXCHANGE EARNINGS

As the most important net foreign exchange earner of the country, Tourism Industry is today the most important industry especially in view of the critical balance of payment position. Karnataka as seen from the Government of India study, roughly contributes to about Rs.240.00 crores of foreign exchange, and hence is an important sector which needs to be developed in the interest of Karnataka and our country.

In view of the above facts which are increasingly being appreciated now, Tourism Industry has to be given the great push forward and hence the request for the increased budget allocation.

F.POLLUTION CONTROL

Dense exhaust smoke emitted by motor vehicles causes environmental pollution thereby posing health hazards. To contain this kind of menace, the Government of India have introduced a Rule viz. Rule 115 of the Central Motor Vehicles Rules 1989. This Rule envisages the standards at which the motor vehicles should emit exhaust smoke. The vehicle owners are required to conform to the said stipulations with effect from 1.3.1990. To enforce the provisions, it is necessary to check the vehicles and their exhaust in a scientific manner with standardised equipments.

Under the State Plan Scheme it was proposed to establish Pollution Control Units at 33 different cities/towns in the State in a phased manner at the rate of 5 Pollution Control Units in a year. Each Pollution Control unit consists of

- a) Two Inspectors of Motor Vehicles
- b) Two Group-D Officials
- c) One Driver
- d) One Jeep
- e) Two Gas Analysers
- f) Two smoke meters
- g) One portable Generator

To start with out of funds in non-plan standardised instruments were supplied to each of the Regional Transport Offices at Bangalore to check the vehicles produced for periodical inspections for grant/renewal of fitness certificates.

Review of Progress during Seventh Five Year Plan and Annual Plans 1990-91 & 1991-92.

The first phase of the scheme was sanctioned during 1988-89 for implementation at Mangalore, Mysore Belgaum, Shimoga and Dharwad. Rs.25.00 lakhs were

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provided under the State Plan could not be utilised during that year.

During 1989-90, 5 jeeps and 10 gas analysers were purchased. Smoke Meters were not purchased for want of availability of notified smoke meters. Due to procedural delay in recruitment the amount earmarked under salary head was not utilised in full. In view of this an expenditure of rs. 13.00 lakhs only was incurred during 1989-90, as against a provision of rs. 25.00 lakhs.

During 1990-91 the scheme was implemented in full at the above mentioned five places. Further the scheme was extended to five more places viz. Tumkur, Gulbarga, Bidar, Davangere and KGF. The equipments, gas analysers, smoke meters and generators were purchased. The expenditure incurred during the year was rs. 23.12 lakhs against a provision of rs. 50.00 lakhs for the scheme.

During 1991-92 apart from continuing pollution control scheme at the above mentioned ten places it was also extended to five more regions viz. Bellary, Kolar, Mandya, Raichur and Chitradurga. One Pollution Control unit will be established at each of these cities at a total cost of rs. 25.00 lakhs. In addition to this the existing five pollution control units in Bangalore City will be strengthened with supply of 16 gas analysers and 16 smoke meters and 8 generators at a total cost of rs. 20.00 lakhs. An amount of rs. 5.00 lakhs is proposed to be spent on publicity for prevention of smoke pollution through advertisements, slides, Television fillers, hoardings, pamphlets etc.

EIGHTH FIVE YEAR PLAN AND ANNUAL PLAN 1992-93.

During the Eighth Five Year Plan an allocation of Rs. 200.00 lakhs is proposed for the Pollution Control Scheme and it would be extended to the other thirteen cities/towns in the state. Each of these thirteen places would be provided with one pollution control unit. The existing ongoing scheme would also be strengthened at 10 Regional Transport Offices. It is proposed to create 23 posts of drivers. An amount of Rs. 40.00 lakhs will be provided towards their salary and allowances. For Education and Publicity an outlay of Rs. 57.00 lakhs is proposed. 10 jeeps are proposed to be purchased during the Eighth Plan.

During the Annual Plan 1992-93 an allocation of Rs. 40.00 lakhs is proposed and the scheme will be implemented in five more Regional Transport Offices at Hassan, Bijapur, Udupi, Hospet and Gadag, by providing one gas analyser, one generator and one smoke meter and one jeep. It is proposed to sanction 10 jeeps to the existing Pollution Control Units with creation of 10 posts of Drivers. The total outlay proposed on these items is Rs. 35.00 lakhs. To create awareness among the road users about pollution control it is proposed to give wide publicity through Schools by arranging lectures and seminars, advertisements, Television fillers etc. at a cost of Rs. 5.00 lakhs during 1992-93.

XV. SCIENCE AND TECHNOLOGYA. Introduction

The Department of Science and Technology pursues its objectives, namely; promoting the utilisation of Science and Technology for the development process of the State and promotion and co-ordination of various S&T popularisation efforts of the State, in collaboration with the Karnataka State Council of Science and Technology (KSCST) the Karnataka Rajya Vijnana Parishat (KRVP) and other S&T, academic, R&D and voluntary Organisation in the state.

A.(i). Review of Seventh Plan and Annual Plans 1990-91 and 1991-92:

During the Seventh Five Year Plan and the Annual Plans 1990-91 and 1991-92 several potential technologies aimed at Rural Development and Rural Employment Generation have been developed, under the State and Central S&T Sectors, in the areas of Rural Energy, Housing, Health and Rural Industries, such as:

- a) Astra Ole, efficient bath water stoves, large stoves for community cooking in an Agro-processing, wood gasifier, community biogas plants, Low cost household Biogas plants, low cost solar water heaters, solar pond, micro hydel power generation, etc. in the RURAL ENERGY SECTOR.
- b) Soil Block making machines & stabilised soil, Block Technology, Low cost cement using reactive silica from Paddy husk ash, brick panel, Tile panel and Ferro Cement channel roofing, Ferro Cement and Steel building elements to replace Timber, etc., in RURAL & ALTERNATIVE HOUSING SECTOR.
- c) Sisal industries, Efficient Brick & Tile Kilns, efficient lime kilns, intensive prawn culture etc. in the RURAL INDUSTRIES SECTOR.
- d) Low cost water purifiers, low cost sanitation systems, repairs and maintenance of hand pumps, Winnower, farm ponds and Irrigation scheduling, plant irrigation through porous FRP, multiplication of drought resistant and productive species of Tamarind and pomegranate, etc. in the RURAL HEALTH AND AGRICULTURE SECTORS

In the area of Science popularisation and awareness the efforts of the Department, so far, through the voluntary organisations, such as, the Karnataka Rajya Vijnana Parishath,

in creating Scientific & Technological Awareness among the states population was once limited, due to manpower and financial resources, to urban and Taluk level Centres of the state.

At present there is a large gap in taking Scientific ideas and in bringing in the awareness on new and conventional technology among the poor, women and weaker sections belonging to the rural segment, for improving their living conditions and for creating self employment opportunities.

A.(ii). Priorities and Strategies for the Eighth Five Year Plan and Annual Plan 1992-93

The thrust areas of the Seventh Five year Plan namely (a)Rural Energy (b)Housing (c)Rural Industries and Employment (d) Resource management through application of S&T and (e) Science Education & Awareness; continue to be the thrust areas for the Eighth Five year Plan (1992-97) and Annual Plan 1992-93 with the following order of priorities.

- (a) Transfer of ideas and benefits of Science & Technology to the Rural population, especially to the poor, women and weaker sections, in order to improve their living and economic conditions.
- (b) Promoting the application of Remote Sensing Technology For resource management in all developmental sectors of the state.
- (c) Development of Technologies with potential to use Rural manpower and natural resources
- (d) development of curriculum for inclusion of S&T as a subject up to the XII standard education.
- (e) Information systems related to Drought and Disaster Management and those related to State Science & Technology Planning and Management.
- (f) creating awareness for improved utilisation of Non-conventional Energy sources and for Energy Conservation.

In order to realise the new objectives the following strategies are proposed for the Eighth Five Year Plan and Annual Plan 1992-93.

- (a) A new scheme State S&T Sector Action Plan for Rural areas with suitable decentralised implementation structure at District Taluk and Mandal level is proposed (Brief write up provided in note vide Para C)

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- (b) As part of the Action Plan S&T Material infrastructure in the form of S&T Centres with basic tools and demonstration equipment are proposed to be established at all the 2563 Mandals of the state in a phased manner.
- (c) Formation of high level Committees for the prioritisation and Utilisation of S&T inputs including Remote Sensing Applications in all development sectors.

In the light of the above mentioned strategies the proposals of the Department require, for implementation, an amount of Rs 3260.00 Lakhs for the Eighth Five Year Plan (1992-97) and an amount of Rs 665.00 Lakhs for the Annual Plan (1992-93). However the current proposals are limited to the allocations, of Rs 760.00 Lakhs and Rs 165.00 Lakhs, made by the Government towards the S&T Sector and the details of the individual Schemes are as follows:

B. Eighth Five Year Plan and 1992-93 Annual Plan Proposals:

B.(i) On-going Schemes:

1. Administrative Charges of the Dept. of S&T:

At present the Science & Technology Secretariat is administered by one section of Ministerial staff and 2 Scientists under the Additional Secretary headed by Commissioner & Secretary to Govt, which was the Staff strength sanctioned during the Seventh Five Year Plan. In view of the Expansion of existing schemes, inclusion of new schemes during the 1990-91 and 1991-92 plans and in view of major new Scheme being taken up during the Eighth Plan; it is proposed to create one more section of ministerial staff with 2 additional Scientific staff. A sum of Rs 50.00 Lakhs is proposed towards the scheme for the Eighth Plan with a sum of Rs. 13.00 Lakhs proposed for the 1992-93 Annual Plan.

2. Karnataka State Remote Sensing Technology Utilisation Centre (KSRSTUC):

In order to utilise the modern tool of Remote Sensing Technology for monitoring and effective utilisation of natural resources of the state and to aid planning and implementation of various land based developmental projects in the state, the Department has established the KSRSTUC in the year 1988-89. The 1st phase establishment of the Centre is completed, under which the visual interpretation equipment is procured and facilities for Documentation and Cartography are created. The Centre at present has a Scientist Director, 3 Scientists and

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administrative staff. The Centre has already identified 30 major projects in all developmental sectors to be implemented in the VIII Five Year Plan. The 2nd Phase procurement of Advanced interpretation cartographic equipment, Geographical Information Systems etc. and appointment of adequate Scientific and Technical staff are proposed to be implemented. An amount of Rs 160 Lakhs are proposed for the activities of the Centre during the Eighth Plan, with Rs 40.00 Lakhs proposed for the 1992-93 Annual Plan.

3 Grant-in-aid to Karnataka State Council for Science & Technology (KSCST):

Under the Scheme the KSCST receives Grant-in-Aid from the Department towards its projects and programmes. The Council coordinates need based Research & Development and dissemination projects in the development sectors of the state. Various highly potential technologies have so far been developed in sectors of housing, energy, industry, health, agriculture, etc., and some technologies such as Astra Ole, Low cost housing, wood gasifier etc., have been successfully integrated into the development process of the State. The programmes of the Council consist of Student Project Programme (SPP), Student Training Programme, Coordination of District Councils of S&T, coordination of S&T activities at all Universities in the state, etc. The Council is also the Nodal Agency for DNES, GOI for dissemination of Solar Devices, wind Energy Utilisation, Biogasifier Programmes

Towards these activities of the Council a sum of Rs 200 Lakhs is earmarked as Grant-in-aid for the years 1992-97 and a sum of Rs 42.00 Lakhs towards the Annual Plan 1992-93.

4. Promotion of Non-Conventional Energy Sources:

This is an On-going scheme of the Dept. since the beginning of the VII Five Year Plan. The significant achievements under the scheme were Development of a 1 MWe Power Generation System based on sludge gas using retired Aeroengines (developed under a project Co-sponsored by the Department), Development of a low cost polyethylene bag plug flow digester, Wind Monitoring and Wind Mapping Projects (cosponsored) to identify potential sites in the state to locate Wind Electricity Farms, Pilot training Camps for dissemination of Astra Ole in the state, etc.

Sums of Rs 25.00 lakhs and Rs 5.00 Lakhs are proposed under the scheme respectively for the Eighth Plan and Annual Plan 1992-93; to cosponsor/ initiate the following activities for the promotion of Non-conventional Energy sources/systems and energy conservation in the State.

- i) Scientific studies Surveys aimed to harness Non-conventional Energy Sources such as, solar, wind, microhydel, wave, etc.
- ii) Development, Demonstration, Training, maintenance extension of devices/ technologies related to the utilisation of Non-conventional Energy
- iii) Activities such as publication of books, manuals, production and promotion of films, slides and audiovisual aids, aimed at the popularisation of Non conventional Energy sources/ systems.
- iv) Incentive Schemes to promote the use of Solar Thermal Systems

5. Grant-in-aid to Karnataka Rajya Vijnana Parishat (KRVP)

The KRVP, established in the year 1980, has the objective to inculcate the scientific spirit and awareness among the states population. To meet its objective, the KRVP is undertakes science popularisation activities, which include publication of a popular science monthly "Bala Vijnana" (20,000 copies/month), wall newspaper "vijnana Deepika", Books, etc. . Production & Exhibition of Science Films, Kits, etc., mass contact Programmes such as Vijnana Jathas Conducting workshops, debates, quiz competitions for students and programmes to improve Science teaching, writing, etc. KRVP has a 450 Science Centres (most of which are units) which include 4 District level Science Centres at Mysore, Tumkur, Dharwad and Belgaum.

KRVP has proposed to strengthen its 450 Science Centres and Continue with its on-going activities of Science popularisation for the year 1991-92. Towards the proposed activities of the KRVP sum of Rs. 50.00 Lakhs is proposed under the Eighth Plan with a sum of Rs 10.00 Lakhs earmarked under the scheme for the 1992-93 Annual Plan.

6. Other Schemes of the Department of Science & Technology
(Other Scientific Bodies - Grant-in-aid)

Following are the details of ongoing sub-schemes of the Department of Science & Technology some of which are modified to suit the priorities of the Eighth Five Year Plan

- (a) **Technology Demonstration:** At present 3 Technology Demonstration Centres are established in the state to demonstrate, train and extend the Technologies of Rural and Non-conventional Energy and alternate and Low Cost Housing, to rural areas. If the impact

of this scheme to be widespread, efforts are required to integrate the technologies into the programmes of the Government at District and block levels. It is proposed to modify the scheme to demonstrate to and train the technical staff belonging to the Zilla Parishats and blocks in the state on a regular basis.

- (b) **Community Science Centres:** 56 Science centres are being established at Rural schools in the state to conduct School Science and community Science Programmes on a regular basis. Recurring programme expenditure of these centres are proposed to be borne under the Scheme with proposed establishment of New community Science Centres Which is linked with the Scheme of Govt. of India, Ministry of Culture.
- (c) **Grant-in-aid to Voluntary organisations for Science Popularisation and Awareness:** Under the Scheme Voluntary organisations in the state are encouraged to develop software and to conduct Science Popularisation and Awareness programmes for general Public from all walks of life. Now stress is placed to motivate large participation of voluntary sector with the involvement of district Development Organisations.
- (d) **National Science Day Celebrations:** As part of National Science Day Celebrations, to be held on and around 28th of February every year to commemorate the Noble winning Discovery of Sir C V Raman; popular programmes such as Science Exhibitions, quiz and debate competitions, etc are held in the state with the participation of voluntary organisations. In order to be coincide with the objectives of the Action Plan the Scheme is modified to spread the programmes statewide with involvement of District Development organisations, State Education Department and voluntary organisations.
- (e) **District Councils of Science & Technology:** District Councils of Science & Technology Were proposed during the Annual Plan 1990-91 to be constituted at all districts in a phased manner; to act as focal points at district level to gather S&T resources for dissemination of technologies, for solving local specific problems, formulation of S&T components of District Development Plan, etc. As a result 8 DCSTs are under establishment under

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the Chairmanship of District Development officer with S&T Resource persons as members. The establishment of DCSTs at the remaining 12 Districts in the State is proposed to be completed in the initial phase of Eighth Plan: as these are the vital links in the proposed statewide implementation of all the above mentioned schemes.

- (f) **Establishment of S&T Planning and Management Information System for the State:** During the Annual Plans 1990-91 and 1991-92 it was proposed to establish the above mentioned system to augment the efforts Of Dept., in promoting the utilisation of S&T inputs in all developmental sectors and to disseminate S&T information to Governmental and Non-governmental Agencies implementing development programmes/activities, through NICNET. At present a database on Rural and Non-conventional Energy Technologies is under preparation. During the Eighth Plan it is proposed to develop state specific databases pertaining to the Sectors of Low cost housing and other Technologies, Resource personnel Information, Analytical and research equipment available at organisations in the state, R&D projects undertaken / Sponsored in the State, etc.
- (g) **Promotion of Innovations in Electronics:** The Scheme was originally intended to create a Testing and Engineering Openhouse facility for a large number of Electronic manpower resident at the City of Bangalore. However after interaction with existing State and Central Electronic Development Organisations, it was felt that such facilities already exist with these organisations and with slight functional flexibility these facilities could be thrown open to individual Electronic engineers and entrepreneurs. Efforts are already on in this direction. Hence the Scheme is modified to institute a system of Awards and Financial support to innovative electronic products aimed at local specific needs.

A sum of Rs 150.00 Lakhs is proposed for the above mentioned sub-schemes during the Eighth Five Year Plan with an amount of Rs 30.00 Lakhs earmarked under the Annual Plan 1992-93.

6. Drought Monitoring Cell (DMC):

In order to get a realistic distribution of rainfall throughout the State new raingauges are proposed to be installed by the DMC in a phased manner and the existing raingauges to be standardised and maintained. The Cell is also monitoring manifestations of drought such as surface and ground water depletion and is formulating short and long term measures to combat drought. Drought indices for all agroclimatic zones are being developed. These would be validated and published on a regular basis and analytical models and statistical models for prediction of drought will be developed in collaboration with Central agencies. It is proposed to take up implementation of Drought Response and Assessment and Information systems at all districts in the State. Other schemes proposed are delineation of Watersheds and mapping of floodprone areas in the State. The activity of publishing weekly Crop and Weather Reports, Special reports on monsoon prospects and contingency plans, etc. are proposed to be continued during 1992-93 and Eighth Five Year Plan. During this period Additional Scientific staff and equipment are proposed to be recruited and procured respectively.

An amount of Rs.125.00 lakhs is proposed as Grant-in-aid to the DMC for the Eighth Plan, with Rs.25.00 lakhs earmarked for the Annual Plan 1992-93.

Thus the overall proposals of the Science & Technology Sector amount to Rs.760.00 lakhs during the Eighth Five Year Plan and Rs.165.00 lakhs for the Annual Plan 1992-93.

XV - B. ECOLOGY AND ENVIRONMENT

REVISED EIGHTH FIVE YEAR PLAN BUDGET PROPOSALS (1992-97)

**SEVENTH FIVE YEAR PLAN PROGRESS AND ACHIEVEMENTS OF THE
DEPARTMENT OF ECOLOGY AND ENVIRONMENT, GOVERNMENT OF KARNATAKA
INCLUDING THE TWO ANNUAL PLAN PERIODS FROM 1990-92**

INTRODUCTION

The Department of Ecology and Environment was established in March 1981 to have an integrated approach to deal with prevention and control of Air and Water Pollution, preservation and development of forest-wealth and other natural resources in the state and also to protect the flora and fauna. The Chief Secretary of the State is the Secretary of the Department of Ecology and Environment. The Special Secretary assists Secretary in running the Department. The Department has one post of Scientific officer. A Technical Cell headed by a Director and assisted by two Scientists is also functioning under the Central Scheme.

The major objective of the Department includes, co-ordination of State Environmental Programmes, creation and intensification of environmental awareness, support to environmental research projects, environmental impact assessment of various developmental projects, review and clearance of medium and major industries from environmental angle, pollution control and monitoring and management of activities involving hazardous chemicals.

The Department takes up a number of need based environmental research projects through various research institutes, voluntary organisations, universities etc.

ACTIVITIES UNDER THE VII FIVE YEAR PLAN AND DURING 1990-92

The defined objectives during the 7th Five Year Plan was not only pollution monitoring and control but also on the efficient use of local resources, conservation of natural resources and planning of developmental projects from environmental angle for sustainable development.

As part of this programme, grant-in-aid was given to a limited extent to the Karnataka State Pollution Control Board, National Museum of Natural History, Mysore. The Department also supported a number of studies.

The new schemes considered during the 7th Five Year Plan were:

- 1) Environmental Education and Awareness Camps.
- 2) Wet land/Mangroves management and conservation.
- 3) Coastal Management.

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- 4) Support to ENVIS Centre.
- 5) Schemes on new development in environment and ecology.

During 1990-92 more areas like Training Courses, Environment Impact Studies, Urban Eco-system Studies, Environmental Cleanliness Campaigns, Eco-development and extension programmes have also been initiated.

In the 7th Plan, against the budget request of Rs.335 Lakhs, only 139.98 lakhs was allotted to this Department. Due to various factors including the economy orders, the actual expenditure was much less than this. The details are given in Table-1.

During 1990-92 also, the actual allocations received were much less compared to the outlays proposed. However, the expenditure achieved was almost 100% in 1990-91. During 1991-92 also, the expenditure is anticipated to be complete.

TABLE-1

Year	Budget provision (Amount in lakhs)	Actual Expenditure (Amount in lakhs)
1985-86	16.30	16.22
1986-87	35.00	28.94
1987-88	35.00	10.53
1988-89	26.00	17.92
1989-90	27.68	27.08
1990-91	33.00	32.24
1991-92	50.00	50.00+ (Anticipated)
Total	222.98	182.93

SHORTCOMINGS FACED IN THE VII PLAN:

The Department had proposed a programme amounting to Rs.335 Lakhs. The major thrust was for pollution control and monitoring through the Pollution Control Board. Eventhough the Planning Commission agreed to strengthen the Pollution Control Board, adequate funds could not be provided under the Plan. This to some extent affected the Pollution Control activities in the State.

The financial constraints again blocked the way of preparing a master plan for tackling the pollution of sewage and sullage from towns and cities for which a sum of Rs.40 Lakhs was earmarked to be given as grant-in-aid to Karnataka Urban Water Supply and Drainage Board.

As regards the other environmental programmes of the

Department, viz., Awareness and new schemes, which are very crucial for encouraging the development of environmental consciousness among the citizens, as against a sum of Rs.110 Lakhs the money actually released was only Rs.63.02 Lakhs.

Thus it could be seen that finance was the main constraint in carrying out programmes envisaged in the 7th Five Year Plan. The situation improved during the period 1990-92. During 1990-91, against an allocation of Rs.33 Lakhs, Rs.32.24 Lakhs was spent. In 1991-92 all the 50.00 lakhs allocated is anticipated to be spent. Further, proposals for supplementary grants are being sought from the State Government.

New responsibilities entrusted to the department due to vigorous implementation of pollution and Environmental Protection laws:

The Environmental (Protection) Act came into force from November 1986 and the existing Water Act and Air Act have been amended over the last two years. The new provisions of the environmental laws enable the general public to question the authorities involved in the environmental pollution control in a court of law. The Department is now responsible for Management of hazardous chemicals, and Control of oil pollution in the coastal waters. In addition, beach management has also been given considerable importance. During June 1989, Government of India indicated that the responsibility of bio-control and bio-technology research work also vests with the Department of Ecology and Environment and Pollution Control Board. Thus, it could be seen that although enormous statutory responsibilities vest with both Ecology and Environment Department and Pollution Control Board, matching financial support was not forthcoming.

Government of India is laying emphasis on the sustainable development and protection of environment. The responsibilities cast on the Department in safeguarding the environment would continue to enlarge in the coming years. This aspect needs to be taken into account while determining the funds required for this Department. The working group of this Department has recommended that a quantum jump in financial resources is required for the Department to manage the assigned tasks.

PERSPECTIVE FOR VIII FIVE YEAR PLAN

Since the inception of this Department in the year 1980-81 and through out the period of VIth and VIIth Five Year Plan, the entire activities of this Department was under State Plan. Recently, the Department had recommended incorporation of some of the essential activities which are to be continued for the VIIIth Five year Plan period under non-plan. Unfortunately the administrative charges of the Department continues to be in

the 'Plan' programme. In view of the above background, in the presently prepared VIII Plan period proposals also, the administrative and establishment charges of this department are shown under plan expenditure alongwith other departmental programmes/projects/schemes.

Considering the shortcomings faced during the VIIth plan; new responsibilities entrusted in implementing the Pollution control and Environment protection laws and the great need to protect and improve the quality of the Environment, the following salient features as additional activities on a larger dimension are proposed during the VIIIth plan period.

- 1 Establishment of District Environment and Nature Awareness Centres (DENAC's) in all the districts of the state.
- 2 Extending the dimension of environmental education and awareness programmes throughout the state by creating necessary facilities like AV mobile vans, AV media, organising street plays/ folklores in rural areas etc
3. Ecodevelopment Projects concerning many areas:
 - a) Demonstration models for Integrated land use and natural resources management for all the 6 Ecological zones in the rural areas of the state.
 - b) Formulation of comprehensive strategies for development of Wastelands and Drylands.
 - c) Expanding the dimensions of the ongoing Mangrove conservation programme in the coastal districts to cover 8000 Ha instead of 100-200 Ha. being covered annually.
 - d) Formulating special programmes for Coastal/ Beach Mangroves
 - e) Wetland resource management/ conservation/ Devpt. Programs
- 4 Diversification of Environmental Impact study areas, drawing up comprehensive management strategies for devptl Projects, identification of ecologically sensitive areas, Zonal planning for industries, development of Environmental impact models etc.
- 5 Projects/ schemes for Hazardous waste disposal & Management.
- 6 Support to District Emergency Authorities for preparation of Off-site emergency plans.
- 7 Carrying out Urban Eco-system studies concerning pollution and health monitoring studies and formulation of Management strategies for various problems like Parthenium control and others like water, air and noise pollution.
- 8 Formulation of conservation and management programmes for Fauna & Flora in selected critical and fragile eco-systems
9. Establishment of more Natural History Museums.
- 10 Establishment of Common Effluent Treatment Plants in all the 125 Industrial Estates existing in the State.
- 11 Establishment of Sewage treatment plants for the Towns/Cities especially located on river banks (60) and along the coast line (15), to make a beginning.

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12. Creation of Centre for Environmental Research and Training.
13. Action plan formulation for the improvement of riverine resources in the State on the line of 'Ganga Action Plan'.
14. Strengthening the department with ten scientific staff from various multidisciplinary fields concerning environment along with supporting staff and infrastructural facilities like library, computers, Cameras, vehicles etc.
15. Conducting Training Courses in Environmental Sciences and Pollution in atleast five institutions situated out side Bangalore District.
16. Strengthening the State Pollution Control Board in terms of Scientific/ Technical/ Supporting staff and the necessary infrastructural facilities. This includes provision of Board offices for each district, creation of an R & D Wing and strengthening the main Board office at Bangalore. This is in view of the new and increased responsibilities assigned to the Board.

Note :-

The details of the concepts and nature of the programmes listed above are provided in the proposal under various Schemes and Sub-schemes.

Thus, considering the short comings faced in the VIIth Plan; new responsibilities entrusted to this department due to vigorous implementation of Pollution control and Environment Protection Laws and the new challenges emerging in the fields of environment, and in co-ordinating all the Programmes listed above, the Department has prepared detailed financial outlays for the continuing and new schemes proposed during the VIIth Plan and these, form the main proposal for seeking grants and this amounts to Rs.16845.00 Lakhs. Of this the Non-recurring expenditure is Rs.14065.00 Lakhs and Rs.2780.00 Lakhs constitutes the Recurring expenditure.

However, in view of the outlays limited by the Government, the departmental proposals have been restricted to Rs. 290.00 Lakhs for the VIIth plan period of which the non-recurring expenditure is Rs. 115.00 Lakhs and Rs. 175.00 Lakhs, constitutes the recurring expenditure. During 1992-93, Rs. 60.00 Lakhs have been provided. The brief financial details for these proposed outlays are provided in Annexure-I.

A. SCHEMES UNDER HEAD 2251- SECRETARIAT-SOCIAL & COMMUNITY SERVICES:

1. Administrative Charges for the Existing establishment:
As per the guidelines of the Finance Department, the existing establishment of this department is to be transferred to Non-plan for the year 1992-93 and the Technical Cell of the department which started functioning during the third year of

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the 7th Plan as a central sector scheme is to be included under the State Plan and preferably under non-plan from the year 1992-93, since this cell has been functioning since 1988. For effective discharge of the increased statutory responsibility entrusted to this department during the later part of the 7th Plan, the existing Scientific and supporting staff of the Technical Cell would have to be continued as a part of the existing establishment of the DEE during the course of the 8th Plan period. A sum of Rs.175.00 Lakhs is provided for meeting the administrative charges during the 8th plan. Out of this, Rs.29.00 Lakhs is proposed for year 1992-93. This allocation is shown under Code No. 800 under 'Other Expenditure' in Annexure -I.

SCHEMES UNDER HEAD 3435-ECOLOGY AND ENVIRONMENT:

The brief details of the proposals under the Major/ Minor heads could be seen in Annexure-I. Utmost care has been taken to see that most of the projects/schemes in their outlays constitute atleast 50% of the expenditure for the rural component. There are many schemes in the areas of Environmental Impact Assessment, Awareness Creation and Eco-development/ extension programmes which have been exclusively aimed to cater to rural needs. However, there are some problems which are associated entirely to urban areas and problem areas like mining, industries etc. wherein the rural component cannot be applicable.

B. 3435-ECOLOGY & ENVIRONMENT - 03 - ENVIRONMENTAL RESEARCH & ECOLOGICAL REGENERATION - 003 - ENVIRONMENTAL EDUCATION & TRAINING - 01 - ENVIRONMENTAL EDUCATION AND TRAINING

2.Training Courses in Environmental Sciences and Pollution etc:

This department has identified St. Joseph College, Bangalore, for conducting a Diploma Course in Pollution analysis and Monitoring. The basic requirement for this training is a Degree in Science. There is an increased demand from the industries for trained technicians who are capable of analysing water, waste water, air, noise and solid waste samples. At present such training facilities are not available in any of the universities. To provide training and employment opportunity in this field, this department is encouraging the above institution to carryout a Diploma Course. Financial assistance is being given to this institution as Grant-in-aid. The first batch of trainees have come out this year. There is a great demand for this training and some more institutions in other regions of the State would also be encouraged to impart such training. Rs.5.00 lakhs is provided for this programme for the 8th Plan of which Rs. . . .00 Lakhs is proposed for the year 1992-93.

3. Creation of Centre for Environmental Research and Training: (CERT) :

In the last 15 years, there is a marked increase in concern on environmental issues. Various information out puts have succeeded in giving the public a sense of the extent, seriousness and urgency of the environmental problems in the country today. However, these messages are largely given out by appealing to people at an emotional level. Such an approach, however effective it may be, has limited educational impact as very little or no substantive information is conveyed.

A large amount of scientific knowledge about the environment already exists and research is producing new information all the time. But most of these are in technical language and accessible to scientists only. The results of ecological research have to have a practical application outside the academic world. The potential users of ecological information therefore, transcend the scientific community. Considering the need to educate non-specialists about the environment, Karnataka during the 8th Five year Plan proposes to establish an environment Training Institute. The activities proposed to be carried out are:

- 1) To conduct regular training programmes on various aspects of environment to the Administrators at various levels.
- 2) To organise workshops so as to bring about an awareness among the Entrepreneurs, industrialists and local authorities, on the need to have pollution abatement measures and to programme their projects with an environmental angle.
- 3) To organise workshops, training programmes to engineers and others involved in developing and implementing the various development projects.
- 4) To Act as an information Centre on various aspects of environment. This will have a very wide scope from informative, educative and consultative levels.
- 5) To act as a forum for free exchange of thoughts and ideas among the Administrators, Scientists and the Industrialists.
- 6) To develop educational materials for the benefit of non-specialists.
- 7) To act as an independent, assessment and opinion making body on various aspects like EIA, Pollution control etc
- 8) Training of operators, Technicians and Laboratory Assistants in the operation, maintenance and quality control of pollution control measures and treatment units.
- 9) To impart training to teachers and students in the field of environmental protection.

For this task, an Environment Training Institute is proposed at a cost of Rs.250.00 Lakhs. The modes of setting up such a

Centre will be done in consultation with renowned bodies in the line in the country. Help through external aid and expertise, is also anticipated. However, a token amount of Rs. 5.00 Lakhs is provided during the 8th plan period. For 1992-93, Rs.2.00 Lakhs is proposed.

C. 3435 -- ECOLOGY & ENVIRONMENT - 03 - ENVIRONMENTAL RESEARCH & ECOLOGICAL REGENERATION - 003 - ENVIRONMENTAL EDUCATION & TRAINING - 02 - ENVIRONMENTAL STUDIES & EXTENSION

4. Environmental Education Awareness Programmes:

a) Environmental Education and Awareness Programmes.

This Department is giving Grant-in-aid to certain institutions like KSCST, KRVP and other voluntary organisations who are dedicated in creating awareness and imparting environmental education at different levels. A number of activities could be initiated on occasions like Environment day/ Earth day/ Vanmahotsav/ Wildlife week celebrations, which could be continued throughout the year.

b) National/State Natural History Museums.

The need to establish Natural History Museums for their educative, participative and awareness creation potential, has become vital. New information generated has to be channelised to reach the public at large to enable them to keep pace with new developments in the fields of Natural history and environment. These can also serve as 'Hobby centres' and 'Nerve centres' for introducing easy public participation concepts for the use of all target groups.

The Department has extended support for establishing the regional Centre of the National Museum of Natural History at Mysore by giving a token grant-in-aid. It is also proposed to continue the Scheme and support The Natural History Museum. It is proposed to have in a phased manner Natural History Museums at all District Centres in the future.

c) Establishment of District Environment & Nature Awareness Centres (DENAC's) :

The awareness activities concerning nature, environment etc. in the State have been mainly concentrated in larger cities and some District headquarters/towns thus, having an urban bias. A lot of activities of course occur in Bangalore. However, even these have mainly remained instructional and involves very little activity which could physically improve the Environmental quality. In the process, rural areas are completely left out, whereas, it is the people of these regions who are directly affected by most adverse environmental impacts.

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Realising these lacunae, it is proposed to establish DENACs so that all districts have a nodal centre from which required activities can be conducted and useful information disseminated. Each DENAC is proposed to be manned by a District Environmental Educator/motivator who would manage its activities. Each centre would fully involve in co-ordinating with all concerned agencies, institutions, resource persons etc. in motivating, promoting and organising programmes of local relevance so that such programmes could spread out throughout the district touching each taluka and finally to see that even all villages are covered by turns if necessary with a continuous stream of programmes.

It would be ensured that apart from purely instructional programmes, all the emphasis would be given to participative. The programmes would also consist of audio/visual programmes including plays, skits and field activities, oriented to cater to all target groups i.e., children, students or adults etc., wherein environmental problems could be helped to be solved by the people. Environmental technologies relevant to the area could also be demonstrated and popularised by making people use and experiment on such facilities to convince themselves.

d) Publication of State of Environment, other Reports:

This department has been bringing out the State of Environment Reports every year, both in Kannada and English. These reports have been appreciated by one and all and there is a great demand by all concerned. This report is brought out through the Centre for Taxonomic studies and the Grant-in-aid is being provided for this institution to bring out these reports. During the coming years, reports on other areas of interest and crucial issues are also proposed to be brought out from time to time.

e) Institution of State Environment Awards:

There are a large number of individuals and institutions who are working towards protecting the environment. Recognising the work done by the people/institutions by the State, would also encourage a large section of people to involve themselves in Environment protection and related activities. Therefore it is proposed to institute state awards for individuals as well as institutions.

To carry out all the programmes detailed above, a sum of Rs. 15.00 Lakhs is provided during the 8th plan period of which Rs. 4.00 Lakhs is allocated for the year 1992-93.

D. 3435-ECOLOGY & ENVIRONMENT - 03 - ENVIRONMENTAL RESEARCH & ECOLOGICAL REGENERATION - 003 - ENVIRONMENTAL EDUCATION & TRAINING - 03 - ENVIRONMENTAL PROJECTS & SCHEMES

The fact that our Environment has been seriously jeopardised by our desire for more progress and prosperity has been realised. Our environment has to be taken seriously, for everything depends on it. We have to consider protection of our environment from the on-slaught of developmental programmes, not as a luxury but as a necessary instrument for sustainable economic development. There are a number of areas in which a lot needs to be done to improve the environment in this state. Solutions have to be found for various issues like environment impacts of development, management of hazardous and solid wastes, problems concerning urban eco-systems, development of industrial areas and their associated problems, treatment of sewage and waste effluents. There is also the need to protect Mangrove, coastal, estuarine and wetland eco-systems. The riverine and water resources also need to be protected against pollution, erosion and other problems. Similarly the pollution of Air and land needs to be tackled to solve some serious environmental problems which are already existing and have become cause for health hazards. The rural areas and the natural resources available locally also need to be developed from the environmental angle with a multi-disciplinary and integrated approach. Thus it can be seen that since the seriousness of various possible negative impacts on the environment are acute, it is necessary that corrective steps should be taken to minimise them on a priority basis. Hence there is a need to conduct various supportive studies on the above lines which could later help to draw up implementation programmes in the future. In the areas where implementation programmes can be started right away, schemes are already proposed and can be seen vide Annexure-I.

Under this sub-head a total of Rs.80.00 Lakhs is allocated during the 8th plan period. Of this, Rs. 21.00 Lakhs is the proposed expenditure during the year 1992-93.

5. Environment Impact Studies :

Environmental Impact Studies have become an important tool and accepted methodology for taking decisions on the developmental programmes. EIAs indicate the seriousness of possible impacts on the environment, which include impact on public health, flora, fauna, water, soil, air, cultural and historical assets.

a) Environmental Impact Studies & Eco-profiles :

Karnataka has started activities on these lines, on a modest scale but much more needs to be done. There are many problem

areas to be tackled but adequate finances have been a major constraint. The programme envisaged for the 8th five year plan are:

- 1) Creation of an interdisciplinary cell to carry out EIA studies
- 2) To develop comprehensive management strategies for minimising environmental damage for a variety of developmental projects.
- 3) Identification and demarcation of ecologically sensitive areas so as to prevent impacts
- 4) Development of plans for zoning of industries.
- 5) Creating a computerised Data base system.
- 6) Development of simulation models for quick assessment of

Environment impact due to developmental projects. The above studies are also envisaged to include studies on siting of industries. Presently the Industrial Area Development Board has been developing industrial areas without giving due consideration for environmental aspects. The Planning Commission is laying stress on sustained development which calls for taking into account the regional carrying capacity from the environmental angle for siting of industries. Keeping this in view, this department is planning to assist the industries department in evolving guidelines for siting of future industrial areas in the State. In this connection a workshop was also held during 1990-91 with the USAID. To evolve suitable guidelines for siting of industries, the department has already entrusted a project to Karnataka State Council for Science & Technology.

Hence, it is very important that all such schemes will have to be supported during the coming years for gearing up to the needs to improve the Environment in the State.

b) Hazardous waste Management and related studies

After the Bhopal Tragedy, new act viz. ,Environmental Protection Act has been enacted by GOI in 1986. This Department has been identified as the nodal agency for its implementation as well as for the management of hazardous chemicals. This is a multi disciplinary task. Government of India has given financial assistance of about 7 lakhs during 1988-89 as against the requirement of nearly 2.5 crores and it is expected that the Government of India would continue this assistance even during the 8th Plan. The assistance is not adequate to take up the responsibilities cast, not only on this Department but on other multi-disciplinary agencies. This statutory responsibility has to be borne by relevant research/study programmes by the DEE, to solve problems concerning these areas.

Unplanned and haphazard development of urban areas are creating increased stress on the available resources and other infrastructural facilities in the urban areas. Multistoried structures in urban areas are causing considerable strain in respect of water supply, sewage disposal, solid waste disposal, fire risks, and adequate parking space constraints for the inmates. The adequacy of the existing By-laws from the environmental angle needs to be looked into. Indiscriminate sinking of borewells in the urban areas, lack of open spaces around the residence, lining of drains are all contributing to the depletion of underground water resources. Improper zoning regulations and siting of industries are creating greater pollution risks in the urban areas. Increased vehicular traffic coupled with inadequacy of roads have added to the problem of air and noise pollution. No systematic study on the urban eco-system has been carried out in the State to identify the specific problems to find solutions. To make a beginning in this direction, the Department is proposing to take up urban eco-system studies in respect of Class-I cities. At the same time, problems of all the major cities and towns of the state have to be also taken care of since, the problems in each case could vary and so also the steps to be taken to improve their environmental status could vary individually.

d) Environmental Protection Council and District Emergency Authorities

As per the directions of Government of India, environmental protection council under the Chairmanship of H.E.

The Governor has been constituted in the State. For the crisis-management involving off-site and on-site emergency plans, District Emergency authorities have been constituted for 5 Districts. Shortly this work will be extended to other Districts also, for training, creating awareness and for the management and combat of crisis during emergency. This is to help speed up preparation, especially of 'Off-site' emergency plans, as this involves the responsibility of the district administrative and implementation agencies, to prepare and follow the guidelines of Off-site emergency plan of action at times of crisis. Mock-up drills to keep the system 'On alert' is also required, to be carried out from time to time. Token provisions have to be made made for the above purpose during the 8th plan period for encouraging the above needs.

6. Environmental Conservation and Management :

Conservation/Management Programmes for Fauna and Flora:

Karnataka with a diversity of climatic factors is endowed with a variety of bio-geographical zones. All these and

particularly the rich, sensitive western ghats, harbour a wide Diversity of Biological species of both fauna and flora. Under the impact of industrialisation and increased human population, many sensitive areas have been already lost and many are under threat of extinction

Although considerable efforts are being made to conserve our biological diversity, many gaps still exist in our understanding the intricate relationship between the eco-system as well. Action envisaged for the 8th Five Year Plan are:

- 1) Development of a Data base on the Distribution pattern for the endangered Species of fauna and flora.
- 2) Studies on selected critical and fragile eco-systems of western ghats.
- 3) Faunistic survey in various eco-systems.
- 4) Preparation and publication of reports on the status of endangered species.
- 5) Support to Museums of Natural History, for such themes.
- 6) Identification of newer bio-geographic areas for conservation.
- 7) To develop standards for the effective management of protected areas.

7. Eco development programmes :

In the post independent era, we have achieved remarkable progress in increasing agricultural productions as well as in industrialisation. Of late we have realised that our development strategy is faced with a number of problems. These problems include degradation of soil, deforestation, loss of tree cover, decreased essential resources like fodder and fuel wood. This is particularly so in the western ghats region where we have a large number of developmental activities going on. There are many other problems which have developed over many years due to lack of ecological and environmental safeguards in planning and development. These have to be taken care of by initiating various types of Eco-development programmes especially in the rural areas.

a) Eco - development projects :

Karnataka has realised this problem and has initiated several actions to protect the environment. It is also realised that it is the local people who have an intimate understanding of the surrounding environment, and it is they who suffer from its degradation. The participation of local population is also being ensured in the eco-development programmes.

Some of the activities envisaged to be taken up are:

- 1) To assess the present land use and to reorient the land use

policy for optimal use of soil moisture and to prevent soil erosion.

- 2) To reorient present pattern of use of natural vegetation and to augment its productivity.
- 3) Carry out studies for rehabilitation of Tribals and on the interaction between Tribal lifestyles with natural resources around them.
- 4) To evolve better animal husbandry practices to prevent overgrazing and to increase milk and dung yields.
- 5) To introduce efficient means of using the fuel, fodder, manure, water and other natural resources.
- 6) To undertake eco-development projects in dry eco-systems

b) Mangroves, coast and beach management and wetland conservation :

Mangrove conservation programmes :

Mangroves are unique plants growing in intertidal regions. They can tolerate salts and hence are capable of growing in saline and brackish marshy areas.

The mangrove eco-system is conducive to numerous forms of life. Another significant contribution of mangrove vegetation is arresting the movements of soft muds with tidal movements of water thus providing effective control of soil and mineral nutrients from flowing into the ocean.

In Karnataka, the mangroves are found all along the coast line in Dakshina Kannada and Uttara Kannada Districts. They are faced with all kinds of degradation problems such as felling for firewood, encroachment, clearing for agricultural purposes etc. The need to conserve, protect and develop mangroves is of paramount importance.

Programmes have been initiated by the Department of Ecology and Environment to manage and conserve the unique vegetation both under Private and Government ownership. A research project supported by DEE to identify and assess the present status of mangroves along the coastline has been completed and certain critical areas for taking up certain conservation measures have been identified.

With the Co-operation of the Forest Department, action has been initiated to protect and afforest critical areas with Central sector grants from the Min. of Env't. and Forests, GOI. So far, Rs. 24.38 Lakhs have been received. About 500 Hectares of area has been planted with different Mangrove species in the Coondapur region of D. K. District. Thus, work in the U. K. District is yet to be initiated. It is estimated that there are about 5000 Ha. and about 3000 Ha., available in the D. K. and U. K. districts for taking up such conservation programmes

manner, and preferably during the 8th plan period itself. Hence, it can be seen that this work needs to be carried out on a large scale and further, the gaps in the knowledge about means of propagation and management still need to be bridged.

The programme to be taken up to date includes :-

- 1) Provision of additional support to the Forest department for implementing the programme on a larger scale. This is because the Forest dept., is now trained and equipped to carry out planting of upto 1000 Ha. Per annum or even more and the funds from the GOI, are able to cater to only about 200 Ha. per year.
- 2) Development of a comprehensive management plan for the conservation of mangroves along the coastline, to go along with the activities at (1) above.
- 3) Research on better and efficient methods of cultivation and propagation of mangroves species.
- 4) To devise practices for efficient management and protection of mangrove eco-systems.
- 5) To develop educational materials on the mangrove species, uniqueness of the eco-systems, interrelation with other systems etc., so as to bring about an awareness among the general public, for developing efficient protection and conservation attitudes.

The above programme is to progress under complete support as a centrally sponsored scheme. However, the State component would include only Research/Study/Monitoring programmes to a small

Programmes for Coastal and Beach Management:

Karnataka has a long coastline covering the Dakshina and Uttara Kannada Districts. Large scale industrial activities are taking place all along the coast line. Tourism is also being developed in these areas. Recently Government of India in pursuance of the directive of Prime Minister has addressed the State to ensure that indiscriminate construction activities within 500 m of the high tide level should not be allowed as, these could result in serious environmental impacts.

Karnataka has initiated studies to prepare a report on the status of our Beach line. The work has been completed. This would now be used as a guideline, to monitor further coastal developments, draw up action plans etc.

In order to prevent indiscriminate industrial activities which adversely affect the shore line, the following programmes are proposed for the VIII Plan.

- 2) Prepare action programmes to protect beaches against erosion and impact of wind.
- 3) Identification of pollution sources and pollution load from industries, solid wastes from cities, silt load etc. ,and to develop suitable management strategies, to reduce and control pollution of estuaries and the sea.
- 4) Continuous monitoring of the Coastal Zone for environmental quality including shore waters.
- 5) Preparation of Action Plans to improve coastal fishery resources.
- 6) Identification of suitable conservation areas for creating Marine National Parks.
- 7) Documentation of Environmental impacts of dredging operations for formulating management strategies.
- 8) Contingency plans for managing oil spill disasters.
- 9) Preventive measures to control sea erosion.

In the above programmes, for many of the components requiring huge financial outlays are anticipated to be supported by other Departmental programmes/ external funding.

Wet land survey and action programmes:

Wetlands (lakes, tanks, marshes etc.), form very important and vital ecological habitats. They serve many ecological purposes and water resource needs for irrigation and public at large, apart from the point of view of fisheries. They further, help to stabilize the local climate and harbour wildlife and serve aesthetic/ recreational needs if managed properly.

Eventhough, there are number of wet lands in the State Survey of these wet lands is yet to be under taken. A small begining has been made in conserving lakes only around Bangalore. There is a need for survey of all important wet land. in the State. Based on the survey, an action plan for improving the eco-system can be formulated. The implementation work envisaged for a wholistic improvement of these wetland resources, would include desilting of lakes, planting of trees and improvement of catchment areas. For implementation programmes, other sources are to be depended upon.

c) Environmental cleanliness campaigns/ projects :

The urban area of Bangalore city limits, has a large number of waterbodies which once provided a large range of utilities. These were in the form of water resources for various uses to the public, (domestic and irrigational), large areas of cool open spaces, climate modulators, aesthetic and recreational fisheries and important habitats for wildlife in terms of birds and other fauna. Over the past two decades of urban development, many of these waterbodies have been lost for

adequate care and protection. Hence, there is an urgent need to restore to the remaining waterbodies, the above environmental considerations, by protecting, conserving and managing these habitats and their catchment areas in an ecologically sound manner. This however involves large financial inputs.

Further, water is a precious and vital natural resource. Hence, these activities have to be reached out to other district cities/towns facing similar problems here, the problems would be more acute as alternative water resources as in Bangalore, would not be available. So, the existing water resources would need to be protected in these areas. In the rural areas also there are many water bodies facing various degrees of Environmental pressures; with pollution and siltation being the major problems. These areas are also proposed to be tackled through this scheme. The above eco-development programmes would be purely from the point of view of protecting and ensuring clean water quality in water bodies.

The other area of major environmental concern is in the disposal and management of enormous quantities of solid wastes like garbage, produced in cities and towns. There are new technologies which have been developed for the management of such wastes. Further, there is an urgent need to create some more large parks, open spaces and wilderness areas to cater to the needs of the public especially of Bangalore city and other cities/towns which have increased tremendously in the last two decades. Further, different types of Environmental cleanliness campaigns have to be taken up from time to time, to involve the residing public in maintaining the city clean.

There could be other problematic areas apart from those mentioned above. This for example could be in areas of new development for environmental improvement programmes, public participative cleanliness campaigns etc., on local issues, or health problems due to environmental causes. These also have to be attended to. A provision is made for such situations also. Largely these would be locally relevant issues and, could vary from area to area.

The major areas to be concentrated upon are:

1. Restoration, conservation and development of waterbodies in Bangalore.
2. Similar activities as above for water bodies at other district cities/towns.
3. Similar action for other water bodies to be identified in rural areas.

4. Garbage/solid waste disposal and management, development of parks and Wilderness areas and for Environment cleanliness campaigns in all districts.

d) Rural Eco-system studies & Eco-development Extension projects/ Programmes :

Karnataka State is endowed with varied types of climatic, Agro climatic, geographic zones and the natural resources obtained range from those got from dry and arid zones to wet evergreen forests and even the estuarine and coastal eco-systems, all of these being located in a tropical zone.

The State falls into 6 ecological zones. In each of the zones, the variety, nature and quantum of natural resources vary. The agricultural practices also vary a great deal. The range is so vast that it has areas with scanty and low rainfall to that of the coasts and tropical rain forests, where the rainfall is very heavy.

Associated with the above are the soil types which vary from almost negligible nutritive values in wastelands/eroded terrains to high nutrient reserves in the well reserved forest areas. Each of the zones have a number of habitations scattered within them. The inhabitants resident here have traditionally depended on locally available natural resources to fulfill their minimal needs. Their ways have also differed from region to region.

However, over the recent years; especially in the last two decades, there has been tremendous pressure on these natural assets and resources. The populations have increased tremendously. The practices to manage their lands and other resources have become non-systematic and unscientific. In most of the villages, soil and land management has suffered seriously and natural resources have been steadily depleted. Forest covers have declined rapidly. Water has become scarce. Local needs of food, fuel, fodder, and timber can no longer be met now locally. These programmes have aggravated rapidly due to increased populations, overgrazing and over exploitation. More lands have got eroded and many stretches have turned into waste lands. Imbalanced environmental situations, causing health problems are the socially adverse aspects, which are on the increase.

In such an existing situation, there is an urgent need to alleviate the above problems by encouraging in the rural sector, activities to develop renewable resources of energy as well as other basic needs. A number of farmer-cum-environmentally congenial technologies and methodologies have been suggested or developed by various agencies/ institutions, to:

- a) improve soils (cultivated/uncultivated) in terms of nutritive content, moisture retention etc.
- b) improve vegetation cover of local suitabilities.
- c) develop common lands as resource producers.
- d) improve local lands, areas around villages for production of food, fuel, fodder & timber needs.
- f) change or adopt more suitable land use patterns.
- e) protect and improve existing forests, to improve water resources, soil quality and to check erosion.

All the above are to be carried out in an integrated and locally relevant manner in the direction of achieving sustainable development in the long run. Model villages are also anticipated to be created for experimental or demonstration purposes initially, in all the 6 eco-zones.

In view of the above, there is a need to encourage attempts to help to adopt and implement the existing technologies wherever relevant, and also to help to experiment on and develop new technologies continuously, depending on the local situations. There is also a need to encourage extension programmes which could disseminate such technologies to the target groups wherever necessary.

To make a beginning to carry out such eco-system studies and eco-development extension programmes, in the rural areas under different ecological regions in the State, to improve the environmental quality of the villages, some programmes are planned to be initiated during 8th plan period.

e) Parthenium eradication programme

Parthenium is an obnoxious weed introduced into India. This weed can be seen in all nooks and corners of the State. The scientific studies have clearly brought out the harmful effects of these weeds on the health of the citizens as well as live stock. Further the weed comes in the way by competing with agricultural and other cash crops. Also the open lands hitherto serving as areas for minor fodder for livestock are also lost to this weed.

Hence, there is an urgent need to control this weed by using in an integrated fashion, various control technologies like Mechanical, Chemical and Biological methods. This activity needs to be vigorously carried out simultaneously in all the 20 districts in the state during the 8th plan period. This programme is intended to be supported on co-ordination level in the State.

8. Common Effluent Treatment Plant programme :

Establishment of common ETPLs.

This is an area which directly concerns the quality of human life in terms of maintaining our natural flowing water resources free from pollution.

On one hand, with the increased awareness among the general public about harmful effects of pollution there is a pressure on the industries to meet the standards prescribed by the Pollution Control Boards. On the other hand, industries especially a large number of Small Scale Industries are expressing financial problems to implement pollution abatement technologies. Costs for setting up such facilities are also escalating fast. The Government of India has come up with a programme to provide common effluent treatment facility for clusters of Small Scale Industries. 20 Percent of the cost is met by Government of India and another 20 percent of the cost is to be met from State Government. Rest of the amount has to be shared by industries and some amount could be got from international/ex-ternal agencies. There are 125 industrial estates in the State and all these are proposed to be covered in a phased manner during the 8th plan period. Towards this, token amounts are proposed to be provided by this department, to encourage speedy implementation of these activities.

9. Projects on new developments in environment:

Awareness of environmental issues is increasing day by day. Under the existing Act, Public has been given a greater say in environmental issues. New industries and hence new types of chemicals are coming into the market. These are posing considerable challenges for the environmental scientists. Greenhouse effect, depletion of ozone layer etc., worldwide, are threatening the environment. Certain research work is needed in these fields. Noise pollution control is a new area which has to be properly understood and implemented. Some other areas of importance concerning the ecology and environment of the state could come up which have not been anticipated in the regular programmes. This sub-head is anticipated to cater to such a situation also.

E. 3435-ECOLOGY & ENVIRONMENT - 03 - ENVIRONMENTAL RESEARCH & ECOLOGICAL REGENERATION - 003 - ENVIRONMENTAL EDUCATION & TRAINING - 04 - PREVENTION AND CONTROL OF AIR AND WATER POLLUTION

a) Grant-in-aid to KSPCB for strengthening personnel, labs and R&D activities:

Karnataka State Pollution Control Board is in existence since

19119'74. The Board is implementing the provisions of Water Act, Air Act, Cess Act and certain provisions of Environmental Protection Act. For this purpose the Board has its establishment at Bangalore with a laboratory and a research and developmental wing, five Regional offices without laboratory support (three in Bangalore, one in Gulbarga and one in Raichur), three Regional offices located at Mysore, Davanagere and Dharwad with laboratory support. The Board is also functioning as a collecting authority for collection of cess under the Water Cess Act.

State Pollution Control Board is generating its own funds through collection of consent fee, Water Cess etc. They are receiving an assistance from the Central Government as well as from Central Pollution Control Board for certain schemes. Central Government is actively considering doubling the Water Cess rates. There is a proposal to enhance the consent structure and to levy penalty for late applications. Action is taken to streamline the collection of normal cess amount and cess arrears due from local authorities. All these measures will enhance the receipt of revenues of the State Pollution Control Board.

In the recent years, the statutory responsibilities given to the Pollution Control Board under the Environmental Protection Act in the field of management of hazardous chemicals, Oil pollution control in the ports and in the coastal area is gaining considerable importance. Additional responsibilities in the field of bio-technology and bio-control is also earmarked for the State Pollution Control Board. Basic work will have to be taken up in the field of noise pollution control as this subject has come under the statute. Considering these increasing responsibilities, the Department of Environment, Government of India have repeatedly suggested to strengthen the State Pollution Control Board not only in terms of technical and scientific man power but also in terms of additional infrastructural facilities. To meet these statutory and essential functions, Board has prepared an elaborate proposal amounting to Rs.5607 Lakhs. A sum of Rs. 10.00 Lakhs has been proposed as G-I-A to the Karnataka State Pollution Control Board as partial support to its planned activities.

b) Control of Water Pollution from towns and cities:

Even though this decade has been declared as 'International decade of water supply and sanitation', the progress achieved in controlling pollution from cities and towns is not satisfactory. Proposals have been submitted to Government of India to take up work similar to "Ganga Action Plan" for the rivers in Krishna Basin. Proposals have also been submitted to Government of India for seeking assistance from foreign

agencies such as DANIDA, SIDA and World Bank. Prospects of getting favourable responses are bright.

There are a number of cities and towns, located on the major river banks and causing direct pollution from domestic wastes flowing into the rivers. The major rivers are the Tunga and Bhadra in the Krishna basin and to a lesser extent, the Cauvery. Though all rivers are to be covered in the long run, initial attempts would be to tackle the most problematic towns on priority. Most of these towns also lack underground/common drainage facilities. The same is the case with cities/towns situated along the State's coast. The waste water either flows into the sea or the estuaries.

Hence, detailed plans and estimates have to be prepared for these towns both for effluent (sewage) treatment and effective underground drainage facilities to take up an action plan.

Token amounts to help agencies like Karnataka Urban Water Supply and Drainage Board and others, to prepare such plans and estimates for having sewage treatment facilities in such crucial areas are planned to be supported during the 8th plan period.

River pollution and monitoring studies shall be taken up parallelly by the KSPCB as a part of its programmes.

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