



# SEVENTH PLAN 1985—90

AND

# ANNUAL PLAN 1985-86

ORISSA

(DRAFT)

(VOL. I)

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ORI-S

GOVERNMENT OF ORISSA  
NOVEMBER 1984

**SEVENTH PLAN, 1985-90**  
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**VOLUME I**

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**GOVERNMENT OF ORISSA**  
**PLANNING & CO-ORDINATION DEPARTMENT, BHUBANESWAR**  
**NOVEMBER 1984**

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## CHAPTER I

### ECONOMIC BACKGROUND

1.1. Since the inception of First Five-Year Plan, the State plans in Orissa have followed the National objectives of growth, equity and social justice, self-reliance, improved efficiency and productivity. The progress so far achieved has been substantial though the pace has been somewhat slower than envisaged. The very process of development has, however, generated new impulses for acceleration.

1.2. With an estimated population of 2.64 crores in 1980-81, Orissa accounts for about 3.85 per cent of the country's population. The economy of the State is basically agrarian. 60.9 per cent of the State Domestic Product originates from the agriculture and allied sector which also accounts for 80.34 per cent of the total work force in the State. At the national level, on the other hand, the agriculture and allied sector contributes 39.5 per cent of the National Domestic Product and 72.56 per cent of the work force. The large agricultural base of the State has been slow in moving up the economic ladder. In spite of concerted efforts to step up the State's economy, the overall growth has, therefore, not been able to keep pace with the national growth. The *per capita* income of the State is far removed from the national income *per capita* and even among the larger States, Orissa occupies the second lowest position in terms of *per capita* level of income. This relative lag is basically due to the historical circumstances which gave the State a poor economic base, the prolonged period of stagnation preceding the commencement of the Five-Year Plans and consequent delays in attaining the requisite momentum for development. The slow progress of industrialisation, inadequacies in power generation and uneven agricultural growth have all contributed to the low growth on the economic front. The situation in these fields has, however, been improving steadily as a result of structural and institutional changes, shift in the sectoral composition of production, diversification of activities and advancement of technological innovations.

#### Savings

1.3. The underlying trend of growth of the State's economy is latent in the growth trends of savings and investments. Considering the over-all economic situation of the State, particularly its poor resources-base, low levels of production, large incidence of Tribal and Scheduled Caste population and wide-spread poverty, the trend of savings and investments has not been unimpressive. In the decade between 1970-71 and 1981-82, which was a watershed in the economic development of the State, the gross savings averaged about 15.12 per cent of the net State domestic product with annual rates fluctuating between 13.75 per cent and 20.32 per cent. The gross savings at the national level during this period were of the order of 21.20 per cent. The contribution of the public sector to the gross domestic fixed capital formation in 1970-71 was 57.32 per cent and that of the private sector 42.68 per cent. In 1981-82 the contributions of the respective sectors were of the order of 56.10 per cent and 43.90 per cent. In between, the performance of the public sector fluctuated between 52.99 per cent and 68.94 per cent and that of the private sector between 31.06 per cent and 47.01 per cent. The relatively small number of economically viable private enterprises in the State accounts for the larger contribution of the Public Sector to capital formation. It also shows that in the private sector itself the main support to capital formation came from domestic savings in the household sector through the sacrifice of consumption. Savings from the corporate sector were slower than anticipated.

#### Investments

1.4. The growth of Plan outlays in the State is indicated in Annexure I. Over the years, the State Plan outlays have increased from Rs. 18.42 crores in the First Five-Year Plan to Rs. 1,570.00 crores in the Sixth Plan 1980-85. As a percentage of the net domestic product, the annual outlays have gone up from 4.30 per cent in 1970-71 to 8.26 per cent in 1982-83. The upward trend has been maintained in the subsequent years also. The increase in Plan investments has, however, been accompanied by deceleration in real terms due to inflation. A Planwise analysis is presented in Annexure II.

1.5. In an economically under-developed State like Orissa, the impact of higher levels of public sector investment during the successive Plans has been significant. The contribution of the public sector to the development of infrastructure has been the key to large scale expansion of industries in the terminal phase of the Sixth Plan.

1.6. The analysis of growth trends in savings and investments should not, however, obscure the fact that the level of investment hitherto achieved is by no means adequate and a higher order of investment is not only the desideratum but also a pre-condition for higher levels of growth. The main reason inhibiting investments of the requisite order is that the State with its slender resources base does not have adequate investible surpluses to augment the plan outlays according to the needs. The returns on past investments in the public sector, particularly, in power, irrigation, transport and the corporate sector have also been far less than expected.

### Growth

1.7. The growth of the State income indicating the overall performance of the economy during different plans is presented in Annexure III. The data shows that the trend of growth has not been consistent and its rate has fluctuated from Plan to Plan. The compound annual growth rate of State income was 2.8 per cent in the First Plan, 10.7 per cent in the Second Plan, 4.5 per cent in the Third Plan, 4.1 per cent in the Fourth Plan and 2.9 per cent in the Fifth Plan compared to the national growth rates of 3.6 per cent, 4.0 per cent, 2.2 per cent, 3.4 per cent and 5.1 per cent during the corresponding periods.

1.8. Between 1970-71 and 1982-83, the compound growth rate of the net national product (at constant prices) was 3.29 per cent and that of the net national product *per capita* 0.98 per cent. During this period, the net State domestic product grew at the rate of 2.39 per cent and the State domestic product *per capita* at 0.49 per cent. The rate of growth of the State economy was lower. This inevitably led to a parallel decline in the share of the State in total income of the country from 3.03 per cent in 1970-71 to 2.73 per cent in 1982-83. At both points of time, separated by more than a decade, while the State's share in the total population of the country was about 3.85 per cent, the share of the State in income in the total national income was much less. The analysis of annual variations in the State income shows that the period 1971-72 to 1982-83 was characterised by low levels of income on account of extreme economic strain caused by cyclones, floods, droughts and crop failures.

1.9. In 1978-79, the growth rate of the State income over the previous year was 6.7 per cent while that of the national income was 5.5 per cent. The succeeding year, 1979-80, was, however, a year of widespread drought, which negated the State and the national growth rates by 17.4 per cent and 5.3 per cent respectively. The quick recovery effected in the following year (80-81) enabled the economy to move up and register a growth of 26.1 per cent over the previous year and 4.1 per cent over 1978-79 but the gains were soon to be lost in a fresh wave of natural calamities occurring a year after. In 1981-82, the growth rate was 8.5 per cent over the previous year compared to 5.0 per cent of the national growth rate. The reversal came in 1982-83, when in the wake of repeated onslaughts of flood and drought, the growth rate declined to (-) 8.3 per cent. The national growth rate in that year was also marginal, that is, 1.77 per cent. 1983-84 was a good year agriculturally and holds the promise of a rise in the State income. 1984-85, in spite of the set-back to agricultural production due to drought, is also expected to register a fair rate of growth.

1.10. The compound growth rate of the State, that is, 2.39 per cent between 1970-71 to 1982-83, is, however, one of the lowest among the major States in the country and lower than that of the neighbouring States of Andhra Pradesh (2.8 per cent), Madhya Pradesh (2.8 per cent), Bihar (2.9 per cent) and West Bengal (3.2 per cent). In comparison, the growth rates of States like Haryana, Punjab and Maharashtra are much higher, i. e. 4.5 per cent, 4.6 per cent and 5.2 per cent respectively.

11.11. Sectoral analysis of the State income data indicating the contribution of different sectors to the State income is furnished in Annexure IV. The data shows that the contribution from the primary sector decreased from 67.9 per cent in the First Plan to 60.9 per cent in 1982-83, the mid-year of the Sixth Plan. The contribution from the secondary and tertiary sectors, on the other hand, registered a rise from 8.34 per cent to 13.8 per cent and 6.4 per cent to 11.7 per cent respectively during this period. The decline in the contribution from the primary sector is clearly marked in its negative trend from 67.29 per cent in 1970-71 to 60.9 per cent in 1982-83.

11.12. The composition of the State income has changed steadily, though not sharply, during the Plan period. It will be seen from Annexure IV that the share of the commerce, transport and communication sector increased from 6.4 per cent in the First Plan to 11.7 per cent in 1982-83, and that of manufacturing (Small Industries, electricity and gas) increased from 8.3 per cent in the First Plan to 13.8 per cent.

11.13. The higher rate of growth in the secondary and tertiary sectors is a healthy trend for the backward economy of the State and may be maintained in the Seventh Plan.

11.14. The relative growth rates recorded in different sectors of the economy in the State and at the national level between 1970-71 and 1980-81 were as follows :—

SECTOR	ORISSA	INDIA
Agriculture and allied activities	2.0	1.8
Mining, manufacturing and small enterprises	5.5	4.5
Commerce Transport and Communication	2.5	5.4
Other services	4.1	5.4

The figures indicate diversification of productive activities both in the national and State spheres. It is clear that the growth of agriculture and allied activities as also of mining, manufacturing and small enterprises in the State has picked up during this decade which is a very salutary development.

#### Per capita Income

11.15. The impact of the growth of State income is reflected in the *per capita* income. Annexure V shows the disparity between the State and the national incomes *per capita* from 1970-71 to 1982-83 and Annexure VI the *per capita* income computed at the current and 1970-71 prices during the same period. In a comparison of the State and the national incomes *per capita* what stands out in bold relief is the slow rate of growth of the State *per capita* income on account of the relatively smaller size of its Domestic Product. Comparison with other States having higher *per capita* income may attest the same conclusion.

11.16. During 1981-82 and 1982-83 the national *per capita* income did not undergo much change but the State *per capita* income declined in 1982-83 by 10 per cent. Though one of the main objects of State planning is to accelerate the growth of the economy so as to bring the State income *per capita* nearer the national level, the gap between them has not narrowed down very much.

11.17. The low level of *per capita* income highlights the poverty of the population. The inter-State comparison in Annexure VII shows that there are few other States whose *per capita* income is as low and the distance from the national *per capita* income as wide as that of Orissa.



### Demographic Situation

1.18. The demographic characteristics of the State have a direct nexus with its economic development. According to the 1981 census, the State had a population of 2.64 crores of which about 37.1 per cent (97.831 lakhs) belonged to the Scheduled Castes and Scheduled Tribes. During 1971—81, the population increased by 20.2 per cent against the national average of 25 per cent. Compared to the growth rate of 25.05 per cent in the preceding decade (1961—71), the decline in growth was significant. Wide-spread use of family planning measures appears to have reduced the birth-rate from 34.6 per thousand in 1971 to 33.2 per thousand in 1980. The net growth rate, therefore, declined from 2.5 per cent per annum during 1961—71 to 2.01 per cent during 1971—81.

1.19. It is to be noted that in spite of the reduction in the growth rate of population in the last decade, the growth of *per capita* income has not shown any marked up-turn. The rise between the *per capita* income in 1970-71 (Rs. 478.1) and 1980-81 (Rs. 529.3) was only about 10.7 per cent, which far from reducing the gap between the national and State *per capita* income increased it from Rs. 154.7 to Rs. 171.1 during the corresponding periods. The reasons for the distortion are stated below.

#### Reasons of the slow growth of State *per capita* income

1.20. Apart from the historical reasons which gave Orissa a poor start in its plan efforts and the compulsion of its geographic, climatic and demographic conditions, there is an apparent paradox between the progressive growth of savings and investments in the State, on the one hand, and the relatively low growth of the State and *per capita* incomes on the other. The most potent factor affecting the growth of the State income has been the devastations caused by recurrent natural calamities, which have not only disrupted the economy but also blown it of course on several occasions. The magnitude of the problem is clearly noticed in a recent study, according to which out of the last 20 years, from 1964-65 to 1983-84, only 7 have been normal years and the rest afflicted by cyclones, floods and droughts either singly or in combination. The recurring natural calamities have not only wrecked agricultural production, but also seriously affected power generation and industrial production, causing considerable erosion of resources. The fluctuations in the growth trend indicated in Annexure III are mostly due to the losses in production and erosion of resources wrought by natural calamities. While the amplitude of upward fluctuations in good years has been sharp, down-ward fluctuation in bad years have been extremely dismal. The instability in agricultural production has negated the savings and investment performance in several years and seriously affected the tenor of income growth due to diminution in the contribution of the primary sector to the State income totals. Despite consistent efforts made during the successive plans to protect the economy from damage, a large area of productive activity in the State is still prone to the ravages of nature year after year.

1.21. Another factor responsible for the short-fall in growth targets of the State and *per capita* incomes is the inadequacy of investment compared to the needs for development. Though, in spite of lean resources, the State Plan investments have been substantially stepped up during the successive Plans, the rate of investment has not been adequate to enable the State to achieve a faster rate of growth. The analysis of the investments also discloses short-falls in real terms in certain years. The details of the average and *per capita* plan investments from the First Plan to the Sixth Plan are presented in Annexure III. The data shows that while the investments in the Second and the Third Plans were higher than in the First Plan, there was a spell of recession in the Annual Plans, 1966-69. In the subsequent plans, however, the growth trend of investments was restored and improved.

1.22. In so far as the quantum of investment required for putting a backward economy on the path of growth is related to the status of the economy and its potential for development, it is imperative that in a State like Orissa where the economy is historically backward and which, in spite of low productivity and pervasive poverty, has made substantial contributions to savings and investments, a higher order of investment is made to enable the economy to move closer to the more progressive States, which on account of their large and productive resources have been able to generate surpluses for higher investment in the

Plans. The *per capita* plan outlay of Orissa, as Annexure VII shows, has hitherto been extremely inadequate and the maximum reached in the Sixth Plan is only Rs. 41.55. Compared to the all States, average of Rs. 54.49 for the Sixth Plan, Orissa ranks with economically backward States. A substantial step-up in the *per capita* investment through higher plan outlays and Central assistance is, therefore, imperative.

1.23. The economy has achieved a compound growth rate of 2.39 per cent between 1970-71 and 1982-83. The achievements during the Sixth Plan have been substantially higher than in the past, though less than what was targetted and more unstable than what was desirable. A part of the shortfall and much of the instability is attributable to the vicissitudes of nature and the devastations caused by natural calamities, which have occurred too frequently. But the gap between the Plan and performance is also due to inadequacies in the maintenance of public investments at the targetted levels and deficiencies in the management and utilisation of assets. The growth targets for the Seventh Plan need to be fixed keeping these inadequacies and deficiencies in view but with the larger objective of stimulating the economy to break out of the straight jacket of low productivity, so that the State income may go up and the hiatus between the national and State income *per capita* may be significantly reduced at the end of the plan period.

#### Annexure I

State Plan outlay in Orissa from the First to the Sixth Plan and the amount of Central assistance

(Rs. in crores)

Period	Total expenditure/ Outlay	Amount of Central assistance	Percentage of Central assistance to total expenditure
(1)	(2)	(3)	(4)
First Plan (1951-52 to 1955-56)	18.42	10.07	54.7
Second Plan (1956-57 to 1960-61)	86.59	63.56*	73.4
Third Plan (1961-62 to 1965-66)	22.60	105.07	46.7
3 Annual Plans (1966-67 to 1968-69)	124.95	87.28	69.9
Fourth Plan (1969-70 to 1973-74) (4 years)	249.34	154.95	62.1
Fifth Plan (4 years) (1974-75 to 1977-78)	453.62	236.44**	52.1
Rolling Plan (2 years) (1978-79 to 1979-80)	385.29	255.82**	66.4
Sixth Plan (1980-81 to 1984-85)	1580.45	776.43**	49.1
1980-81	260.45	160.89**	61.8
1981-82	275.00@	136.66	49.7
1982-83	300.00@	148.79	49.6
1983-84	345.00@	157.49	45.6
1984-85	400.00@	172.60	43.2

\* Includes Paradeep loan of Rs. 8 crores

\*\* Includes advance plan assistance

@ Plan outlays

## Annexure II

Annual and average *per capita* plan outlay in Orissa from the First Plan to Sixth Plan

Period	Total outlay/ expenditure (Rs. in crores)		Average annual outlay/ expenditure (Rs. in crores)		Average annual <i>per capita</i> outlay/ expenditure (in Rs.)	
	At current prices	At 1970-71 prices	At current prices	At 1970-71 prices	At current prices	At 1970-71 prices
	(2)	(3)	(4)	(5)	(6)	(7)
First Plan ..	18.42	41.02	3.68	8.20	2.44	5.43
Second Plan ..	86.59	172.49	17.32	34.50	10.49	20.89
Third Plan ..	224.60	385.24	44.92	71.65	24.52	39.11
Annual Plans (1956-59)	124.95	140.69	41.65	46.90	20.78	23.40
Fourth Plan ..	249.34	223.91	49.87	44.78	22.72	20.41
Fifth Plan ..	453.62	255.39	113.41	63.85	46.15	25.98
Annual Plan (1978-79)	190.28	102.37	190.28	102.37	73.07	39.31
Annual Plan (1979-80)	195.01	89.71	195.01	89.71	73.64	33.88
Sixth Plan ..	1570.00	538.42	316.09	109.68	119.73	41.55

## Annexure III

Compound growth rates of State and National Income (%)

Period	Average annual compound growth rate of			
	State Income	National Income	State <i>per capita</i> Income	National <i>per capita</i> Income
	(2)	(3)	(4)	(5)
First Plan (1951-52 to 1955-56) ..	2.8	3.6	0.9	1.7
Second Plan (1956-57 to 1960-61) ..	0.7	4.0	(-)-1.0	2.0
Third Plan (1961-62 to 1965-66) ..	4.5	2.2	2.0	0.0
Three Annual Plans (1966-67 to 1968-69) ..	..	4.0	..	1.8
Fourth Plan (1969-70 to 1973-74) ..	4.1	3.4	2.0	1.1
Fifth Plan (1974-75 to 1977-78) ..	2.9	5.1	1.0	2.8
Annual Plans* 1978-79 ..	6.7	5.5	4.8	3.3
* 1979-80 ..	(-)-17.4	(-)-5.3	(-)-18.9	(-)-7.4
Sixth Plan				
* 1980-81 ..	26.1	8.1	23.8	5.7
* 1981-82 ..	8.5	5.0	6.5	2.8
* 1982-83 ..	(-)-8.3	1.7	(-)-10.0	(-)-0.4

\* The growth rate refers to percentage increase over previous year

## Annexure IV

Sectoral distribution of State Income in Orissa (1970-71 prices)

Years	% Shares of different sector to State income				
	Agriculture and allied and Mining (Primary)	Manufacturing small Industries Electricity and gas (Secondary)	Commerce, Transport and Communication, etc. (Tertiary)	Other services	All sectors
(1)	(2)	(3)	(4)	(5)	(6)
1st PPlan	67.9	8.3	6.4	17.4	100.0
2nd IPlan	61.3 (-9.7)	14.3 (72.3)	7.8 (21.9)	16.6 (-4.6)	100.0
3rd IPlan	55.4 (-9.6)	19.2 (34.3)	7.5 (-3.8)	17.9 (7.8)	100.0
4th PPlan	67.3 (21.5)	10.8 (-43.7)	10.8 (44.0)	11.1 (-38.0)	100.0
5th IPlan	65.1 (-3.3)	11.7 (8.3)	11.1 (2.8)	12.1 (9.0)	100.0
1978-79	64.6 (-0.8)	12.5 (6.8)	11.0 (-0.9)	11.9 (-1.7)	100.0
1979-80	57.9 (-10.4)	16.1 (28.8)	11.2 (1.8)	14.8 (24.4)	100.0
1980-81	64.6 (11.6)	12.2 (-24.2)	10.9 (-2.7)	12.3 (-16.9)	100.0
1981-82	66.1 (2.3)	11.3 (-7.4)	10.9 (0.0)	11.7 (-4.9)	100.0
1982-83	60.9 (-7.9)	13.8 (22.1)	11.7 (7.3)	13.6 (16.2)	100.0

## Annexure V

Gap between *per capita* Income of Orissa and India (1970-71 to 1982-83 at 1970-71 prices)

(in Rupees)

Year	Orissa	India	Gap	Percentage of Col. 2 to Co. 3
(1)	(2)	(3)	(4)	(5)
1970-71	478.1	632.8	154.7	75.55
1971-72	426.7	626.6	199.9	68.10
1972-73	462.0	603.0	141.0	76.62
1973-74	482.9	620.1	137.2	77.87
1974-75	409.7	615.5	205.8	66.56
1975-76	475.1	660.0	184.9	71.98
1976-77	437.8	649.5	214.7	67.41
1977-78	503.4	692.7	189.3	72.67
1978-79	527.3	719.9	187.6	73.76
1979-80 (P)	427.7	660.1	232.4	64.79
1980-81 (P)	529.3	696.8	167.5	75.96
1981-82 (Q)	563.5	715.3	151.8	78.78
1982-83 (Q)	507.4	712.1	204.7	71.25

P—Provisional

Q—Quick

## Annexure VI

State Domestic Product and *per capita* Income of Orissa

Year	At current prices		At 1970-71 prices	
	Total NSDP in crores	<i>Per capita</i> Income in Rs.	Total NSDP in crores	<i>Per capita</i> Income in Rs.
(1)	(2)	(3)	(4)	(5)
1970-71	1,037	478.14	1,037	478.14
1971-72	1,047	472.95	945	426.74
1972-73	1,297	575.11	1,042	462.01
1973-74	1,607	699.46	1,111	482.90
1974-75	1,672	714.64	959	409.74
1975-76	1,739	729.35	1,132	475.10
1976-77	1,674	689.56	1,056	434.84
1977-78	2,090	845.17	1,245	503.39
1978-79	2,199	872.91	1,328	527.32
1979-80 (P)	2,174	847.46	1,097	427.68
1980-81 (P)	2,878	1,101.49	1,383	529.28
1981-82 (Q)	3,482	1,308.24	1,500	565.54
1982-83 (Q)	3,630	1,339.20	1,376	507.42

P—Provisional

Q—Quick

## Annexure VII

*Per capita* average Annual Plan outlay/expenditure of major States at 1970-71 prices over different Plan period

(in Rupees)

States	First plan	Second plan	Third plan	Annual plan	Fourth plan	Fifth plan	Annual plan	Sixth plan
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1. Andhra	14.95	21.03	29.45	21.88	17.59	29.11	43.60	45.16
2. Assam	13.32	23.12	33.57	23.12	24.31	21.79	37.65	43.59
3. Bihar	11.37	16.14	21.79	15.30	15.27	18.52	26.36	35.94
4. Gujarat	25.99	30.64	34.85	32.13	36.66	45.58	55.02	84.30
5. Haryana	..	..	..	34.84	64.06	56.47	95.09	1.08.97
6. Karnatak	20.85	24.99	32.41	26.61	22.93	32.26	43.05	47.57
7. Kerala	13.90	20.00	32.64	27.69	28.02	27.15	34.49	47.47
8. Madhya Pradesh.	15.46	19.24	27.07	16.68	20.52	30.58	44.62	56.71
9. Maharashtra	16.79	23.17	33.26	31.67	35.80	44.84	61.61	76.63
10. Orissa	5.43	20.89	39.11	23.40	20.41	25.98	36.60	41.55
11. Punjab	..	..	..	34.20	56.72	58.04	64.68	91.93
12. Rajasthan	17.71	21.38	31.52	21.42	21.54	28.24	39.43	46.20
13. Tamilnadu	12.36	22.96	31.38	26.78	24.06	26.52	34.93	50.74
14. Uttar Pradesh.	11.43	13.06	23.21	20.11	23.64	28.55	31.46	41.06
15. West Bengal	24.66	19.34	26.03	14.76	14.75	23.19	37.04	49.98
All States	16.74	21.05	30.14	23.36	25.47	31.62	42.97	54.49

## CHAPTER 2

### DEVELOPMENT PERFORMANCE

2.1. The Sixth Plan of the State with an investment of over Rs. 1,500 Crores in the State Sector has assumed a growth rate of 6.1 per cent to achieve a higher level of growth and reduce the gap between the national and State *per capita* income. In the analysis of economic situation under Chapter-1 it has been noticed that the State Domestic Product, which is the composite economic indicator for measuring the general status of the economy, had demonstrated a perceptible growth in the Third and Fourth Five-Year Plans, when the growth rate was actually higher than that of the National Domestic Product. The decline in the growth rate in the subsequent period was mainly due to the adverse effects of natural calamities. The downward trend has, however, been reined in by better performance of the economy in the Sixth Plan and it is expected that the overall growth during the Plan period may be higher than in the past. The good harvests in 1983-84 and 1984-85, higher levels of investment in the State and Central Sector Programmes, the impact of higher investments on savings, industrial expansion due to the new industrial policy of the Government and larger in-flow of institutional finance may all contribute to the achievement of the targeted level of growth.

2.2. The *per capita* State income increased in the first year of the Sixth Plan (1980-81) from Rs. 427.77 in the preceding year (1979-80) to Rs. 529.3. A further increase was registered in 1981-82 raising the *per capita* income to Rs. 563.5. The gap between the national and State *per capita* income which was Rs. 2344 in 1979-80 reduced to Rs. 171.1 and Rs. 156.4 in 1980-81 and 1981-82 respectively. The fall in the *per capita* income in the subsequent year (1982-83) to Rs. 507.4 was on account of the adverse effects of natural calamities. The national *per capita* income also suffered a decline during that period. The general economic situation in 1983-84 and 1984-85 however, gives the hope that the improvement in the State income would yield higher *per capita* income than in the past. The disparity between the national and State *per capita* income may narrow down further.

2.3. As indicated in Chapter-1, the allocation of State Plan resources has hitherto been made broadly in accordance with the priorities set out in the National Plans. In the Sixth Plan, special emphasis has been placed on the improvement of agricultural production, expansion of irrigation facilities, development of industries, augmentation of employment opportunities and poverty alleviation. Substantially higher provisions have been made for the programmes in these sectors. Sector-wise break-up of the Plan outlay is furnished in Annexure-I.

#### Price Situation

2.4. Prices in the State, as in the rest of the country, have been rising since 1960-61. Escalations in the cost of projects and salary bills of the establishment distort the budget formulations and investment decisions of the State Government. Changes in the relative prices of commodities and services also disturb the inter-commodity and inter-Service balance and adversely affect the development process. The real income of different sections of the society is also affected in varying degrees resulting in re-distribution effects of an unforeseen nature.

2.5. Index numbers of wholesale prices which determine the direction of consumer prices are relatively more stable than retail prices and provide a good indication of the price fluctuations over time. At the commencement of the Sixth Plan (1980-81) inflationary pressures were very high due to the sharp decline in agricultural production in the preceding year (1979-80). The annual average wholesale price index (base-1970-71=100) which was 217.6 in 1979-80 increased by 18.24 per cent to 257.3 in 1980-81. In 1981-82, the index further increased to 281.3, though at a slower rate, that is, 9.4 per cent. On account of the anti-inflationary measures taken by the Central Government, however, the rising price curve showed a downward trend in 1982-83 even though this was a year of widespread natural calamities and severe damage of crops. The average price index in 1982-83 increased only marginally to 288.6, that is, by 2.6 per cent. A rising price trend, however, again emerged in 1983-84. On account of the effect of international prices and the market

trends in the country, prices started rising from the beginning of 1983 till September 1983 when the index was as high as 318.2. But, this was followed by a period of relative stability till April, 1984 during which the prices rose by about 4 per cent mainly due to seasonal factors. A further rise was again noticed for a short duration from May to August, 1984 when the price index rose to 345.0. The period thereafter has been one of declining prices. The price level came down to 340.2 in September and the trend is continuing.

2.6. Effective administration of commodity prices, quality control and firm distribution arrangements for essential commodities are some of the measures taken by the State Government to maintain price stability and protect the interests of the unorganised community of consumers.

## SELECTED PROGRAMMES

### Agriculture

2.7. The main components in the development of the economy relate to growth in agriculture and industries. While emphasis in the industries sector has been on structural diversification, similar emphasis in the agriculture sector has been far more daunting. The development of agriculture in the State has been inhibited mainly by the out-moded systems of land tenures, particularly in the ex-State and ex-Zamindari areas, wide prevalence of antiquated farming technologies and the serious lack of infrastructure. With the merger of the Princely States and abolition of intermediary interests, a direct relationship was established between the tenants and the lands tilled by them, but much more remained to be done to stabilise their rights and interests in the holdings. Land settlement operation was therefore taken up on a priority basis throughout the State. As a result of the drive, settlement has been completed in 39,956 out of 48,624 villages by the end of 1983-84 and maps and records of rights have been prepared. The operation in the other villages would be completed in a phased manner.

2.8. The availability of land records has helped in stabilising the land rights of tenants and also facilitated the implementation of land reforms measures like determination of land ceilings, distribution of ceiling, surplus lands, etc. In a State where small and marginal farmers constitute about 76 per cent of the land-holders and operate barely 40 per cent of the land and even these lands are largely fragmented due to succession and transfer, consolidation of land-holdings was also necessary to step up the pace of agricultural production. The programme of Consolidation of holdings was continued during the Sixth Plan, particularly in the irrigated commands of major and medium irrigation projects. By the end of 1983-84, consolidation was completed in respect of 3,47,495 hectares out of 9,05,100 hectares taken up under the operation.

2.9. The predominant agrarian base of the State makes the growth of its economy largely dependent on agriculture. As noticed under Chapter-I, the State's agriculture is highly susceptible to the vagaries of nature and the variations in the State income are mainly due to the fluctuations in the contribution from the agriculture sector. 60.9 per cent of the State domestic product originates from this sector, which also accounts for 80.34 per cent of the total work force.

2.10. The compound growth rate of the "agriculture and allied activities" sector in the State between 1970-71 and 1980-81 was 2 per cent as against 1.8 per cent of the country. On account of the unfavourable climatic conditions, however, the economy of the State suffered considerable deterioration in 1979-80, that is, immediately before the commencement of the Sixth Plan and again in 1982-83 the mid-year of the Plan. The rate of decline in the contribution from the agricultural sector in 1979-80 was of the order of (-) 10.4 per cent and in 1982-83 (-) 7.9 per cent. Even for the country as a whole, the annual growth in the national income during these periods was low. Due to the negative contribution from the agricultural sector, the State's economy could not keep pace even with the growth of the population. The adverse situation may however, be off-set to some extent by the very good harvests in 1983-84 and generally good harvests in 1984-85 when the agriculture sector is expected to make a higher contribution to the State income.



2.11. The overall picture however, is that despite adverse climatic conditions, recurrent damages caused by the natural calamities, lack of infrastructure and technological constraints, agricultural production in the State has made perceptible headway in the Sixth Plan. The production figures of 1983-84, which was a normal year, indicate that agricultural development in the State is gradually progressing and, given the normalcy of weather and technological in-put, its potential may develop further. The main indicators comprising the production achievements in 1983-84 are the following.

	Production in 1983-84		Highest production in previous years	
	(In lakh tonnes)		(In lakh tonnes)	
Rice	..	51.3	45.31	(in 1975-76)
Pulses	..	10.59	10.45	(in 1981-82)
Total foodgrain	..	70.01	59.77	(in 1980-81)
Groundnut	..	3.99	2.92	(in 1981-82)
Total Oil seeds	..	7.36	5.90	(in 1981-82)

2.12. The area-coverage and production of rice in 1983-84 was the highest in the last 24 years. The yield rates, that is, 19.17 quintals per hectare in respect of winter paddy and 26.33 quintals per hectare in respect of summer paddy, were also the highest. The consumption of fertilisers and plant nutrients in 1983-84 also, for the first time, exceeded one lakh tonne mark. The consumption during the year was 1,03,012 tonnes, the previous best being 85,667 tonnes in 1982-83. The tempo of agricultural production has been generally kept up in 1984-85 except in areas affected by drought and flood and efforts will be made to improve it further in the Seventh Plan period.

2.13. The need for early transplantation of paddy, as a risk insurance against drought, has also received attention. Facilities have been provided in community nurseries for supplying seedlings for early transplantation.

2.14. The broad agricultural strategy during the Sixth Plan has been maximisation of production in irrigated lands, diversion of lands, not suitable for paddy cultivation, to other crops like pulses and oil seeds, expansion of dry-farming and development of horticulture and soil conservation. During the last four years, there has been a significant increase in the utilisation of unbanded high lands which are unsuitable for paddy cultivation for production of pulses and oil seeds. The production of pulses has also been increased by raising short-duration high-yielding varieties of paddy and non-paddy crops to release the land for second and third crops. Some increase has also been effected by encouraging the cultivation of pulses at the tail end of canal irrigated areas. The area under pulses, which was 15.66 lakh hectares in 1978-79, increased to 20.37 lakh hectares in 1983-84. The production during this period also increased from 7.99 lakh tonnes to 10.59 tonnes.

2.15. The production of oil seeds has also increased during the last four years. A special drive has been undertaken to expand groundnut cultivation in the Command areas of major and medium irrigation projects. The area under oil seeds which was 6.64 lakh hectares in 1978-79 increased to 10.19 lakh hectares in 1983-84. The production of oil seeds also increased from 4.26 lakh tonnes to 7.36 lakh tonnes during this period. The area under ground nut cultivation in 1983-84 was 2.58 lakh hectares and the production 3.99 lakh tonnes.

2.16. The thrust of horticultural programmes in the Sixth Plan has been on extensive plantation of Coconut and mango and of miscellaneous fruit plants in the areas where plantation of coconut and mango is not suitable. Up to the end of 1983-84, about six lakh coconut plants were planted and in situ mango plantation was extensively taken up for producing good quality mangoes, particularly in the rain-fed areas in the interior districts. About 9,509 hectares in 8 districts were covered by mango plantation. Miscellaneous horticultural plantations were also developed in an additional area of about 36,594 hectares.

2.17. About 80 per cent of the cultivable areas in the State being rain-fed, emphasis has been placed on the development of dry-land farming. Both intensive and extensive approaches have been adopted for expanding dry-land farming technology. Development of water-sheds has been taken up under the intensive approach. 568 mini water-sheds have been identified so far out of which detailed plans have been prepared in respect of 254. 232 mini water-sheds are in the process of execution. Under the extensive approach, the emphasis is on diversion of high lands from paddy to non-paddy crops like pulses, oilseeds, maize, ragi etc. Up to the end of 1983-84, about 5 lakh hectares of high lands were diverted for the cultivation of non-paddy crops. Mixed cropping practices have also been introduced for expanding dry-land farming. Seed kits of pulses and ground-nuts have been distributed to small and marginal farmers. The area brought under mixed cropping practices during 1983-84 was of the order of 52,500 hectares.

#### **Co-operation:**

2.18. Out of 36.72 lakh agricultural families in the State, 27.47 lakh families have been brought into the co-operative fold. Of the later, 71 per cent are small and marginal farmers and 39 per cent belong to the Scheduled Castes and Scheduled Tribes. About 65 per cent of agricultural loans have been provided to the weaker sections.

2.19. All Gram Panchayats in the State have been covered by Co-operative outlets for distribution of consumer goods, the value of the goods handled by them during the Sixth Plan period being about Rs. 48 crores. They have also transacted in fertilisers worth Rs. 5 crores and marketed agricultural produce costing about Rs. 35 crores. The co-operatives have also participated in the dug-well programme and financed about 3.37 lakh dug-wells. 2.12 dug-wells have already been completed creating an additional irrigation potential of 2.61 lakh acres.

2.20. Crop insurance scheme, introduced in 1981 on a pilot basis, has now been extended to 160 blocks. With World Bank assistance, agricultural marketing facilities have also been expanded by creating additional storage capacity for storing agricultural produce. Against the Sixth Plan target of 1.67 lakh tonnes, storage capacity of 1.16 lakh tonnes has already been built up. Another World Bank assisted project is also under-way to build up further storage capacity of 2.63 lakh tonnes with NCDC assistance.

#### **Animal Husbandry and Dairy Development:**

2.21. The thrust of the Sixth Plan programmes for Animal Husbandry and Dairy Development is on increasing the production of milk, eggs, poultry and mutton by introducing improved methods of production and organising co-operatives for marketing. Artificial insemination has, therefore, been expanded on large scale for genetic improvement of the cattle. About 2.30 lakh cross-bred heifers have been produced by this method during the Plan period. Genetic improvement has helped in increasing milk production substantially. It is estimated that the production of milk in the State would go up from 2.38 lakh tonnes in the base year of the Sixth Plan to 3.34 lakh tonnes at the end of the plan. Production of eggs would also increase from 343 millions to 373 millions during this period.

2.22. For marketing of milk, District Milk Co-operative Unions have been organised in all districts.

#### **Fisheries:**

2.23. Eleven Fishing Farming Development Agencies and two Brackish Water Fish Farming Development Agencies have been set up during the Sixth Plan. Eight Fish Seed farms have also been established to meet the requirement of fish seeds for pisciculture. Besides inland fisheries, the development of marine fishing has also been given attention. Infrastructure facilities like approach roads, jetties etc. have been provided at various places. In view of economic importance of fishing, welfare programmes for providing assistance to fishermen have been taken up extensively.

**Forestry:**

2.24. Development of forests has been given priority during the Sixth Plan and emphasis has been placed both on social forestry and production forestry. The programmes under social forestry include mixed plantation, rehabilitation of degraded forests, rural fuel wood plantation and coastal shelter belt plantation. Production forestry covers economic plantation on large scale, plantation of quick-growing species and development of minor forest produce. During 1983-84, 962 lakh seedlings were distributed from forest farms and 1,047.89 lakh trees were planted. Plantation of trees on private lands was also encouraged.

2.25. A social forestry programme with Swedish assistance has been taken up from 1983-84. The programme involves an expenditure of Rs. 23 crores within a period of five years and extends to 9 districts in the State. The main emphasis of the programme is on the development of various aspects of social forestry in an integrated manner. Selection of species for plantations is, therefore, made keeping in view their utility for supplying timber, fodder, fuel and raw materials for village-level industries.

2.26. The following table summarises the Sixth Plan targets under production forestry and achievement during the Plan period.

	Target	Achievement during the Plan period
		(000'hectares)
1. Plantation of quick-growing species	12	10.97
2. Economic and commercial plantation	15	15.65
3. Plantations for minor forest produce	2	1.06
4. Mixed plantations	20	18.74
5. Reforestation of degraded forests	10	12.08
6. Afforestation in coastal shelter belt	7	2.92

The Sixth Plan target is likely to be achieved under all programmes except coastal, shelter belt plantation where the constraints of resources and the difficulties in taking up plantations on private lands in the coastal areas are the inhibiting factors.

**Irrigation**

2.27. The following table summarises the irrigation potential expected to be created by the end of the Sixth Plan from different sources.

Sl. No.	Category of Irrigation projects	Potential created by 1979-80	Sixth Plan target	Potential created during 1980-84	Potential targeted for 1984-85	Cumulative potential anticipated by Sixth Plan end
(1)	(2)	(3)	(4)	(5)	(6)	(7)
(In lakh hectares)						
1.	Major & Medium	7.377	1.86	1.01	0.27	8.65
2.	Minor (Flow)	3.255	0.81	0.40*	0.09	3.74
3.	Minor (Lift) (In public sector)	0.888	0.48	0.69	0.40	1.97
4.	Minor (Lift) (In private sector)	1.400	2.80	1.25*	0.36	3.01
		12.900	5.95	3.35*	1.12	17.37

\*(Provisional)

At the commencement of the Sixth Plan, 39 major and medium irrigation projects were under execution including 3 multipurpose projects viz., Rengali, Upper Kolab and Upper Indrabati, 5 major projects viz., Mahanadi Delta, Salandi, Anandpur, Rengali and Mahanadi Barrage, 17 World Bank assisted projects and 14 other projects. Besides, 3 modernisation schemes relating to Rushikulva, Baladiha and Hirakud had also been taken up. By the end of 1983-84, 9 of these projects had already been closed/completed and 3 modernisation projects had reached the completion stage. During 1984-85, 9 more projects assisted by the World Bank are scheduled to be completed in addition to the Rengali Dam Project (irrigation part). Certain items of Rengali Dam Project may, however, spill over to the first year of the Seventh Plan. The completion of these projects would yield an additional irrigation potential of about 98.06 thousand hectares. Irrigation of about 29.50 thousand hectares would also be available from the central sector Potteru Project during the Sixth Plan. The total irrigation potential likely to be created at the end of the Plan would, thus, be about 127.56 thousand hectares against the target of 186 thousand hectares. The short-fall is mainly due to inadequacy of resources.

2.28 The Sixth Plan programme for minor irrigation includes the completion of 331 projects carried over from the Fifth Plan and execution of new projects in the drought prone and tribal areas of the State. Out of the carried over projects, 300 have already been completed and the rest are scheduled for completion by the end of 1984-85. Of the new projects, 67 in number, 17 are targeted for completion during the same period. The additional irrigation potential likely to be created by these projects is 48,601 hectares against the plan target of 40,000 hectares.

2.29. The Sixth Plan target for additional potential from lift irrigation projects in the public sector was 47.5 thousand hectares. 1,900 lift irrigation projects were also proposed to be energised during the plan period. The Lift Irrigation Corporation however, energised 2,233 projects in the first 3 years of the Plan creating an additional irrigation potential of 52.01 thousand hectares. By the end of the Plan period, the additional potential from lift irrigation (Public Sector) is expected to be about 109.50 thousand hectares.

2.30. Over the years, a massive dug-well programme has also been in operation in the State. The Sixth Plan programme includes the construction of 4 lakh dug-wells. It is expected that by the end of the plan period, about 2.50 lakh dug-wells may be constructed providing an additional irrigation potential of about 161 thousand hectares.

2.31. The over-all achievement in the creation of additional irrigation potential from all sources by the end of the Sixth Plan would be of the order of 4.47 lakh hectares.

2.32. An important aspect of the irrigation strategy in the State is to provide adequate irrigation facilities to all Blocks. Each Block in the State is proposed to be provided additional irrigation of 500 to 1,000 acres by the end of the Sixth Plan by extending the existing irrigation systems, renovating tanks and providing lift irrigation and water harvesting structures. It is estimated that by this process, 160 out of 314 Blocks, would get irrigation facilities of 1,000 acres or more. 88 would have additional irrigation of 500 to 1,000 acres and 64 Blocks with limited irrigation potential, would get less than 500 acres of irrigation.

#### **Power**

2.33. The power system in Orissa is mainly hydro-electric. There is only one thermal power station at Talcher with an installed capacity of 470 MW and firm power generation of 33 MW.

2.34. The installed capacity of power projects in the State at the commencement of the Sixth Plan was 914 MW with firm power generation of 469 MW. It was estimated that during the plan period 560 MW more would be added to the power capacity by completing two units of Talcher Thermal Power Station of 110 MW each, two units of Rengali Project of 50 MW each and three Units of Upper Kolab Project of 80 MW each. Only two units of Talcher Thermal Power Station have, however, been completed during the plan period and the installed capacity has increased by 220 MW with firm power generation of 150 MW. Thus, at the end of the Plan, the installed capacity of power projects for the State would be 1134 MW with firm power capacity of 614 MW. Power from the Rengali and Upper Kolab Projects, which could not be completed would be available in the Seventh Plan.

**Industries**

2-35. The industrial policy of the State Government envisages provision of a package of incentives and concessions to entrepreneurs for rapid industrialisation. Assistance is provided to large and medium industries through single-point contact and to small scale industries through District Industries Centres. A High Power Nodal Committee oversees the implementation of the programmes.

2-36. Government participation in the capital investment of different industries is routed mainly through the Orissa State Financial Corporation and the Industrial Promotion and Investment Corporation.

2-37. As a result of the new industrial policy of the State Government, 71 large and medium scale industries have come up in the State during the last 4 years. These industries account for a total investment of over Rs. 152.56 crores with a direct employment potential of nearly 13,914 persons. Besides, 92 large and medium industries with a total investment of Rs. 261 crores and employment potential for nearly 20,476 persons have been identified and are now in various stages of progress.

2-38. In pursuance of the industrial policy of the Government of India, Nucleus Industrial Complexes are proposed to be set up in the backward districts of Balangir, Kalahandi, Mayurbhanj and Dhenkanal. The Industrial Complex at Chandka has already made sufficient progress.

2-39. Three districts in the State, viz., 1 Balasore, Phulbani and Balangir have been declared No Industry Districts. Bankable schemes for different programmes in these districts are being drawn up in accordance with the norms laid down by the IDBI and the Central Government.

2-40. During the period of Sixth Plan, "The Orissa Industrial Infrastructure Development Corporation Act, 1980" was passed setting up the Industrial Infrastructure Development Corporation (IDCO). The IDCO has the responsibility of providing developed lands and ready-made sheds to new industrial units. The Corporation has already developed 1,765 acres of land and constructed 906 sheds.

2-41. The Electronic Development Corporation which was set up in September, 1981 looks after the development of Electronic industries. 27 projects have been identified by the Corporation, of which 8 have made sufficient progress.

2-42. The Industrial Promotion and Investment Corporation continues to be the premier industrial development corporation in the State. The Corporation has provided assistance to 80 large and medium industries, costing about Rs. 94.20 crores. These industries have generated employment opportunities for about 8,610 persons. The Corporation has also provided assistance to 90 more units, costing about Rs. 259.60 crores, which on completion, would provide employment to about 19,360 persons.

2-43. The State Financial Corporation has disbursed loans of more than Rs. 106.53 crores to various industries by the end of 1983-84. Rs. 60 crores more are proposed to be sanctioned during 1984-85.

2-44. By the end of 1983-84, 11,116 small scale industrial units were established in the State with an investment of about Rs. 88.48 crores. The target for 1984-85 is 3,000. At the end of the Plan period, the total number of these industrial units is expected to exceed the target of 14,000. Employment would be provided by them to about 1.06 lakh persons.

2-45. Special attention has been given to the development of artisan-based industries. Against the Sixth Plan target of 2.43 lakh artisan units, 2.66 lakh units have already been set up with an investment of more than Rs. 54.28 crores and employment capacity for 5.16 lakh persons. 302 Handicrafts Co-operative Societies have also been formed for helping the artisans, about 10,700 of whom have been brought into the Co-operative fold. The Co-operatives which would produce handicrafts worth Rs. 114 crores would provide employment to about 56,000 persons.

2-46. In keeping with the emphasis laid on the growth and technical development of handlooms under the 20-Point Programme, high priority has been accorded to handloom development during the Sixth Plan. The main thrust of the programme is on covering a bulk of the active looms in the rural

areas by the end of the Plan period. The number of handlooms which was 1.05 lakhs at the beginning of the Sixth Plan, has now gone up to 1.50 lakh, providing direct employment to 3 lakh persons and indirect employment to about 75,000. The expansion has helped in increasing the production of handloom cloth from 667 lakh metres at the beginning of the Plan to 760 lakh metres at present. The production of Janata fabrics has also gone up from 1.28 lakh metres at the commencement of the Plan to 2.70 lakh metres at the end of 1983-84.

2.47. For the development of sericulture, 61 Primary Tassar Growers Co-operative Societies have been organised, which include 24,916 persons belonging to the Scheduled Tribes, 3,580 to Scheduled Castes and 3,219 to other economically backward classes. Mulberry plantation has been taken up in an area of over 688 acres benefiting about 723 farmers.

2.48. Co-operative Spinning Mills have also occupied an important place in industrial development. Out of 7 Co-operative Mills targeted for the Sixth Plan, 2 have gone into production. Two more are expected to be completed soon. Establishment of the other Spinning Mills would be taken up after the finalisation of financial arrangements with N.C.D.C.

2.49. In the Powerloom sector, the progress has been delayed due to delay in finalising funding arrangements. Out of 4,063 Powerlooms for which permit was received from the Central Government during the Fourth Plan, only 1,538 have been set up so far. During the Sixth Plan 2,000 more Powerlooms have been allotted, out of which 1,450 are proposed to be set up in Powerloom Projects and 550 in Handloom Weavers Co-operative Societies. This target may not, however, be reached if the funding arrangements are not completed in time.

2.50. For promotion of Khadi & Village Industries, 175 Artisans Industrial Multipurpose Co-operative Societies and 13 Gramyodaga Marketing Co-operative Societies are functioning in the State. These Societies need to be strengthened for effective functioning.

### Health

2.51. Health and Medical care facilities have been considerably improve during the Sixth Plan in spite of the constraint of resources. Services of Specialists in important disciplines have been provided in the district and sub-divisional hospitals. The bed strength in urban hospitals has increased from 6,553 to 7,236 during the Plan period. The bed strength in the rural dispensaries has also gone up from 3,681 to 4,051. The over-all increases have, however, been marginal and the bed-population ratio and doctor-population ratio has therefore not improved perceptibly.

2.52. A Dental College at Cuttack and a Nursing College at Berhampur have been established during the Plan period. Additional infra-structure facilities for these Colleges would be provided in the Seventh Plan.

2.53. In the rural health sector, emphasis has been placed on increasing the number of Primary Health Centres and subsidiary health centres for providing intensive health care facilities. According to the present norms an additional primary health centre is required to be provided for a population of 50,000 in the tribal areas and for more than one lakh population in other areas. Against the Sixth Plan target of 20 additional primary health centres, that is, 10 each in the tribal and non-tribal areas, 16 primary health centres have already been started; the rest are scheduled to be taken up during 1984-85. The new primary health centres have increased the medical care facilities provided by 314 primary health centres existing earlier. 17 primary health centres have also been upgraded by providing specialist services and increasing the number of beds.

2.54. Sub-centres form an integral part of the rural health infrastructure. According to the existing norms a sub-centre has to be provided for a population of 5,000. On this basis, the total requirement of sub-centres in the State has been estimated at 5,540. At the commencement of the Sixth Plan, the number of sub-centres was 2,038 and it was proposed to add 2,000 more during the Plan period. Up to the end of 1983-84, 1,749 sub-centres had been completed and 340 more have been targeted for 1984-85.

2:55. For the control of leprosy, a composite programme of health education, early identification and treatment of the identified cases followed by rehabilitation has been initiated. 42 leprosy control units, 16 upgraded leprosy control units, 16 urban leprosy centres, 2 upgraded urban leprosy centres and 10 temporary hospital wards have been provided.

2:56. Control of T. B. has been given attention. It is estimated that about 5 lakh persons in the State are suffering from T. B. of whom about 2 lakhs are in the infective category. For treatment and control of T. B., three T. B. hospitals and 14 district T. B. centres have been established. Eleven ten-bedded T. B. wards have also been provided in sub divisional hospitals. Immunisation programme has been taken up on a large scale for protecting persons up to the age of 20.

2:57. The national programme for prevention of visual impairment is being implemented in the State. All district headquarter hospitals and the Capital Hospital at Bhubaneswar have been provided with specialists and additional beds for the treatment of patients suffering from visual impairment. Three mobile units have also been attached to the three medical colleges in the State for conducting eye examination in the rural areas and taking up operations in camps.

2:58. Family Planning Programmes have made considerable headway though some short-fall has occurred in achieving the targets under sterilisation, IUD use and CC use mainly due to the shortage of staff and inadequacy of instruments and transport steps have been taken to remove these constraints. A Green Card system has been introduced to provide incentives to employees who voluntarily accept terminal methods of family planning. Awards have also been instituted to induct field workers to achieve better results.

#### **Rural Water Supply :**

2:59. Out of 46,992 inhabited villages (1971 census) in the State, 27,077 have been identified as problem villages. Up to the end of the Fifth Plan, however, only 3,461 villages had been covered under the drinking water supply programme. It was therefore proposed to expand the programme during the Sixth Plan. During the first four years of the Sixth Plan, that is, between 1980-81 to 1983-84, 10,818 villages were brought under the programme and provided with drinking water supply facilities. The total number of villages where the facilities of drinking water have been fully provided thus come to 14,279. Besides, 6,039 villages have also been partly covered. Since the object is to provide at least one source of drinking water supply to each village and one well is necessary for a population of 250, the overall requirement of wells is estimated at 70,349. By the end of 1983-84, 49,928 wells including 9,508 sanitary wells had been provided in the problem villages. The gap remains to be made up.

2:60 Drinking water supply schemes are being financed both under the Minimum Needs Programme and the Accelerated Rural Water Supply Programme assisted by the Central Government of India. With the assistance of the Danish International Development Agency, a drinking water supply scheme is also proposed to be provided in 20 identified Blocks in the districts of Cuttack, Puri and Balasore. The DANIDA Scheme envisages provisions of open wells in 2,010 villages and piped water supply in 26 villages. Preparatory arrangements for implementing the scheme are already under way. With the implementation of this programme, the problem of drinking water supply in the identified Blocks in the coastal districts would be solved to a great extent.

#### **Education**

2:61. According to the Fourth Education Survey (1978), 11,740 habitations in the State had no primary school within a distance of one kilometre and 1,911 habitations with a population of 500 or more did not have a middle school. The need for providing primary and middle schools in the needy villages was, therefore, imperative.

2.62. Universalisation of elementary education is the main object under the elementary education programme. The target is to achieve the enrolment of 93.1 per cent of children in the age-group of 6-11 years in primary schools. This target is expected to be exceeded in the Sixth Plan with the enrolment percentage rising to 94.5 covering 32.06 lakh children. For middle schools the target is to cover 41 per cent of the children in the age-group of 11-14 years. The achievement by the end of the Sixth Plan is likely to be of the order of 39.9 per cent covering 7.75 lakh children.

2.63. The programme for universalisation of elementary education is being supplemented by the non formal system of education. The Sixth Plan envisages the establishment of 8,000 primary stage and 5,600 middle stage non-formal education centres. Prior to 1983-84, 2,400 primary level non-formal centres and 1,600 middle level centres were functioning in the State. During 1983-84, 3,560 more primary level centres were started. Of them 560 centres were intended exclusively for girls. There is a further programme to start 1,000 general and 2,000 girl's non-formal education centres during 1984-85. Against the targeted enrolment of 2.64 lakhs in the non-formal stream in the age-group of 9-14, the enrolment already made so far is about 1.63 lakhs.

2.64. For the removal of adult illiteracy, Government efforts are being supplemented by the involvement of students and voluntary agencies. The Sixth Plan target for removal of adult illiteracy is 5.85 lakhs. The achievement during the year 1982-83 was 1.17 lakhs and in 1983-84, 1.59 lakhs. The target of 2 lakhs for 1984-85 is expected to be fully achieved by the end of the year.

2.65. Higher education has significantly expanded during the Sixth Plan. The number of High Schools has gone up from 2,260 in 1980 to 3,346 in 1984 with corresponding increase in enrolment from 2.81 lakhs to 6.10 lakhs. The number of colleges has also increased from 138 in 1980 to 296 in 1984. The increase in the number of students during this period has been about 43,193. The increase in the number of High Schools and colleges, however, has not been free from physical deficiencies in terms of building, libraries, laboratories, teaching aids etc., in the institutions. For qualitative improvements in the standards of education the deficiencies need to be removed expeditiously.

#### **Roads (including Rural Roads)**

2.66. The allocation of funds for road communication has not been adequate in the past. Even during the Sixth Plan, the requirement has not been met fully. The inadequacy is also reflected, to some extent, in respect of rural roads. Out of about 1,700 villages with a population of 1,500 and above which were required to be provided with all weather roads, only 512 had been covered up to the beginning of the Sixth Plan and it was therefore proposed that the remaining 1,188 villages may be provided all-weather road connection during the plan period. The target has however, not been achieved fully and only 950 villages have been provided road communication under the Minimum Needs Programme. Even some of these roads are lacking in cross-drainage works to make them all-weather. In all 2,617 Kms. of roads have been constructed during the plan period under the Minimum Needs Programme.

#### **Rural Electrification**

2.67. Out of 46,999 inhabited villages in the State (1971 Census), 17,231 had been electrified up to the beginning of the Sixth plan. By the end of the plan period, 6,514 villages (against the target of 6,400) are expected to be electrified bringing the total number of electrified villages to 23,745. 50.28 per cent of the villages would, thus, be electrified at the end of the plan against the national average of 60.6 per cent in May, 1984. 70 per cent of the State's population however, has access to electricity at present and the coverage is likely to go up by the end of the Sixth Plan.

2.68. Energisation of pump sets has been slow. At the beginning of the Sixth Plan, 12,958 pump sets has been energised and the target for the plan period was set at 34,150. Against this target, the achievement at the end of the Plan is expected to be of the order of 20,073 bringing the cumulative total off energisation of pumps to 33,031.



### **Environmental Improvement of slums**

2-69. The environmental improvement scheme envisages provision of drinking water, storm-water drains, community bath and latrines, roads, street lights etc. in the slum pockets of towns and urban localities to improve their environmental condition. The scheme which was originally taken up in Cuttack town, was later extended to Bhubaneswar and other towns. Against the Sixth Plan target of covering a slum population of 37,000 the achievement by the end of 1983-84 was of the order of 33,000. During 1984-85, 14,600 more slum dwellers are expected to be covered, bringing the total coverage to 47,600.

2-70. A scheme for integrated development of small and medium towns is also being implemented in 6 towns of the State viz. Sambalpur, Puri, Balasore, Rourkela, Dhenkanal and Jeypore. The scheme is proposed to be extended to some more towns during the Seventh Plan.

### **Construction assistance to landless labourers for rural housing**

2-71. A programme for distribution of house sites to homesteadless labourers is in operation from 1974-75. Under the programme, house sites measuring four decimals each are allotted to homesteadless families free of premium both in the semi-urban and rapidly developing areas as well in rural localities. The target of distribution of house sites to homesteadless labourers was exceeded in 1983-84 when the achievement was of the order of 262 per cent. The target for 1984-85 also expected to be achieved by the end of the year.

2-72. Construction assistance is provided to beneficiaries as a part of the house-site allotment programme. Against the cost of each house amounting Rs. 2,000, Government assistance is provided for Rs. 1,500 and the balance is contributed by the beneficiaries in the form of labour. Through the Sixth Plan outlay envisaged a provision of Rs. 100 lakhs for construction assistance to landless labourers the provision has been considerably increased in view of the importance of the programme and it is expected that the expenditure at the end of the Sixth Plan may be over Rs. 278 lakhs. About 17,263 beneficiaries would receive constructional assistance during the plan period.

### **Nutrition**

2-73. Under the nutrition programme, three categories of feeding schemes are in operation i. e. the special nutrition programme, Mid-day meal programme in schools and the upgraded special nutrition programme. The target of 50 lakh beneficiaries under the special nutrition programme, has already been achieved. Under the mid-day meal programme, feeding is being continued in the schools where the CARE authorities are withdrawing in a phased manner. About 1.80 lakh beneficiaries would be covered by the mid-day meal programme during the Sixth Plan. Under the upgraded special nutrition programme the standard SNP feeding Centres in the non-ICDS Blocks is proposed to be upgraded to that in ICDS Blocks. The upgraded programme has been taken up in the districts of Mayurbhanj, Keonjhar and Kalahandi, where, besides supplementary feeding, the facilities of health care, immunisation pre-school education etc. are also providing to the beneficiaries.

### **Minimum Needs Programme**

2-74. The Minimum Needs programme is intended for human resources development to meet the social consumption needs of the peoples below the poverty line. The Schemes under MNP, which form a part of the sectoral programme under the State Plan, include rural electrification, rural roads, elementary education, adult education, rural health, rural water-Supply, house-sites-*cum*-construction assistance to rural landless labourers, environmental improvement of slum and nutrition. Out of the Sixth Plan outlay of Rs.1570 crores, Rs.137 crores has been earmarked for the schemes under the Minimum Needs programme.

## Unemployment

2-75 The problem of unemployment and under-employment in the State has been crucial and has been sought to be tackled in many ways, that is, by encouraging productive activities, providing self-employment opportunities and introducing schemes for direct employment particularly in the rural areas. At the end of 1977-78, the backlog of unemployment in the State was of the order of 24.1 lakh and it was only marginally reduced to 22.6 lakhs in 1979-80. The Sixth Plan, therefore, started with a backlog of unemployment of about 22.6 lakhs. The addition to labour force during the Sixth Plan itself being of the order of 9.5 lakhs, employment opportunities were required to be created during the Plan period for an aggregate of 32.1 lakh persons. During the first four years of the Sixth Plan, employment avenues were provided to 13.98 lakh persons and in 1984-85 an additional potential of 3.65 lakhs is expected to be created. Gainful employment for about 17.6 lakh persons would thus be opened during the Sixth Plan period. The Seventh Plan would however, still have to carry a backlog of about 14.5 lakhs.

## Poverty Alleviation Programmes

2-76. Poverty alleviation programmes have been given high priority in the Sixth Plan, the important Programmes being the Integrated Rural Development Programme and the National Rural Employment Programme. While IRDP is a beneficiary oriented programme, the emphasis under NREP is on providing employment to the rural poor to promote their economic status.

2-77. Up to the end of 1983-84, 708,312 beneficiaries were assisted under the IRDP including 143,964 belonging to Scheduled Castes and 162,825 belonging to Scheduled Tribes. Together, these categories constitute about 43 per cent of the total number of beneficiaries against 30 per cent required under the IRDP norms. The proportion has gone up further in the subsequent period. During 1984-85, 188,400 families including 35,917 of the Scheduled Castes and 62,200 of the Scheduled Tribes are proposed to be assisted under the programme.

2-78 A special programme called the Economic Rehabilitation of the Rural Poor is also being implemented as a Plan Programme. Initiated in 1980-81 this programme aims at providing assistance to 10 poorest families in each village to bring them up on the economic scale. The beneficiaries under the ERRP are allowed full subsidy in respect of the land-based and pisciculture schemes. For schemes relating to animal husbandry and artisan crafts, subsidy is allowed at the rate of 75 per cent. The ERRP programme is specially beneficial to the Scheduled Castes and Scheduled Tribes who constitute two-third of the total number of beneficiaries. Under the programme, 269,928 beneficiaries were provided assistance up to the end of 1983-84. Though the number of beneficiaries to be covered under the Programme was originally set at 5 lakhs, the target was subsequently reduced to 4 lakhs due to the constraint of resources. The target for 1984-85 is 1.06 lakhs.

2-79. The object of the National Rural Employment Programme is to increase the level of rural employment through labour-intensive works. Since rural poverty arises basically out of under-employment and unemployment and affects the size of the family income, the programme aims at the generation of larger employment opportunities to prevent the spread of poverty. The implementation of the programme has helped in the generation of 194.34 lakh mandays of employment in 1981-82, 176.61 lakh mandays in 1982-83 and 132.26 lakh mandays in 1983-84. The target for 1984-85 is generation of 117.5 lakh mandays of employment. Besides, employment opportunities, NREP has also contributed to the creation of community assets in various forms.

2-80. In spite of the cumulative backlog, adverse effects of the natural calamities and inadequacy of resources for higher investment, efforts have been made in the Sixth Plan to develop the economy of the State to achieve a higher growth rate. The problem of poverty has been sought to be tackled on a priority basis. Basic institutional changes have also taken place during the Plan in some areas like land reforms, credit infrastructure and orientation in favour of weaker sections of the society and similar target groups.

## Annexure-I

## Sectoral outlays/expenditure during Sixth Plan

(Rs. in lakhs)

Name of the Sector	Approved outlay for Sixth plan (1980-85)	Expenditure for first four years 1980-84	1984-85		Remarks
			Approved outlay.	Anticipated expenditure	
(1)	(2)	(3)	(4)	(5)	(6)
Agriculture and Allied Services	9,015.00 (6.01)	7,292.62 (6.31)	2,268.50 (5.67)	2,277.50 (5.50)	
Rural Development ..	113,525.00 (9.02)	9,561.50 (8.28)	4,751.00 (11.88)	5,602.60 (13.53)	
Co-operation ..	3,000.00 (2.00)	2,385.75 (2.07)	837.00 (2.09)	837.00 (2.02)	
Irrigation and Flood Control ..	47,000.00 (31.33)	34,395.56 (29.77)	10,550.00 (26.37)	10,650.00 (25.72)	
Power. ..	41,000.00 (27.33)	31,753.03 (27.48)	9,682.50 (24.21)	9,424.50 (22.76)	
Industry & Minerals ..	6,485.00 (4.32)	6,943.99 (6.01)	3,115.00 (7.79)	3,245.00 (7.84)	
Transport ..	10,825.00 (7.22)	7,453.83 (6.45)	2,560.00 (6.40)	2,868.00 (6.93)	
Scientific Services and Research ..	..	22.49 (0.02)	41.50 (0.10)	40.50 (0.10)	
Social and Community Services ..	18,205.00 (12.14)	15,188.34 (13.15)	5,787.00 (14.47)	5,996.85 (14.48)	
Economic Services ..	225.00 (0.15)	177.64 (0.15)	55.00 (0.14)	65.50 (0.15)	
General Services ..	720.00 (0.48)	397.43 (0.31)	352.50 (0.88)	403.05 (0.97)	
<b>Total</b> ..	<b>1,50,000.00</b> <b>(100.00)</b>	<b>1,15,572.18</b> <b>(100.00)</b>	<b>40,000.00</b> <b>(100.00)</b>	<b>41,410.50</b> <b>(100.00)</b>	

(Figures in brackets denote percentage to the totals)

## CHAPTER 3

### PLAN OBJECTIVES AND PATTERN OF INVESTMENT

3.1. With a view to solving the problems of backwardness and poverty and achieving a faster growth of the economy the successive Five-Year Plans of the State have aimed at optimising production in the key sectors and developing the human resources for effective contribution to the process of economic development. The efforts have resulted in considerable improvement in the creation of infrastructure, provision of electric power, spread of communication facilities and the growth of an educated workforce. The secondary and tertiary sectors have grown fast and their services are available to the producing sectors. The welfare approach to development has also generated an egalitarian trend. The achievements in terms of literacy, education, health services, water supply etc., have been perceptible. A large ground, however still remains to be covered. The growth in agriculture, in spite of structural changes effected by land reforms, has yet to reach the level achieved in the developed states. In the industrial sector, the technologically and managerially backward traditional industries are struggling against rising costs. Modern industries are growing slowly but have not been able to make any significant contribution to employment. The growing population and widespread unemployment and under employment have emphasised the compulsion for enlarging poverty alleviation programmes. Costly delays in the completion of some major irrigation and power schemes, under-utilisation of the facilities already created and the high rate of inflation have also not been conducive to the growth of the economy. During the next Plan it is necessary to consolidate and accelerate the stimulating factors of development and remove the barriers which are obstructing progress.

3.2. Orissa is proverbially a poor State with about 66.40 per cent of its population below the poverty line. According to the National Sample Survey (32nd round), 1977-78, the incidence of poverty in the State was higher than the all India average of 48.13 per cent and highest among the larger States in the Country. Reduction in the level of poverty and improvement in the standards and quality of life of the poor has, therefore, been a main objective of State Planning. In the Sixth Plan a number of schemes are being implemented for a frontal attack on poverty. No significant improvement may however, be practicable unless substantially higher investments are made to reduce unemployment and deliver greater benefits to the poor through enlarged access to social consumption.

3.3. Rural poverty arises basically from unemployment and under-employment, which limit the size of the family income. Generation of employment is, therefore, a main requisite for the containment and alleviation of poverty. In the employment front therefore, the planning strategy has to shift from *ad hoc* or even general schemes to specific schemes for generation and optimisation of employment. As stated in the Approach document of the Planning Commission, "instead of relying on general economic growth for raising employment opportunities without any special effort to give employment orientation to this growth, it is necessary to treat employment as a direct focal point of policy". It has been indicated in chapter-I that the Seventh Plan of the State would start with an unemployment backlog of about 14.3 lakhs. Talking into account the participation rates of the main and marginal workers, the addition to the labour force during the Plan period itself would be of the order of 10 lakhs at the rate of 2 lakhs a year. The investment strategy for the Seventh Plan would therefore, have to reckon with the need for providing employment to an unemployed work force of about 24.5 lakhs. The growth rate of economy has to be assumed at a commensurate level.

3.4. To fulfil the Seventh Plan objectives, enunciated in the Approach document, a growth rate of 5 per cent has been assumed at the national level. In a backward State like Orissa with a high incidence of Scheduled Caste and Scheduled Tribe population and pervasive poverty, it is necessary to aim at a higher rate of growth so that the State does not slide back in the economic scale. The imperatives of faster development require that the growth rate should not be less than that assumed for the Sixth Plan.

It has been indicated in chapter-1 that the average annual compound growth rate of 2.8 per cent in the First Plan had increased to over 4 per cent in the Third and the Fourth Plans and except in the abnormal years, when the production suffered due to natural calamities, the trend of growth has continued in the Sixth Plan. The performance of the economy in 1983-84 and 1984-85 gives the hope that the over-all growth in this Plan may not fall short of 6.1 per cent, as originally envisaged. A similar order of growth is also assumed for the Seventh Plan.

3.5. The State Income in 1978-79, the year which preceded the Sixth Plan (1979-80) was an abnormal year) was Rs. 1,328 crores (at 1970-71 prices) and it may rise to Rs. 1,784 crores in the last year (1984-85) of the Plan. On the basis of this trend of growth, the State income in 1989-90, that is, the terminal year of the Seventh Plan (1985-90) may be of the order of Rs. 2,387 crores. To estimate the investment requirement for an increase of Rs. 603 crores (Rs. 2,387 crores minus Rs. 1,784 crores), certain assumptions have to be made. It is estimated that the incremental capital-output ratio for the State in the Sixth Plan may be 4:1. If the estimates of investment in the Seventh Plan are worked out by applying this ratio to achieve a growth rate of 6 per cent during the Plan period, the total investment by the terminal year of the Plan should be of the order of Rs. 2,412 crores at 1970-71 prices. The outlay required for an investment of Rs. 2,412 crores would then be Rs. 2,822 crores on the basis of the outlay-investment ratio of 1.17: 1. At 1984-85 prices, the outlay would work out to Rs. 10,526 crores.

3.6. The outlay of Rs. 10,526 crores would result in an increase in the State *per capita* income and reduce the difference between the national and State income *per capita*. Taking into account the increase in population, the *per capita* income in the State in the terminal year of the Seventh Plan is likely to be of the order of Rs. 768 when the *per capita* national income would be about Rs. 851. The difference between the National and the State income *per capita* would, thus, be reduced from Rs. 151.8 in 1981-82 to Rs. 83 in 1989-90. The proposed outlay of Rs. 10,526 crores also has a long term objective. If it materialises during 1985-90 the State would be poised for a higher rate of growth in the subsequent quinquennium.

3.7. Out of the total outlay of Rs. 10,526 crores, the investment from the private sector and financing institutions is expected to be of the order of Rs. 2,000 crores. Considering the inflow of institutional finance in the Sixth Plan, the share of investment of Rs. 2,000 crores assumed in this sector in the Seventh Plan may not be too high. The balance of the outlay of Rs. 8,526 crores would have to be met from the State and Central investments together. Taking into account the tempo of State Plan expenditure in the Sixth Plan, the share of the State in the investment outlay is reckoned at Rs. 5,088 crores. The residual amount of Rs. 3,438 crores is assumed as Central investment during the Seventh Plan period.

3.8. A higher rate of Central investment has been assumed both for supplementing the State Plan efforts and removing inter-State imbalance. At the last meeting of the National Development Council on the 12-13 July, 1984, the Chief Minister of Orissa had stressed this point stating that while maximisation of employment opportunities through development of agriculture and continuance of the anti-poverty and rural employment programmes should be the focal point of planning, a renewed emphasis was necessary on the removal of regional disparities. It was pointed out that the "mechanism evolved in the past to remove regional inequalities has been found inadequate and a determined bid has to be made for channelling adequate flow of funds to backward regions for development of basic infra-structural facilities like irrigation, power, transport and communication". It was also suggested that the modest size of the State Plan being inadequate for funding Central sector schemes like I. R. D. P. and N. R. E. P. on the basis of matching contribution, greater emphasis should be placed on schemes like R. L. E. G. P. which are fully funded by the Central Government. The Seventh Plan projections under various sectors aim at achieving a growth rate of 6 per cent by the end of the Plan period. The economic backwardness of the State, however, imposes severe constraints on the level of development and substantial investments are required to make a dent on the existing situation. From these considerations, an overall outlay of Rs. 10,526 crores has been proposed for the Seventh Plan including Central investment of Rs. 3,438 Crores.

3.9. Of the Plan objectives enunciated, the vitally important is the creation of large employment opportunities during the Plan period. It has been indicated earlier that the Seventh Five-Year Plan would carry an unemployment backlog of about 14.5 lakhs and an additional labour force of 10 lakhs would be added during the Plan period. It is estimated that out of the proposed outlay of Rs 10,526 crores, the State Plan investment (Rs. 5,088 crores) would generate employment potential of 15.97 lakhs. Private sector investments (Rs. 2,000 crores) 6.28 lakhs and the Central Sector investment (Rs. 3,438 crores) 2.52 lakhs. The aggregate employment generation would be of the order of 24.77 lakhs. The outlay (Rs. 10,526 crores) would thus contribute to the removal of unemployment.

3.10. Sectoral break up of the State Plan component of Rs. 5,088 crores in the Seventh Plan is indicated below together with the investment proposed for the first year of the Plan (1985-86)

(Rs. in crores)

(1)	Approved outlay for Sixth Plan (1980-85)	Anticipated expenditure during Sixth Plan	Tentative outlay suggested for	
			Seventh Plan (1985-90)	Annual Plan (1985-86)
	(2)	(3)	(4)	(5)
Agriculture and Allied Services ..	90.15	95.70	283.93	34.99
Rural Development ..	135.25	151.64	410.00	55.63
Co-operation ..	30.00	32.23	66.00	10.55
Irrigation and Flood Control ..	470.00	450.46	1,219.05	154.08
Power ..	410.00	411.78	1,505.43	151.41
Industry and Minerals ..	64.85	101.89	252.80	37.90
Transport ..	108.25	103.22	299.39	58.57
Scientific Services and Research ..	.	00.63	18.03	2.00
Social and Community Services ..	182.05	211.85	1,097.83	134.09
Economic Services ..	2.25	2.43	4.75	0.89
General Services ..	7.20	8.00	29.50	10.50
<b>Total</b> ..	<b>1,500.00</b>	<b>1,569.83</b>	<b>5,088.71</b>	<b>650.61</b>

3.11 The operational strategies for achieving the objectives of the Seventh Plan as set out in the Approach document approved by the National Development Council have been discussed in the relevant chapters dealing with the sectoral programmes. The sectoral plans aim at the following:—

- (i) Faster growth to achieve the overall annual growth rate of 6 per cent during the Seventh Plan.
- (ii) Maximisation of production in the commodity producing sectors through optimum utilisation of the capacities and infrastructure already built up.
- (iii) Enlargement of job opportunities by emphasising employment-intensive schemes.
- (iv) Formulation of local-level schemes and projects based on the material and man-power resources available in the locality through decentralisation of the Planning process.
- (v) Balanced regional development through more effective exploitation of resource endowments in different parts of the State.
- (vi) Strengthening the public distribution system and introducing efficient marketing techniques.
- (vii) Providing an increasing share of the benefits of development to the poorer sections of the society including the scheduled castes and scheduled tribes.
- (viii) Initiating measures to improve the living conditions of the weakest sections of the society, the aged and the disabled.

3.11 To achieve these objectives it is necessary to observe certain basic priorities. The fore-most is the completion of all incomplete and on-going schemes/projects, so that the benefits of past investments may be fully derived before making fresh investments. Necessary provision for the ongoing and incomplete schemes/projects has been made in the sectoral plans. To tide over resource constraints, greater attention has also been given to improve the efficiency and productivity of the existing assets.

3.13 The allocations for different sectors of development in the Seventh Plan are higher than those in the Sixth Plan. The following break-up shows groupwise allocations for production, infrastructure development and social services sectors and for other services in the Sixth Plan and the Seventh Plan..

	Sixth Plan	Seventh Plan
	(Rupees in crores)	
Production sector	1,211.47	3,573.21
(Agriculture and Allied Services, Irrigation and Flood Control, Power, Industries & Minerals)		
Infrastructure Sector	135.45	365.39
(Co-operation, Roads and Bridges, Communication & Transport, Ports, Tourism, etc.),		
Social Services Sector	211.85	1,097.83
(Education, Health, Water-supply, Housing, Urban Development, Labour Welfare, Welfare of SC & ST, Nutrition, Information & Publicity, etc.)		
Other Services	11.06	52.28
(Scientific Services & Research, Economic Service, General Services)	1,569.83	5,088.71

3.14 While adequate provision has been made for the production and infrastructure development sectors, a higher order of allocation has been suggested for the social services and other service sectors where the development is lagging behind due to inadequate investments made in the past.

#### Selected Programmes

3.15 Sectoral strategies for development programmes in different sectors have been discussed in detail in the relevant chapters. Some important aspects are high-lighted below :-

#### Agriculture

3.16. Some distinctive features of agriculture in Orissa which have relevance to planning are --the pressure of population on land (about 76 per cent of the land-holders are small and marginal farmers cultivating only 40 per cent of the land), divergence in the cropping pattern resulting from variance in the physiographic features particularly topography and the inadequacy of irrigation (only 28.3 per cent of the cultivable land are irrigated)etc. Unlike in the past, when increase in agricultural production was achieved through expansion of area, future improvement in production has now to strive for vertical growth.

3.17. The main strategy for agricultural development in the Seventh Plan is to increase food production to achieve self-sufficiency at higher levels of consumption. It is proposed to integrate agricultural development programmes with the programmes for poverty alleviation. The operational implications of this approach are the following--

(i) Comprehensive area development with special attention to the poorer sections of the population in the rural areas.

- (ii) Promotion of mixed-farming for increasing investment, employment and income per unit of land.
- (iii) Promotion of dry land-farming.
- (iv) Diversification of production base by integrating crop production with forestry and animal husbandry.
- (v) Efficient soil and water-management on scientific lines and maintenance of soil fertility through judicious land use and cropping pattern.
- (vi) Optimum utilisation of water both in irrigated and rain-fed areas
- (vii) Increasing per hectare application of fertilisers
- (viii) Conservation of farm produce through post-harvest technology and safe storage
- (ix) Study and effective flow of appropriate technology to the field for increasing productivity.

3.18. In 1983-84 there was a quantum jump in the production of foodgrains and utilisation of fertilisers and plant nutrients. Efforts would be made to maintain the tempo of higher production in the Seventh Plan and improve it further

#### **Animal Husbandry and Dairy Development**

3.19. Animal husbandry and dairying are relatively less-developed sectors in Orissa though they afford immense scope for raising the income of the small and marginal farmers and enlarging employment opportunities in the rural areas. In the past, considerable stress has been laid on the development of livestock through the provision of better health care, intensification of cross-breeding, development of poultry and piggery and extension support for scientific management of cattle. The strategy for the Seventh Plan in the Animal husbandry Sector lays emphasis on low-cost livestock production for sustaining and increasing the income of small and marginal farmers, continuance of cross-breeding together with the preservation of the local breeds of cattle, provision of incentives in the form of supply of good quality animals together with arrangements for veterinary care, marketing and credit facilities and supply of in-puts for increasing the income of beneficiaries under poverty alleviation programmes. The emphasis in the dairy sector is on fodder development, organisation of dairy and poultry co-operatives and augmentation of milk production through the Operation Flood-II Programme. These strategies have been incorporated in the animal husbandry and dairy development plan with substantial step up in the physical and financial targets. Milk production is proposed to be increased from 3.34 lakh tonnes in 1984-85 to 6.50 lakh tonnes by the end of the Seventh Plan. The production of egg would also go up from 373 million in 1984-85 to 720 million in 1989-90.

3.20. For successful implementation of animal husbandry and dairy development programmes in the Seventh Plan certain important guidelines enunciated by the National Work Shop on Animal Husbandry organised by Ministry of Agriculture in July 1981 have also been kept in view. These include production of pre-mixed cattle-poultry feed and utilisation of agricultural wastes as feed substitutes, improvement in the management of breeding farms for cattle, buffalo, sheep and poultry; improvement of fodder seed farms; provision of low-cost animal health cover including surveillance; disease control; provision of prophylactic infrastructure; and production of quality vaccines.

3.21. 22 per cent of the 7th Plan outlay is proposed to be invested in the tribal sub-plan areas for the benefit of tribal population and 14 per cent of the outlay in the special component plan for the benefit of the scheduled castes.



### Fisheries

3.22. Fisheries development has a direct impact on the weaker sections of the society. Apart from income it also generates employment with relatively low investment. Orissa with a long coast-line of 480 Kms. has a vast scope for increasing marine fish production. The average fish production per Km. in the State is, however, 98 tonnes per Km. compared to the All-India average of 284 tonnes per Km. A substantial increase in production is, therefore, proposed to be achieved during the Seventh Plan by providing infrastructure facilities like jettis, landing bases etc. to the traditional fishermen.

3.23. Inland fishing would also be given a boost by encouraging Fish Farmers Development Agencies and Brackish Water Fish Development Agencies to take up more bankable schemes with institutional finance. Fish seed production would be increased and marketing facilities would be expanded. Export of processed fish would also be encouraged in the corporate sector. It is estimated that the production of spawn would increase in the Seventh Plan from the present level of 28 crores to 50 crores and that of fries/fingerlings from 11.80 crores to 16.4 crores. The production of inland and marine fish is also expected to increase from 54,000 MTs. per annum to 1 lakh MTs per annum.

### Forestry

3.24. The main emphasis of planning in the forest sector has been on building up economic plantations, improvement of social forestry, coastal shelter-belt plantation and development of infrastructure facilities for exploiting forest product. The strategy for the Seventh Plan is—

- (i) Consolidation and development of reserve forests
- (ii) Improvement of social forestry
- (iii) Expansion of wild life and nature conservation
- (iv) Reorientation of forest policy to involve the rural people in the efforts to promote, protect and manage intensive afforestation programmes, geared to fulfil the ecological requirements and the needs of the rural population.

3.25. The social forestry programme taken up with Swedish assistance would continue in the Seventh Plan. 95,000 hectares of plantations to be taken up during the plan period would provide the fodder, fuel and timber needs of the people. Plantations of minor forests would also be expanded to provide employment to the tribal population living in the vicinity of forests. Special stress would be given to wild life conservation. The major change in forest policy in the Seventh Plan would be association of the people in afforestation programmes, so that they may be responsive to the need for preservation of forests..

### Irrigation

3.26. Orissa has a vast water potential to irrigate about 75 per cent of its cultivated lands. Only 28.33 per cent of the lands are, however, irrigated at present. At the end of the Sixth Plan, the total irrigation potential in the State would be of the order of 17.37 lakh hectares including the additional potential of 4.47 lakh hectares created during this Plan (1980-85).

3.27 The irrigation strategy for the Seventh Plan is -

- (i) rapid expansion of irrigation facilities to support increase in agricultural production, particularly rice;
- (ii) completion of incomplete projects with priority for poorer regions having low and uncertain rain-fall;
- (iii) adequate funding of externally aided projects;
- (iv) modernisation/extension of old irrigation systems to facilitate drainage and better utilisation of the irrigation potential;
- (v) starting new projects in the tribal, drought prone and backward areas

3.28. An additional irrigation potential of 5.41 lakh hectares is proposed to be created in the Seventh Plan, i. e., 1.88 lakh hectares from major and medium irrigation, 0.33 lakh hectares from minor irrigation (flow), 1.20 lakh hectares from lift irrigation (public sector) and 2.00 lakh hectares from lift irrigation (private). In the minor irrigation sector, priority would be given to the completion of ongoing projects and new projects would be taken up selectively in the tribal, drought prone and backward areas. Attention would be given to provide facilities for drainage, which is a major problem in the coastal districts.

3.29. Within the constraints of resources in the Seventh Plan, it may not be possible to increase the additional irrigation potential beyond 5.41 lakh hectares unless central assistance becomes available to complete some ongoing major projects. Three important major projects are Rengali, Upper Kolab and Subarnarekha. Rengali Irrigation Project is likely to cost about Rs. 792 crores against which expenditure up to the end of Sixth Plan would be about Rs. 43.58 crores. This is a large project designed to utilise the tail-race discharge from Rengali Dam for irrigating 2.35 lakh hectares in the first phase and 1.64 lakh hectares in the second phase. The investment on this high cost project cannot be fully met from State Plan funds though, on completion, it would provide irrigation to a large area and help in substantially augmenting production.

3.30. Upper Kolab Project with an irrigation command of about 93.93 thousand hectares, almost fully in the tribal sub-plan area, is estimated to cost Rs. 75.41 crores. This spill-over expenditure on the project in the Seventh Plan is of the order of Rs. 59.05 crores.

3.31. Subarnarekha project, with an irrigation command of 93 thousand hectares, out of which about 89 thousand hectares lie in the tribal sub-plan areas of Mayurbhanj district is estimated to cost of Rs. 391.49 crores. On completion, the project would help in changing the economy of the area.

3.32. Since the expenditure on these major projects cannot be fully met from State Plan funds and their execution in phases over a long period may result in escalation of costs, it may be worthwhile if the Central Government provide assistance for the completion of these projects during the Seventh Plan period. In that event, the expenditure proposed to be incurred on these projects may be usefully diverted to the completion of other projects which may yield an additional irrigation potential of about 1.10 lakh hectares.

#### Power

3.33. By the end of the Sixth Plan, the installed capacity of power generating units in the State would be 11.4 MW with a firm power capacity of 614 MW. During the Seventh Plan, Rengali Stage-I and Upper Kolab Projects would be commissioned, providing additional installed capacity of 340 MW with firm power capacity of 155 MW. Besides, Rengali Stage-II, one unit of Ib Thermal, all the six sets of gas-turbine, Potteru Project, Bargarh canal head regulator and small hydel projects are also proposed to be commissioned. The combined installed capacity of these Projects would be 618 MW, with firm capacity of 278 MW.

3.34. 23,745 villages constituting about 50.28 per cent of the total number of villages in the State would get electricity by the end of the Sixth Plan. To extend this benefit to all villages, the remaining 23,247 villages are proposed to be electrified during the Seventh Plan.

3.35. By the end of the Sixth Plan, 33,031 pumps would be energised. 40,000 more pump sets are proposed to be energised in the Seventh Plan.

#### Industries

3.36. The industrial policy of the State Government in the Sixth Plan has succeeded in building up the tempo of industrialisation, which would be continued in the Seventh Plan. Priority would be given to the completion of the incomplete Schemes/Projects. The strategy for the Seventh Plan is:--

- (i) completion of incomplete projects;
- (ii) full capacity utilisation;

- (iii) modernisation;
- (iv) creation of additional employment opportunities particularly for weaker sections of the society;
- (v) development of agro-based industries;
- (vi) labour participation.

3.37. The Infrastructure Development Corporation has programmes to develop 3,940 acres of land and construct 1,990 industrial sheds and 1,320 houses during the Seventh Plan. Most of these would be concentrated in the no-industry districts of Balasore, Balangir and Phulbani. IPICOL, which is a major promoter of industries in the State would complete 61 spill-over projects of the Sixth Plan and endeavour to promote 104 new projects.

3.38. In the small industries sector, 21,000 small scale units are proposed to be set up to provide employment to about 2 lakh persons. In the artisan sector 3.75 lakh units would be established which would generate employment for about 7.5 lakh persons.

3.39. Production of handicrafts would be encouraged through co-operatives. The object is to produce handicrafts worth Rs. 40 crores during the plan period. Handicrafts production would provide employment to about 1 lakh persons.

3.40. In the handloom sector, the emphasis would be on improving the quality of life of handloom weavers by providing facilities like housing, insurance coverage, etc. The production of handloom cloth is also expected to be increased from the present level of 900 metres per loom to 1,390 metres per loom by the end of the Seventh Plan.

3.41. Sericulture programmes would be developed and expanded. The annual silk production is proposed to be increased from the existing level of 1 lakh Kgs. per annum to 2.50 lakh Kgs. per annum. This would provide gainful employment to about 25,000 persons.

#### **Transport and Communication'**

3.42. State investments in the transport and communication sector include investments on the construction of roads and bridges, inland water-ways, ports and harbours (other than major ports) and public sector road transport. The strategy for road development in the Seventh Plan is to optimise the existing net-work by strengthening and improving the major roads and developing selected link and lateral roads. The main emphasis would, however, be on the completion of the incomplete works, particularly bridges which would facilitate all-weather communication. Under the Minimum Needs Programme, 116 spill-over projects are proposed to be completed and 39 new projects taken up during the plan period to provide all-weather communication to about 1,000 villages having a population of 1,000 to 1,500. These essential roads could not be taken up during the previous plans.

3.43. The work on Talcher-Sambalpur and Rayagada-Koraput rail links would be continued in the Seventh Plan. Acquisition of lands would also be taken up for the third phase of Jakhpura-Banspani rail link connecting Keonjhar and Banspani. The Ministry of Railways have accepted the proposal of the State Government to take up the rail link between Khurda and Balangir on a priority basis.

3.44. In the transport sector, the Orissa State Road Transport Corporation plans to strengthen its fleet substantially. 578 superannuated vehicles are proposed to be replaced and 476 new vehicles added. Amenities and facilities for the travelling passengers are also proposed to be expanded in the Seventh Plan by putting up bus-stands, rest sheds, toilets, canteens, etc. A Fund known as the Passengers Amenities Fund has been created for taking up construction of bus-stands. For other amenities, adequate provision has been proposed in the Seventh Plan.

3.45. In the Port sector, completion of the incomplete and ongoing works, mainly the minor port at Gopalpur, would be given priority in the Seventh Plan. A Fishing Harbour has already been established at Dhamra to facilitate commercial shipping. Estuaries of tidal rivers, however, also provide natural navigational out-lets to mechanised crafts for economic fishing. A number of fishing bases are proposed to be developed in these areas in the Seventh Plan.

## Education

3.46. The educational strategy in the Seventh Plan gives priority to universalisation of elementary education for children in the age-group of 6-11 and based on its achievement, to 100 per cent enrolment of children in the age group of 11-14. The priority for universalisation of elementary education stems from the consideration that it is the basic input for all other forms of development. Since resources constraints would not permit coverage of all children in the age group of 6-14 under formal system, both full and part-time systems and formal and non-formal methods are proposed to be adopted for implementing the programme.

3.47. In conformity with the national guidelines, efforts would also be made to cover all adult illiterates in the age-group of 15-35 by appropriate literary programmes in the Seventh Plan. The programmes would give priority to women and persons belonging to the Scheduled Castes and Scheduled Tribes.

3.48. In view of the wide disparity in the matter of access to secondary education in different districts of the State, expansion of the facilities for secondary education, commensurate with the out-put at the M. E. stage in the districts where such facilities are below the state average, is also proposed to be effected.

3.49. Plus two courses have so far remained largely academic-oriented and uni-track. There is urgent need to introduce vocational courses at the plus two stage. With a view to making vocational courses attractive, efforts would be made in the Seventh Plan to link the qualification and training obtained at the plus two stage to jobs and self-employment opportunities.

3.50. In higher education the main emphasis would be on the consolidation of the existing facilities, removal of basic infrastructural deficiencies and other shortcomings. Quantitative expansion in any significant scale is not envisaged except in the backward districts where facilities for higher education are inadequate. In line with these formulations, universities would also be encouraged to restructure their curriculum at the under-graduate and post-graduate levels to suit community needs. Greater emphasis would be given to post-graduate level research in practical problems associated with development.

## Health

3.51. The Seventh Plan Programmes for health care have been formulated in accordance with the National Policy for "HEALTH FOR ALL BY 2000 AD". Priority has been given to the provision of promotive, preventive and curative services; special plans, for health care (including family welfare) for vulnerable groups i.e. children and pregnant women; and control of endemic communicable and non-communicable diseases. Emphasis has been placed on strengthening health services in the rural areas where the facilities are inadequate, initiating appropriate steps in environmental sanitation, mitigating regional imbalances in coverage, consolidating the existing infrastructure to make it yield better results and expanding and strengthening the Indian and Homoeopathic systems of medicine.

3.52. The number of Primary Health Centres is proposed to be increased substantially to augment health care facilities in the rural areas. At present there are 314 Primary Health Centres and 20 additional Primary Health Centres in the State. 100 more Primary Health Centres are proposed to be added in the Seventh Plan. According to the National Health Policy, a sub-centre is required to be provided for a population of five thousand. Against total requirement of 5,540 sub-centres in the State, 4,127 would be available by the end of Sixth Plan. 1,413 sub-centres are proposed to be set up in the Seventh Plan.

3.53. In the project districts served by the U. K. AID PROJECT certain infrastructure has been provided for upgraded Primary Health Centres. Similar facilities are also proposed to be provided in 125 upgraded P. H. Cs in the non-project districts.

3.54. For expanding the benefits of Homoeopathic and indigenous systems of medicine 15 Ayurvedic Dispensaries and 15 Homoeopathic Dispensaries are proposed to be upgraded to the level of subsidiary health centres.

3.55. District and Subdivisional level hospitals are proposed to be strengthened both by providing specialist services and increasing the number of beds.

3.56. In medical education, greater emphasis would be placed on rural orientation. To fulfil a long felt need a Centre for medical education and research, similar to the Post-Graduate Institute at Chandigarh is also proposed to be established in the Seventh Plan.

3.57. Research facilities would be expanded in the Seventh Plan in all medical Colleges and training programmes would be provided for para-medical personnel like Laboratory technicians, Radiographers, Pharmacists.

3.58. The programmes for control and eradication of communicable diseases would be continued and school health services would be strengthened. Family Planning programmes would be given renewed emphasis.

### **Drinking Water Supply**

3.59. The Seventh Plan proposals for provision of drinking water supply to the urban and rural areas have been framed keeping in view the objectives of the "INTERNATIONAL DRINKING WATER SUPPLY AND SANITATION DECADE 1981-91" to provide the facilities of water supply and sewerage disposal to all towns/villages. Considering the low coverage of drinking water and sanitation facilities in the urban areas i.e. about 39.27 per cent of the population by the former and 2.91 per cent by the later up to 1980-81, it is proposed to step up the progress and provide safe drinking water supply and sanitation to all urban localities during the Seventh Plan.

3.60. Out of 46,992 villages in the State, about 27,077 villages would get at least one source of safe drinking water supply by the end of the Sixth Plan. According to the target for the International Water Supply and Sanitation Decade 1981-91, all villages should be provided safe drinking water facilities. Considering the urgency of providing drinking water supply facilities to problem villages, it is proposed to extend the facility to such villages in the first instance. In the Seventh Plan, all problem villages would get at least one source of safe drinking water supply. In 20 coastal blocks, advantage would be taken of the assistance from DANIDA for providing drinking water facilities.

### **Housing**

3.61. Under the Minimum Needs Programme, landless labourers would be provided house sites and financial help for building their own houses. For new housing projects, infrastructure facilities like developed sites, electricity, water supply, roads, sewerage etc. would be made available on a larger scale. Environmental improvement of slums would also be continued in the Seventh Plan and extended to a larger number of towns.

### **Nutrition**

3.62. The coverage of the Special Nutrition Programme would be expanded from 1.5 lakhs at the end of the Sixth Plan to 6 lakhs in the Seventh Plan. The Mid-day Meal Programme would also be continued. Against the target of 3.5 lakhs, only 97,000 beneficiaries have been covered under this programme during the Sixth Plan. The target of 3.5 lakhs is proposed to be achieved during the Seventh Plan.

## CHAPTER 4

## ROLE OF CREDIT INSTITUTIONS

4.1. Seventh Five-Year Plan would call for massive investment of institutional finance. In Orissa, it will flow from the following lending and investment institutions:-

*Credit Institutions providing loan to Priority Sector*

1. Scheduled Commercial Banks
2. Regional Rural Banks ( R. R. Bs)
3. Co-operative Central Banks
4. Co-operative Land Development Banks
5. National Bank for Agriculture and Rural Development (NABARD)
6. Orissa State Financial Corporation

4.2. There are development banks and investment institutions which advance loans to small scale and medium industries. In Orissa, the institutions are—

*A. All India Level Development Banks*

1. Industrial Development Bank of India (IDBI)
2. Industrial Finance Corporation of India (IFCI)
3. Industrial Credit and Investment Corporation of India (ICICI)
4. Industrial Reconstruction Corporation of India (IRCI)

*B. State Level Development Banks*

1. Orissa State Financial Corporation (OSFC)

*C. Investment Institutions*

1. Life Insurance Corporation of India (LIC)
2. Unit Trust of India (UTI)
3. General Insurance Corporation of India (GIC)

4.3. Orissa Scheduled Caste and Scheduled Tribe Development Finance Co-operative Corporation is a development bank engaged in providing soft loan assistance to Scheduled Caste and Scheduled Tribe people only. It has provided such assistance to 69,527 Scheduled Caste and 2931 Scheduled Tribe beneficiaries during the Sixth Plan period upto the 31st March 1984. During the Seventh Plan too, the Corporation will continue to provide assistance to the above weaker sections.

4.4. For infrastructure development such as for electrification the Rural Electrification Corporation, which has provided loan assistance of Rs. 48.76 crores to the Orissa State Electricity Board during the Sixth Plan upto the end of September 1984; will continue to provide finance during the Seventh Plan.

4.5. Similarly, there are institutions like Housing and Urban Development Corporation providing finance for construction of houses. The Corporation will continue to provide assistance during the Seventh Plan.

**Expansion of branch, net-work of Banks**

46. During the Sixth Five-Year Plan, there has been very rapid expansion of branch net-work as given below:—

**Table 4.1**

Sl. No.	Category of banks	No. of banks		No. of branches	
		At the commencement of 6th Plan	As on 30-9-1984	At the commencement of 6th Plan	As on 30-9-1984
(1)	(2)	(3)	(4)	(5)	(6)
1	State Bank of India Group	1	3	218	320
2	Nationalised Banks	19	19	368	521
3	Private Sector Banks	..	3	..	3
4	Regional Rural Banks	4	9	180	661
	Total	..	24	766	1,505

47. During the remaining months of the current year, it is proposed to open 179 more branches of Commercial and Regional Rural Banks. At the end of the Sixth Plan, the number of bank branches is thus expected to be 1684 bringing the average per branch population to 15,660 on the basis of 1981 census. This is against the national goal to provide one branch to 17,000 population by the end of the Sixth Plan. The national average as on 31st March, 1984 stood at 16,000 population.

48. Of the 25 Commercial Banks presently operating in the State, only 13 banks have their controlling offices in Orissa. It will be the endeavour of the Government to persuade the remaining 12 Commercial Banks to open controlling offices in Orissa during the Seventh Plan in order to effectively monitor the lending programmes particularly in the priority sector.

**Credit Deposit Ratio**

49. According to Reserve Bank of India guidelines, the banks should maintain the credit deposit ratio at 60%. At the commencement of the Sixth Plan, it was 58% in Orissa while All India average was 65.9%. At the end of June, 1984, this ratio for Orissa stood at 83.1% against All India average of 67.2% as given below—

**Table 4.2**

(Rs. in crores)

	At the commencement of Sixth Plan		At the end of June 1984	
	Orissa	All India	Orissa	All India
	(1)	(2)	(3)	(4)
Deposit	.. 248.00	27,016.00	695.30	63,532.00
Credit	.. 143.90	17,795.00	578.10	42,709.00
C. D. Ratio (%)	.. 58.00	65.90	83.10	67.20

Source—Reserve Bank of India

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30/4/85

### Lending by the banks

4.10. The following table reflects the advance position as at the end of June 1984 in Orissa:

**Table 4.3**

(Ps in crores)

Category of Banks	Total advance	Advances to priority sectors		D. R. I. advances	Direct advance to agriculture
		Total	To weaker section		
(1)	(2)	(3)	(4)	(5)	(6)
1. Commercial Banks ..	578.10	361.60 (62.3)	89.00 (15.4)	17.10 (2.9)	149.60 (25.6)
2. Regional Rural Banks	87.80	85.60	85.30	3.00	52.30
3. Co-operative Banks ..	183.70	165.10	126.00	..	155.10
<b>Total</b> ..	<b>849.60</b>	<b>612.30</b>	<b>300.30</b>	<b>20.10</b>	<b>357.00</b>

Source—Reserve Bank of India

(Figures within brackets under those of Commercial Banks indicate percentage of total advances. According to the guidelines of the R. B. I. advances to the priority sector, weaker section and direct finance to agriculture should be 40%, 25%, and 16% respectively by March 1985. Thus there is shortfall in respect of advance to weaker section.)

### Lending under Annual Action Plan

4.11. For smooth implementation of anti-poverty programmes and other priority sector schemes District Credit Plan and Annual Action Plans are prepared by the Lead Banks allocating shares of investment to all the banks including the Co-operative Banks operating in the State. During the Sixth Plan Period two credit plans were prepared one for 1980—82 and the other for 1983—85. The following table gives the performance during the Sixth Plan.

**Table 4.4**

(Rs. in crores)

Sector	1980—82		1983		1984	
	Target	Achievement	Target	Achievement	Target	Achievement (30.6.1984)
A. Agriculture & Allied Activities	480.14	388.00	243.53	177.62	267.91	73.70
B. Small Industries	80.23	81.00	45.22	46.68	50.60	36.06
C. Services & Business	56.61	95.55	38.91	48.40	36.11	33.83
<b>Total</b> ..	<b>616.98</b>	<b>564.55</b>	<b>327.66</b>	<b>272.70</b>	<b>354.62</b>	<b>143.19</b>

Source—S. L. R. M. and R. B. I.



4.12. For the Seventh Five-Year Plan instructions from Reserve Bank of India to prepare district credit plan have not been received yet. Annual Action Plan for 1985, the first year of Seventh Plan is however, under preparation on the lines advised by the Reserve Bank of India.

#### Credit Estimate under Priority Sector during 7th Five-year Plan

##### Crop Loan

4.13. Requirement of crop loan (ST credit) by the end of Sixth Five-year Plan was estimated to be of the order of Rs. 245 crores (Chapter-V: Report on the study Team on Agricultural Credit Institutions in Orissa). Taking into account, the anticipated increase in the gross cropped area and increase in irrigation potential during the Seventh Five-Year Plan and also increase in the scales of finance owing to escalation of price of inputs and adoption of improved agricultural practices, there may be over-all increase of 30% over the institutional credit estimated for the last year of the Sixth Plan. Thus, the credit for short-term agricultural operations by 1989-90 will be of the order of Rs. 318.50 crores or Rs. 319 crores which will mean doubling the present level of lending because this year, the banks may reach the level of Rs. 162.00 crores.

##### Term Loan

4.14. During the Seventh Five Year Plan, while projecting the credit requirement for different sub-sections in the priority sector, we have taken into account the need for upward revision of the scale of finance owing to price escalation and therefore to step up credit flow, need to cover more number of beneficiaries belonging to weaker sections and above all the capability of the banks to maintain an average annual growth rates of 15% in lending. The anticipated credit flow from the financing institutions in each sub-sector during the Seventh Plan has been accordingly estimated as indicated below.

##### Agricultural Term Loan

4.15. During 1984, the last year of the Sixth Five Year Plan the level of credit for this sub-sector would be of the order of Rs. 106 crores. Providing for cumulative annual increase of 15% in credit flow during the Seventh Plan, the estimated requirement of agricultural term loan would be Rs. 822 crores. This includes the credit component under IRDP.

##### Small-Scale Industries

4.16. During the last year of the Sixth Five-Year Plan, the banks have programmed to provide credit under the SSI Sector to the tune of Rs. 50.60 crores including the IRDP component. The total requirement of credit during the Seventh Five-Year Plan period, i. e. 1985-90 would be Rs. 392.33 or Rs. 393.00 crores. This takes into account 15 per cent cumulative annual increase.

##### Services and business

4.17. The provision of credit under this sector for the last year of the Sixth Plan is Rs. 36.11 crores. There should be a need of caution to the financing institutions not to give over-emphasis in this sub-sector as has been experienced during the Sixth Five-Year Plan. Therefore, as against 15 per cent annual increase in agricultural and industries sectors, 10 per cent average increase per year is envisaged under this sector during the Seventh Plan. The total credit requirement is thus estimated to be Rs. 242.50 or Rs. 243.00 crores.

4.18. The total credit flow under priority sectors will thus be—

		( Rs. in crores )
Crop Loan	..	319.00
Agricultural Term Loans	..	822.00
Small Industries	..	393.00
Small business and services	..	243.00
<b>Total</b>	<b>..</b>	<b>1777.00</b>

4.19 The above estimated of credit requirement the Seventh Plan is based on the present level of availability of subsidy under IRDP and ERRP etc., anti-poverty programmes. In case, Government decide to raise the subsidy provision or rate of subsidy under the above programmes, the quantum of credit will undergo revision. Since the district credit plan for 1985-90 is not being prepared now and it is likely to be formulated after the Seventh Five-Year Plan is finalised the banks will have no difficulty to deploy the required amount of credit based on the Plan provisions.

#### National Bank for Agriculture and Rural Development ( NABARD )

4.20. An important development in the area of rural credit is the setting up of NABARD on 12th July, 1982. This central institution has taken over the entire function of the erstwhile Agricultural Refinance Development Corporation ( ARDC ) and a part of the functions of Reserve Bank of India ( Agricultural Credit Department and Rural Planning and Credit Cell ) While the ARDC was looking after agricultural term loans only, NABARD covers the entire field of rural development including village industries, handicrafts, services and business sectors.

4.21. The refinance assistance given by NABARD during the Sixth Plan is indicated in the following table:—

Table 4.5

Year	Total disbursement of refinance	Purposewise Disbursement					
		Minor irrigation	Pump set	Plantation & Horticulture	Animal Husbandry	IRDP	Others
1980-81	1,979	1,283	220	91	91	153	141
1981-82	3,730	1,357	269	174	178	1445	307
1982-83	3,389	862	122	115	54	1,948	288
1983-84	3,003	565	202	131	48	1,789	268
	<u>12,101</u>						

Source—NABARD

4.22. The projected refinance NABARD may be called upon to disburse during the Seventh Plan period may be of the order of Rs. 450 crores.

#### Orissa Scheduled Caste and Scheduled Tribe Development Finance Co-operative Corporation

4.23. The Orissa Scheduled Caste and Scheduled Tribes Development Finance Corporation provides soft loan to the Scheduled Caste and Scheduled Tribe beneficiaries belonging to the weaker section. During the Sixth Plan, the Corporation has target for providing margin money loan assistance to 1 lakh Scheduled Caste and 13,000 Scheduled Tribe families. During the Seventh Five Year Plan, it proposes to provide such loan assistance to 2.5 lakh families of whom 1.25 lakh families will be from Scheduled Caste and an equal number from Scheduled Tribe.

## CHAPTER-5

### MANPOWER & EMPLOYMENT

5.1. Population explosion in the State during the Sixties with an annual growth rate of 2.5% as against 1.9% in the Fifties posed a serious problem for the State as babies born in Sixties entered the labour market during Fifth and Sixth Plan periods. It was estimated that the annual addition to the labour force during this period was about 1.9 lakh persons. The last decade, i.e., 1971 to 1981 has however registered a fairly lower growth rate of population mainly on account of low birth rate, and it is expected that this will have a moderating effect on growth of labour force as those born after 1971 will reach working age-group (15 to 59 years) after 1985 onwards. But there may not be any significant reduction in labour participation rate as, of late, there has been a tendency among the population (especially among females) within the working age-group for greater participation in labour with the increase in literacy rates and educational standards.

5.2. The total population of Orissa, which was 219 lakhs in 1971 has increased to 264 lakhs in 1981. Of this about 88 per cent live in rural areas. Further, most of the urban centres in the State are no more than overgrown villages. For this reason, the distinction between the rural and urban pattern of unemployment is rather insignificant in the State. In fact, the urban unemployment is considered to be an out-flow of rural employment. According to 1981 Census, there are 987 females for every thousand males. According to activity, the total population has been distributed as follows:

<b>A. Main workers</b>	
Cultivators	.. 40.53 lakhs
Agricultural Labourers	.. 23.97 lakhs
Household Industries	.. 2.85 lakhs
Others	.. 19.00 lakhs
Total main workers	.. 86.35 lakhs
<b>B. Marginal workers</b>	.. 13.87 lakhs
<b>C. Main &amp; Marginal workers</b>	.. 100.22 lakhs
<b>D. Non-Workers</b>	.. 163.48 lakhs
<b>E. Total Population</b>	.. 263.70 lakhs

5.3. The participation rates of main and marginal workers are 32.82% and 5.10%, respectively. It may be assumed that the main workers are almost fully employed and marginal workers are under-employed. The non-workers mainly consist of housewives, (fully engaged in domestic activities) students, children rent receivers, sick old invalids, beggars and those who are available for work but are fully unemployed.

5.4. The population in the working age-group is very much relevant for determination of labour force. Even though the population according to age-group in 1981 Census is not yet available, the following estimates have been obtained by projection.

Table No. 5.1

Distribution of population according to broad age-groups, 1981

Age-group (1)	(In lakhs)		
	Males (2)	Females (3)	Total (4)
0 -14	49.98	47.58	97.56
15 -59	74.60	74.07	148.67
60 and above	8.52	8.95	17.47
All ages	133.10	130.60	263.70

Total population within the working age group has been estimated at 1.49 crores and bulk of the workers come from this group.

#### Labour force

5.5. The labour force includes the active working force and the chronically unemployed persons. At any given time there exists a hard core of chronically unemployed persons who do not get any gainful activity and continue to seek work or are available for work. The results of 27th round N. S. S. (1972-73) on employment revealed that for the country as a whole, the rate of chronic unemployment was only 0.5 per cent of the labour force but for Orissa it was fairly higher, i. e. 0.7 per cent. This is, however, a small fraction of the total volume of unemployment. The major chunk unemployment measured in terms of mandays or manyears consists of under-employment and seasonal unemployment. According to 1981 Census, there are 86.5 lakhs main workers in the State. The worker participation rate among males (main workers) has been significantly higher (54.38%) as compared to females (10.7%). But a striking feature has been noticed from the Census data that in 1981 the participation rate among females has considerably increased over 1971 whereas that among males shows a declining trend as will be revealed from the following statement:—

Table No. 5.2

Worker participation rate according to sex.

Percentage of	Percentage of main workers to total population :	
	1971 Census	1981 Census
All workers	31.22	32.82
Male workers	55.32	54.38
Female workers	6.81	10.70

5.6. Besides there are 13.5 lakh marginal workers who are also economically active and the total labour force has been about one crore in 1981. The total worker participation rate has also increased significantly among females in both rural and urban areas. Taking both main and marginal (seasonal) workers, it has been noticed that there has been greater awareness among females for gainful employment (mainly seasonally or part time). This tendency is revealed from the following statement:—

Table No. 5.3

## Worker participation rate in rural and urban areas

	Percentage of male and female workers (main + marginal) to total population			
	1971		1981	
	Male	Female	Male	Female
Rural ..	55.8	6.8	56.55	21.09
Urban ..	50.6	6.5	50.14	9.07

5.7. It is found that worker participation rate is invariably higher in rural areas and in urban areas there is more of non-earning dependants on the working population. One strikingly important feature is noticed in 1981 that percentage of female workers is very high in rural areas. This is principally because of large scale seasonal employment of females (marginal workers) in agricultural operations and rural development work.

5.8. Due to increase in the work participation rate on account of higher literacy and educational levels and consequent awareness among the population, the growth of working force has been faster even though the growth rate of population has been lower in the last decade. It has been estimated that about 2 lakh new entrants will join annually to the working force.

**Stock of Technical Manpower**

5.9. The stock of technical manpower has been estimated on the basis of the methodology given in Planning Commission D. O. No. LEM-2/1/81-M.P. However, an attrition rate of 2 per cent has been used for all categories of manpower. The total stock of some important categories of technical manpower has been estimated as follows :—

Table No. 5.4

## Stock of some important categories of technical manpower

Sl. No.	Manpower Educational category	Total stock at the beginning of 1980	Total stock at the end of 1985
(1)	(2)	(3)	(4)
1	Engineering degree holders		
	(a) Civil	927	1,141
	(b) Electrical	1,490	1,751
	(c) Mechanical	1,939	2,142
	(d) Electronics	165	189
	(e) Chemical	546	598
	(f) Metallurgical	415	476

Sl. No.	Manpower Educational category	Total stock at the beginning of 1980	Total stock at the end of 1985
(1)	(2)	(3)	(4)
2	Engineering diploma holders		
	(a) Civil	1,202	1,347
	(b) Electrical	2,359	2,485
	(c) Mechanical	1,617	1,707
	(d) Inst. control	186	220
	(e) Electronic	449	486
	(f) Mining	482	583
	(g) Chemical	212	230
	(h) Metallurgical	211	230
3	Medical Graduates	5,963	6,288
4	Agricultural Graduates	1,801	2,099
5	Agricultural Post-Graduates	738	876

5-10. A task force was set up by State Government to project the requirements of engineering manpower in the State during the Sixth Plan to meet the growing activities in mining, heavy industries and modern small industries. Considering the demands of large projects like Orissa Aluminium Project, Fertilizer Plant at Paradeep, projects undertaken by I. D. C. IPICOL, and the small Industry units to be taken up under I. R. D. P. and other normal programmes, the task force made a realistic assessment of various categories of engineering graduates, licentiates and craftsmen required. The task force also recommended for opening of new technical disciplines to meet the additional requirements. Accordingly 2 more Engineering Colleges, one at Talcher and another at Bhubaneswar (OUAT) were opened. Readjustment of seats in diploma courses was brought about as per the needs. AMIE courses were introduced in Engineering Schools. A Women's Polytechnic was set up at Bhubaneswar for Architecture. Another Agriculture College was started at Chiplima in Sambalpur district. A Fishery College was also opened at Gopalpur in Ganjam district. Accordingly the State has got the following capacity to train its manpower in different technical faculties so as to meet the needs of technical manpower in the State.

Table No. 5.5

Existing Technical Training facilities available in the State

Type of Technical Institution	Numbers	Intake capacity	Average annual outturn
(1)	(2)	(3)	(4)
<b>A. Engineering</b>			
1. Engineering Colleges (Degree)	4	396	300
2. Engineering Schools and Polytechnics (Diploma)	10	850	709
3. I. T. I. (Craftsmen training)	13	4,080	3,512
<b>B. Agriculture</b>			
1. Agricultural Colleges (Degree)	2	240	180
2. Agricultural Engineering College (Degree)	1	40	32
<b>C. Animal Husbandry and Veterinary</b>			
1. College of A. H. & V. Sc. (Degree)	1	48	45
<b>D. Fisheries:--</b>			
College of Fisheries (Degree)	1	..	..
<b>E. Medical and Para-Medical</b>			
1. Medical College (Degree)	3	300	269
2. Nursing	3	187	186
3. A. N. M.	17	304	141
4. Pharmacist	2	60	50
5. Lab. Assistant/Technician	2	62	62

5-11. In order to project the requirements of Technical Manpower during the Seventh Plan, Sub-Committee of the working group has been formed. They have been entrusted to make the assessment on a normative basis and identify the surplus and shortage sectors. Necessary reording and adjustments may be made in the training facilities thereafter to match the needs.

#### Unemployment

5-12. Usual status unemeployment refers to chronic unemployment which has been found to be less than 1 per cent. But the magnitude of unemployment measured in terms of person days of under-employment has been colossal. According to Planning Commission a person getting employment for a period of 273 days during the year is considered to have been fully employed. By the end of 1977-78, the back-log of unemployment in the State stood at 24.1 lakh which was marginally reduced to 22.6 lakhs by the end of 1979-80. Therefore, the Sixth Plan was started with a backlog of unemployment for 22.6 lakh persons. This is also corroborated by the unemployment rate (monthly status) obtained by N. S. S. 32nd Round Survey for Orissa at 0.13 per cent of the population which works out at 21.5 lakhs. During the Sixth Plan the total addition to labour force was 9.5 lakhs. Therefore, employment opportunities were to be created for a total of 32.1 lakh persons. During

the first 4 years of Sixth Plan employment opportunities were created for 3.78, 3.66, 3.30 and 3.24 lakh persons. During 1984-85 additional potential is likely to be created for 3.65 lakh persons. Therefore, the Sixth Plan has taken care of providing gainful employment of about 17.6 lakh persons. The backlog of employment in the beginning of the Seventh Plan will be around 14.5 lakhs

5.13. To tackle the unemployment programme during Sixth Plan more emphasis was laid on self employment programmes since the public sector and the organised private sector have limited potentialities for absorbing the growing labour force. The total employment in the Public Sector of the State up to the end of 1983 has been only of the following order.

Table No. 5.6

## Employment in Public Sector in Orissa

Sector (1)	Number of persons employed up to the end of March (in lakhs)			
	1980 (2)	1981 (3)	1982 (4)	1983 (5)
1. Central Government (including Railways) ..	0.53	0.53	0.53	0.54
2. State Government ..	2.76	2.96	3.13	3.21
3. Quasi Government ..	1.11	1.26	1.30	1.37
4. Local bodies ..	0.12	0.15	0.16	0.17
<b>Total</b>	<b>4.52</b>	<b>4.90</b>	<b>5.12</b>	<b>5.29</b>

5.14. Only about 15 to 20 thousand persons get absorbed in public service every year out of the total addition of about 2 lakhs persons to the labour force. The small industry sector offered employment to about 82,290 persons during the first 4 years of Sixth Plan. The organised industry sector employment has also been of the same order. No reliable estimates of additional employment in Agriculture on account of irrigation and multiple cropping, etc., is available, even though a sizable portion of the additional labour force has been rehabilitated in agriculture. Massive employment programme created under N. R. E. P. has provided employment opportunities of about 560 lakh mandays which is equivalent to 2 lakh person years. Besides, the assets have been created under minor irrigation, flood control and drainage, Soil Conservation, Rural Water-Supply, Rural Roads, School Buildings, Housing and Social Forestry

5.15. Under the self-employment and poverty amelioration programmes, a large number of beneficiaries have been covered during the Seventh Plan. Under Integrated Rural Development Programme, and programme for Economic Rehabilitation of Rural Poor ((State Programme), during the first 4 years of the Sixth Plan 10.53 lakhs beneficiaries have been covered under these programmes and during 1984-85 it is expected to cover another 2.91 lakh beneficiaries. Besides 70 thousand handloom weavers have been additionally covered under State Programme. Therefore, the total beneficiaries likely to be covered under all these programmes, will be around 14.14 lakhs during Sixth Plan. The most important employment oriented schemes under I. R. D. and E. R. R. P. have been animal husbandry, fisheries, handloom, Khadi, Village and artisan based industries and sericulture. The number of beneficiaries covered under different programmes is summarised below. Even though all these programmes do not offer full time employment their employment potential in terms of person days/person years is considered to be quite substantial on a continuing basis. A study is being undertaken to estimate the employment potential of different categories of self-employment schemes.



Table No. 5-7

Beneficiaries covered under different programmes during the Sixth Plan

Programme	Number covered during the first four years (In lakhs)	Number likely to be covered during 1984-85 (In lakhs)	Total (In lakhs)
(1)	(2)	(3)	(4)
1. I. R. D. P. ..	7.08	1.88	8.96
2. E. R. R. P. (Land based and fisheries) ..	1.01	0.36	1.37
3. Special Component Plan ((S. C.) ..	1.28	0.25	1.53
4. Tribal Sub-Plan (S. T.) ..	1.16	0.42	1.58
5. Additional Programme for handlooms ..	..	..	0.70
<b>Total</b> ..	..	..	<b>14.14</b>

5.16. It has already been stated that a significant achievement has been made by reducing the magnitude of unemployment from 22.6 lakhs in the beginning of Sixth Plan to 14.5 lakhs by its end in spite of the fact that 9.5 lakh persons joined the labour force additionally during this 5 years period. Out of these 14.5 lakh persons, a major portion remains in the rural areas which do not have the scope to approach employment exchanges. The data released from employment exchanges show that there are about 5.36 lakh persons in the live register by end of 1983 and the number is increasing every year. The number of placements have been only around 15 to 17 thousand persons annually. The following statement gives the live register position and placements through employment exchanges for the last 5 years.

Table No. 5-8

Applicants in live registers and placements in last 5 years

Year	Applicants in the live registers up to the end of the year	Placement during the year
1979	432,157	21,806
1980	447,171	16,830
1981	494,832	17,840
1982	478,725	16,081
1983	536,145	12,559

### Educated Unemployment

5-17. According to the Employment exchanges, the total number of persons unemployed by December, 1983 (as available from the live registers) has been 5.36 lakhs of whom 2.40 lakhs possess qualification of passed H. S. C. and above, and rest are below H. S. C. Very few among them are illiterate. The educated unemployed constitute roughly 45 per cent of the total unemployed. Distribution of unemployed according to their educational standards is as follows :-

Table No. 5-9

Distribution of candidates in the live register according to their qualificational standards (31-12-1983)

Qualification	Number in live register	Percentage to total unemployed
(1)	(2)	(3)
1. Below H. S. C.	295,828	55.18
2. H. S. C.	1,44,174	26.84
3. Intermediate	31,333	5.84
4. Graduates (Total)	62,175	11.60
(i) Arts	38,866	7.25
(ii) Science	8,591	1.60
(iii) Commerce	8,201	1.55
(iv) Agriculture	83	0.01
(v) Engineering & Technology	326	0.06
(vi) Veterinary	..	..
(vii) Medicine	502	0.09
(viii) Others	5,606	1.04
5. Post-Graduates (Total)	2,635	0.49
(i) Arts	1,718	0.32
(ii) Science	674	0.13
(iii) Commerce	168	0.03
(iv) Agriculture	..	..
(v) Eng. & Technology	..	..
(vi) Veterinary	..	..
(vii) Medicine	..	..
(viii) Others	75	0.01
Total	5,36,145	100.00

5.18. Of late, larger number women are joining the working force with the growth of literacy and education. It has already been stated earlier that work participation rate among females exhibit a significant rise. Even in organised sectors also their number is increasing at a faster rate even though they yet constitute a low proportion of the total employees. The following table gives their position in the organised sector for the last 5 years.

Table No. 5.10

## Employment of Women in Organised Sector

Year	Total employees (In '000)	Women employees in organised sectors (In 0000)			Percentage of Women employees to total employees
		Public sector	Private	Total	
(1)	(2)	(3)	(4)	(5)	(6)
1978-79	523	22	13	35	6.69
1979-80	534	24	12	36	6.74
1980-81	613	28	13	41	6.69
1981-82	597	31	13	44	7.37
1982-83	614	31	13	44	7.17

5.19. In accordance with the guidelines issued by Planning Commission, District Manpower and Employment generation councils have been set up as a sub-Committee of the District Development Board in each district under the Chairmanship of the Collector to suggest special employment oriented programmes to examine employment potential of different schemes to determine norms of employment, to identify areas of skill development, and to suggest refashioning of training programmes etc. Besides, for identifying the entrepreneurs under "Educated unemployment Scheme" a task force has been set up in each district and a Final Selection Committee has been set up with the Collector as the Chairman associating the M. L. As., M. Ps., and General Manager, D. I. C. During 1983-84, 11,266 beneficiaries identified and recommended under this scheme by the committee for bank loan to take up independent self-employment schemes. Loans were sanctioned in 8,944 cases and disbursed to 7,120 beneficiaries who started their enterprises.

**Manpower and Employment Strategy**

5.20. The approach document for Seventh Plan rightly indicates that generation of gainful and productive employment has to be emphasised upon through a decentralised manpower and employment Planning. The District Manpower and Employment Generation Councils through liaison with the District Planning Cell will take recourse to employment Planning for all categories of labour force i.e., for landless labourers, seasonally unemployed labourers, skilled and educated unemployed and women who offer for work. Since poverty is the product of unemployment and economic growth is dependent on increase in production in all sectors, the employment has to be planned with the dual objective of removal of poverty and improving productive resources. For this purpose, the I. R. D., E. R. R. P. and Programmes for employment of educated unemployed will not only be continued but will be given a progressively greater push so as to offer self employment opportunities

in all possible ways. The programmes such as N. R. E. P., and R. L. E. G. P., are also to be sponsored with added momentum giving greater emphasis on asset generation or skill formation. All these programmes are normally planned in a decentralised manner so as to identify rural employed and offer employment opportunities either self employment (I. R. D. P., E. R. R. P. etc.), or wage employment (N. R. E. P., R. L. E. G. P.) etc., in all the blocks. During the Seventh Plan, it is envisaged to cover as many as 30 lakh beneficiaries under the self employment programmes such as I. R. D. P., E. R. R. P. and special programmes for educated unemployed.

5.21. Manpower Planning will have to be matched with educational planning for skill development so that the imbalance between employment and manpower can be removed. The TRYSEM and Craftsman training programmes will be refashioned and restructured to avoid this mismatching. For executing animal husbandry, small Industries, handloom, sericulture, handicrafts and cottage Industry programmes the concerned beneficiary's capabilities are to be improved through necessary training.

5.22. Agriculture which is the single major sector providing bulk of employment to labour force has developed further potential to absorb a sizable additional labour force because of additional irrigation and multiple cropping. During the Sixth Plan additional irrigation potential to the tune of 4.47 lakh hectares has been created which has provided employment to large number rural unemployed. Studies on additional employment generated on account of irrigation of various crops gave the following findings.

**Table 5-11**  
Additional employment generated due to irrigation  
(cropwise)

Crop	Additional employment generated due to irrigation (in mandays)	
	Per hectare	Per Rs. 1,000 (at 1980 price) of invest in inputs
(1)	(2)	(3)
1. Paddy (Local)	40.04	30.42
2. Paddy (HYV)	18.24	28.44
3. Maize (Local)	14.78	16.70
4. Ragi (Local)	3.29	4.43
5. Pulses	11.26	18.10
6. Oilseeds (Kh)	41.95	36.89
7. Oilseeds (I.a)	36.31	26.54
8. Vegetables (Kh)	29.97	20.58
9. Vegetables (RA)	21.87	12.62
10. Sugarcane	95.65	29.73

(Estimated on the basis of information available in World Bank Mission Report)

5.23. A field study undertaken by Bureau of Statistics & Economics revealed that employment generated per Rs. 1,000 investment has been 25 mandays on a continuing basis and 83 mandays at construction stage. Similarly afforestation programme, socially forestry, soil and water conservation programmes, roads programmes and plantations, etc. have also been found to be employment intensive and these programmes create tangible assets for the State. Greater emphasis are also being given on these programmes during Seventh Plan. Seventh Plan envisages creation of additional irrigation potential of 5.41 lakh hectares through Major, Medium and Minor Irrigation Projects. Besides, labour intensive programmes such as plantation programmes, construction of roads, water harvesting structures and farm ponds, etc. are also being programmed in a big way. The Works Department has programmed for constructing 2,037 Kms. of metal roads and for connecting 1,000 big villages with all-weather rural roads. The Forest Department has proposed to undertake plantation in 1.34 lakh hectares of area. Horticulture sector has a programme of developing 39,500 hectares of orchards and the soil conservation organisation proposes to cover about 46,000 hectares of area under different plantation. All these programmes are likely to generate high employment potential for rural unemployed during the Seventh Plan.

5.24. Another exercise was undertaken for determination of employment norms on sectoral investment on the basis of the information obtained from concerned technical Departments. The findings on investment employment norms of these sectors are as follows:—

Table No. 5.12

## Sectorwise employment norms in Orissa

Sector	Norms of employment in person years per lakh of rupees of investment (at 1981 prices)	
	At construction stage	On a continuing basis.
(1)	(2)	(3)
1. Agriculture & allied	8.08	6.57
2. Irrigation	7.59	0.99
3. Power	2.54	2.17
4. Industries	1.09	1.86
5. Transport & Communication	1.20	0.53
6. Social and other services	11.23	2.25

(Person days have been converted to person years taking 273 person days equivalent to one person (year))

5.25. Consistent with the broad objectives of Seventh Plan to ensure employment and poverty alleviation coupled with productivity and faster economic growth, it has been proposed to have an outlay of Rs. 5,088.71 crores for Orissa during Seventh Plan. Emphasis has been laid on employment intensive programmes which may be seen from the following table which gives outlays in broad sectoral groups. On the basis of global employment norms formulated by NCAER for Orissa for different sectors the employment potential for different sectors has been estimated as follows : -

Table No. 5.13

## Employment potential for Seventh Plan.

Sector	Outlay proposed (Rs. in lakh)	Employment likely to be generated per lakh of Rs. outlay (person year at 1984-85 prices)	Total employment likely to be generated (in lakh persons)
1. Agriculture & allied sectors.	66193	4.91	3.25
2. Irrigation	121905	4.91	5.99
3. Power	150543	0.48	0.72
4. Mining & Large Industries.	117780	0.72	0.13
5. Household & Small Industries.	7500	19.14	1.44
6. Transport & Communication	29939	0.96	0.29
7. Public Works	1428	4.91	0.07
8. Other services.	1113583	3.59	4.08
<b>All Sector</b>	<b>508871</b>	<b>3.14</b>	<b>15.97</b>

5.26. With the State Plan outlay of Rs. 5088.71 crores it is estimated that jobs for 15.97 lakh persons are likely to be created for continuous employment. This however excludes the employments likely to be generated with the investments made in the Central and private sectors. It is expected that an outlay of about Rs. 3500 crores and Rs. 2000 crores may be available from Central and private sector. This may generate employment for another 8 to 9 lakh persons during the Seventh Plan. The backlog of unemployed which has been estimated at 14.5 lakh persons by end of Sixth Plan alongwith additional hands joining labour force during Seventh Plan (estimated at 10 lakhs) are expected to be fully employed by the end of Seventh Plan.

## CHAPTER 6

### MINIMUM NEEDS PROGRAMME

6.1. The national programme for minimum needs is being implemented from the Fifth Plan under which certain basic social consumption facilities and investment are provided to the rural poor and the weaker sections in the urban areas. The programme is essentially an investment in human resource development. The provision of free or subsidised services through public agency is expected to improve the consumption levels of those living below the poverty line and thereby improve the productive efficiency of both rural and urban workers. This integration of social consumption programmes with the economic development programmes is necessary to accelerate the growth and to ensure achievement of plan objectives. The programmes included are elementary education, adult education, rural health, rural water supply, rural roads, rural electrification, housing assistance to rural landless labourers, environmental improvement of slums and nutrition. The allocation of resources for the minimum needs programme are ear-marked and thereby it seeks to ensure the necessary provision of resources for the developmental efforts through specific sectoral programmes. Some of the norms under this programme have been suitably modified to improve the coverage of the target groups by integrating essential infrastructure and social service which the public sector alone can ensure. This programme is proposed to be continued with special emphasis on integrating beneficiary oriented and infrastructure programmes with human resource development programmes.

#### Elementary Education

6.2. This programme aims at spread for Universal Elementary Education for the age-group of 6-14 years with special emphasis on girls.

6.3. The target of enrolment for the age-group 6-11 was fixed at 31.58 lakhs for Sixth Plan period and target for the year 1982-83 was fixed at 28.69 lakhs against which 30.06 lakhs (Boys 18.24 lakhs and girls 11.82 lakhs) were enrolled (89.9 per cent of the total child population of 33.41 lakhs (Boys 17.24 lakhs and Girls 16.17 lakhs). During 1983-84, the target for the age-group 6-11 was fixed at 30.41 lakhs (Boys 18.46 lakhs and Girls 11.95 lakhs) which was subsequently revised to 31.06 lakhs (Boys 18.88 lakhs and Girls 12.18 lakhs) against which 30.41 lakhs (Boys 18.43 lakhs and Girls 11.98 lakhs) have been enrolled which is 90 per cent of the total child population of 33.76 lakhs (Boys 17.46 lakhs and Girls 16.30 lakhs). During 1984-85, the target for the age-group 6-11 is fixed at 32.06 (Boys 19.38 and Girls 12.68 lakhs). The total child population of the age-group in 1984-85 is 33.93 lakhs (Boys 17.56 and Girls 16.37 lakhs). The above targets have been fixed with a view to achieving cent per cent enrolment of all the children in the school-going age-group of 6-11 by the end of 1990.

6.4. The enrolment target for the age-group 11-14 was fixed at 6.77 lakhs (subsequently revised to 6.92 lakhs) during 1982-83 against which 6.79 lakhs was achieved which is 35.8 per cent of the total child population of 18.94 lakhs (Boys 9.70 lakhs and Girls 9.24 lakhs). During 1983-84 the target for the age-group 11-14 was fixed at 7.17 lakhs (Boys 4.67 and Girls 2.50 lakhs) against which 7.05 lakhs (Boys 4.62 and Girls 2.43 lakhs) has been achieved which is 36.87 per cent of the total child population of 19.12 lakhs (Boys 9.81 and Girls 9.31 lakhs).

6.5 The target for the age-group 11-14 during 1984-85 is fixed at 7.78 lakhs (Boys 5.07 and Girls 2.71 lakhs). The total child population in this age group is 19.44 (Boys 10.02 and Girls 9.42 lakhs). To achieve the goal, the field officers and all primary school teachers have been instructed to motivate the guardians of the non-attending children to send their children to the school. Enrolment drive during the period from the teachers' day (5th September) to Children's Day (14 November) is being implemented in the State since 1982-83.

6.6 The following table would show the Sixth Plan target, target and achievement for 1982-83 and 1983-84 and the programme for 1984-85.

Item	Sixth Plan target	Target for 1982-83	Achievement in 1982-83	Target for 1983-84	Achievement in 1983-84	Programme 1984-85
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. Enrolment in age-group 6-11 (No. in lakhs)	31.58	28.69	30.066	30.41	30.41	32.06
2. Enrolment in age-group 11-14 (No. in lakhs)	7.78	6.77	6.759	7.17	7.05	7.78
3. Enrolment of girls in age-group 6-11.	12.53	11.24	11.822	11.95	11.98	12.68
4. Enrolment of girls of age-group 11-14.	2.71	2.31	2.322	2.46	2.43	2.71

6.7 Now 34,465 primary schools are functioning in the State out of which 4,704 schools are without buildings. During 1982-83, 1,677 schools have been allotted building grant out of NREP at the rate of Rs. 2,500 to L. P. Schools and Rs. 3,500 to U. P. Schools; which had received Government Grant earlier at the rate of Rs. 3,000 and Rs. 4,000 respectively. To provide buildings to 4,704 buildingless schools Central assistance to the tune of Rs. 38,92,500 has been made available out of RLEGP for 519 schools at the rate of Rs. 7,500 per building. Proposal for providing funds under the said programme to 4,185 buildings at the rate of Rs. 25,000 each has been submitted. There are 16589 Single-teacher Schools in the State. It is decided by Government to provide additional teachers to the Single-teacher schools in a phased manner. During 1983-84, 500 additional lady teachers have been appointed in the State.

6.8. A table showing the upgradation and opening of the schools during the Sixth Five Year Plan is given below —

#### Upgradation and Opening of Schools during the Sixth Five Year Plan

Year	Opening of new L. P. Schools	Upgradation of L.P. Schools to U. P. Schools	Upgradation of U.P. Schools to M. E. Schools	Appointment of additional teachers in the existing Primary Schools
(1)	(2)	(3)	(4)	(5)
1980-81	800	900	306	900
1981-82	300	150	115	—
1982-83	..	..	..	..
1983-84	..	1 (Newly opened)	..	500
<b>Total</b>	<b>1,100</b>	<b>1,051</b>	<b>421</b>	<b>1,400</b>



6.9. The Sixth Plan in Orissa envisages opening of 8,000 primary stage and 5,600 middle stage non-formal education centres in order to achieve the goal of universalisation of Elementary Education. The cost in this connection (except Girls' Centres) is to be shared by the Government of India and the State Government on 50:50 basis as per revised norm of Government of India.

6.10. Prior to 1983-84, 2,400 Primary level N. F. Centres and 1,600 Middle level Centres were functioning. During 1983-84, 3,560 Primary level N. F. Centres have been opened. Out of these, 560 centres are exclusively for Girls. In addition to the above new 560 Girls Centres, Government have also decided to open 1,000 general centres and 2,000 Girls Centres during current financial year 1984-85.

6.11. The Middle level centres are not functioning properly because of inability of U. P. School teachers to handle these centres, non-availability of qualified teachers on monthly remuneration of Rs. 1.25 (Generally meant for two teachers) and unwillingness of parents to send their children to these centres after day's labour. In view of the above difficulties 579 Middle level centres have been converted to Primary level centres functioning is 6,5539 (2,400+579+3,560). The number of middle level centres has been reduced to 1,021 (1,600+579).

6.12. These non-formal part time Education Centres are opened in order to provide educational facilities to the children of age-group 6-114 of scheduled caste, scheduled tribe and children of small habitations specially in tribal, urban and hilly areas (where no formal schooling facilities exist adequately) and the poorer sections of the society including labour class people even in coastal areas, unreserved habitation and other habitations having population below 200.

6.13. The sub-scheme of giving financial assistance to voluntary organisations for running non-formal education centres in the State has not yet been implemented.

6.14. Adequate Swedish cash assistance of gift papers have been received. The job of getting the guide books and instructional and teaching-learning materials printed for non-formal education centres has been entrusted to the SCERT. The SCERT has made some progress in this respect. So in the absence of such publications, text-books prescribed for formal schools are being used in the N. F. Education Centres.

6.15. As regards introduction of craft activities in N. F. Education Centres, it is not possible on the part of one teacher to impart teaching in a centre in addition to the normal courses. Further, financial stringency is the second obstacle for the purpose.

6.16. For effective supervision of the centres, 100 posts of supervisors have been created during 1983-84 and persons have been appointed against these posts. Besides the Deputy Inspectors, Sub-Inspector and District Inspectors of Schools, are visiting and supervising the N. F. Education Centres at present even though they are over burdened with their formal education programmes. Creation of 75 more posts of Supervisors have been sanctioned during the current financial year 1984-85.

6.17. Towards end of the last financial year 1983-84 a total number of 560 girls Primary Stage N. F. Education Centres were opened in this State as per the decision of Government of India on 90:10 sharing pattern (i. e. 90 per cent central share + 10 per cent State share) with a view to increasing the enrolment and to educate the non-enrolled girls students in age-group 6-11.

6.18. Apart from the above, there is a proposal for opening of 2,000 more such girls centres in the State during the current financial year 1984-85.

6.19. It has been decided by the Government to give preference to lady candidates for appointment as Primary School Teachers. During 1983-84, 500 lady teachers have been appointed in the Primary Schools in the State. Government of India sanctioned an amount of Rs. 1,07,200 for appointment of

200 Women teachers in Primary Schools during 1983-84. Due to late sanction of funds by Government of India the funds could not be utilised during 1983-84. Revised proposal for appointment of 1,200 lady teachers has been sent to Government of India with a request to sanction Rs. 56,60,160 during 1984-85.

6.20. During the Seventh Plan Period, it has been proposed to enroll of the children in the age-group 6-11 by 1990. While 97.3 per cent of the child population would be covered through formal schools, the balance will be covered through non-formal schools. It has been proposed to enroll a total of 43.40 lakhs children in the age-group of 6-11 including over aged children i.e. 37.62 lakhs under formal schools and 5.75 lakhs under non formal schools.

6.21. In the age-group of 11-14 years, it is expected that 7.78 lakhs children would have been enrolled by the end of Sixth Plan covering 32.7 per cent in the formal schools. If the students in the non-formal schools are added, the percentage achieved by the end of Sixth Plan is 39.45 per cent. During the Seventh Plan Period, it has been proposed to cover 65 per cent of the children in the age-group of 11-14, which includes the non-formal centres also.

#### Adult Education

6.22. Due emphasis has also been laid on eradication of illiteracy among the adult in the age-group 15-35. It is estimated that there are about 55 lakhs illiterate persons in the State in the age-group of 15-35 who can be made literate. The adult education programme is under operation purely on functional basis. 3,900 centres were operating in 1982-83 enrolling 1.17 lakhs adults. The number of centres was increased to 4,500 during the year 1982-83. The following table presents the Sixth Plan target and achievement so far made in this field.

Item	Sixth Plan target	Target for 1982-83	Achievement in 1982-83	Target for 1983-84	Achievement in 1983-84	Programme for 1984-85
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Enrolment in the age-group 15-35 in adult education centres (Nos. in lakhs).	5.85	1.17	1.35	1.59	1.59	2.00

6.23. During the year 1984-85, the number of centres are proposed to be raised to 68.50 in the following sectors:-

(i) Central Sector	3,900 Centres
(ii) State Plan	1,000 Centres
(iii) NYK	200 Centres
(iv) NSS	1,000 Centres
(v) Voluntary Agencies	750 Centres
<b>Total</b>	<b>6,850 Centres</b>

6.24. Out of the total illiterate adults of 55.35 lakhs in the State in the age group of 15-35 years by the end of 1984-85, 2.15 lakhs learners would have been covered. Therefore the balance 51.58 lakhs illiterate persons are proposed to be covered by the end of the Seventh Plan period. The target for the year 1985-86 has been proposed to cover 3.33 lakh illiterates in the State. This is proposed to be achieved through adult education centres under Central sector, State sector, Voluntary agencies, Nehru Yuva Kendra, NSS and others.

### Rural Health

6.25. According to the present norm, one Primary Health Centre (P. H. C.) will serve a population of 50,000. Accordingly, it was proposed to increase the number of Primary Health Centres during the Sixth Plan period. Prior to the Sixth Plan there were 314 P. H. Cs in the State. During the Sixth Plan, it was proposed to open 20 more P. H. Cs in the State i. e. 10 in tribal and 10 in non-tribal areas. The programme was implemented from 1981-82 onwards. Six Primary Health Centres were opened by 1982-83 and five Primary Health Centres were added in 1983-84. The likely achievement for the current year is to open nine more primary health centres. With this, the target for the Sixth Plan is proposed to be achieved. Construction of P. H. C. buildings and staff quarters is in progress in respect of five additional P. H. Cs located in tribal areas.

6.26. Out of 314 P. H. Cs already existing before the Sixth Plan, 12 P. H. Cs from health side were upgraded after providing 24 additional beds (total 30 beds) to each P. H. C. along with necessary instruments, equipment, etc. During the Sixth Plan period, the target of upgradation of five additional P. H. Cs has been achieved by the end of 1982-83. Services of specialists in Paediatrics and Gynaecology have been provided to all these 17 upgraded P. H. Cs. Necessary instruments, equipments, ambulance vehicles have also been provided in this 17 upgraded P. H. Cs. Construction of staff quarters and wards for additional beds have been completed in respect of all these 17 upgraded P. H. Cs during the Sixth Plan period.

6.27. Prior to the Sixth Plan period, 50 Subsidiary Health Centres (S. H. Cs) including 24 mini health centres located in tribal areas existed in the State. During the Sixth Plan period against the target of opening 100 additional S. H. Cs in the State by way of conversion of dispensaries, 87 S. H. Cs have been set up by the end of 1983-84.

6.28. According to the norms prescribed by Government of India, one Sub-Centre is required to be established for 5,000 population in rural areas and one for 3,000 population in hilly and tribal areas and as such 5,540 Sub-centres are required to be established in the State which is to be achieved by 1987-88.

6.29. There were 2,038 sub-centres in the State as on the 1st April 1980 and there was a proposal to establish 2,300 sub-centres during the Sixth Plan period so as to establish 4,338 sub-centres by end of the plan. The following numbers of sub-centres have so far been opened :—

No. of sub-centres as on 1-4-1980	2,038
Opened during 1980-81	Nil
During 1981-82	749
During 1982-83	700
During 1983-84	300
	( Location approved )
During 1984-85 ( Proposal )	340

6.30. In this connection, it may be stated that out of 2,300 sub-centres proposed for the Sixth Plan period 1,464 sub-centres are meant for the project districts out of which 1,389 sub-centres are now opened under the Area Development Programme with U. K. assistance.

6.31. The multipurpose workers programme scheme is in operation in all the districts of the State from 1981-82 and all medical and para-medical personnel have been provided with training under the scheme. The scheme also aims at providing one health worker ( male ) and one health worker ( female ) at each sub-centre in order to provide package of health care facilities to the rural people.

6.32. The health guides scheme has started functioning from the 2nd October 1977. All the 314 P.H.Cs have been covered under the scheme. Out of the total number of 24,441 health guides in the State, 19,160 have been trained by the end of 1982-83. During 1983-84, 3,000 health guides have been trained. The remaining health guides will be trained during 1984-85.

6.33. By the end of 1982-83, 14,542 Health Guides were provided with medicine kits to serve in the P. H. C. areas. During the year 1983-84, 2,457 Health Guides were provided with medicine kits against the target of 2,643 Health Guides to be provided with medicine kits.

6.34. The Seventh Plan proposals have been formulated keeping in view the national health policy of 'Health for all by 2000 A. D.'. According to the existing norm, an additional primary health centre is required to be provided for more than one lakh population in the non-tribal area and one for 50,000 population in the tribal areas. Accordingly, it has been proposed to establish 100 additional P. H. C's. during the Seventh Plan. The target for the year 1985-86 is to cover additional P. H. C's.

6.35. As per the norm of opening one sub-centre for a population of 5,000 the State requires 5,540 sub-centres. In the beginning of the Sixth Plan there were 2,038 sub-centres in the State. During the Sixth Plan period 2,089 sub-centres were added, bringing the total number of sub-centres to 4,127 by the end of the Sixth Plan. A programme of establishing 1,277 more sub-centres during the Seventh Plan period has been envisaged. The target for 1985-86 is proposed to be 402 sub-centres. It is also proposed to construct buildings for 300 sub-centres during the Seventh Plan period.

6.36. Two Ayurvedic Dispensaries and two Homoeopathic Dispensaries are proposed to be upgraded to that of subsidiary health centres during the current year. It is also proposed to establish 15 subsidiary health centres in Ayurvedic and 15 subsidiary health centres under Homoeopathic during the Seventh Plan period. In addition to the above 25 Homoeopathic Community Health Centres are proposed to be done during the year 1985-86.

#### Rural Water-supply :—

6.37. According to 1971 census the total number of inhabited villages in the State is 46,992 out of which 27,077 villages have been identified as problem villages covering a population of 143.04 lakhs. It was programmed to cover 10,783 villages by providing sanitary wells and 16,294 villages by providing tube-wells.

6.38. Till 1979-80, 3,461 villages have been fully covered under drinking water-supply programme. During the first four years of the Sixth Plan period from 1980-81 to 1983-84 the total coverage of completed villages ('C' category) was 10,818 villages under drinking water supply programme bringing the cumulative figures of completed villages to 14,279. The number of well-less villages under 'N' category which was 15,228 at the beginning of the Sixth Plan was brought down to 6,759 by the end of 1983-84. 40,420 tube-wells have been installed and 9,508 sanitary wells have been completed. Out of the villages which were fully covered by 1983-84, 2,400 villages were provided with sanitary wells and 11,879 villages were covered by tube-wells. Out of the partially covered 6,039 villages, tube-wells have been provided in 3,539 villages and sanitary wells have been provided in 2,500 villages.

6.39. The total number of tube-wells under all programmes which includes tube-wells sunk with funds under natural calamities like cyclone, flood and drought are as follows :—

Year	No. of the tube-wells under plan programme	No. of tube-wells under all programmes including plan programmes
By 3/80	11,846	11,846
1980-81	4,734	9,345
1981-82	7,993	8,650
1982-83	7,110	11,910
1983-84	8,737	12,704
	Total	54,355

Tabewells under natural calamities programme were installed in unidentified villages.

6.40. The target for total number of tube wells and sanitary wells was as follows totalling to 70,349.

Tube-wells	...	42,235
Sanitary wells	..	28,114
		-----
Total	..	70,349
		-----
Coverage so far :—		
tube wells	..	40,420
Sanitary wells	..	9,508
		-----
Total	..	49,928
		-----

6.41. The Government of India in consideration of the satisfactory achievement in the State in the field of drinking water-supply have given Rs. 4.50 crores as grant under the award scheme. The total funds so far invested during the Sixth Plan yearwise under MNP and ARP are as follows t—

Year	Expenditure in lakhs of rupees		
	MNP	ARP	Total
1980-81	407.11(TW) 150.00(SW) ----- 557.11	306.00	863.41
1981-82	492.77(TW) 99.36(SW) ----- 592.13	593.22	11,85.35
1982-83	618.44(TW) 25.00(SW) ----- 643.44	767.73	14,11.17
1983-84 (Provisional)	700.00(TW) 25.00(SW) ----- 725.00	882.82 450.00 (Award)	20,57.82

6.42. It has been decided that henceforth no sanitary wells would be dug and problem villages would be covered by tube-wells. Thus, additionally 20,421 tube-wells are to be installed which would cover all problem villages according to the norm of one sanitary well or tube-well for 250 population. The programme would spill over to the Seventh Plan for bringing all problem villages to 'C' category. By the end of the Sixth Plan i.e., 1984-85 all villages would be covered by at least one spot source of drinking water.

6.43. With the assistance of the Danish International Development Agency (DANIDA) the State has worked out a programme for water supply in the coastal districts of Balasore, Cuttack and Puri. According to the present indication 20 blocks of these three districts will be covered under the

programme which envisages provision of piped water supply to 26 villages, tube-well provision in 2,010 villages, and some small drinking water sources like rain water tanks, etc. in a few villages. The scheme was expected to be taken up with effect from the current year (1984-85). However, detailed agreement with DANIDA has not so far been reached. Since 1983-84, under the preparatory phase, Pilot scheme has been taken up in respect of two piped water supply programmes and provision of 50 tube-wells. This Pilot work is continuing during the current year.

6.44. The number of defunct tube-wells is gradually increasing. The present estimate is that there are 8,710 defunct tube-wells in different districts of the State. A decision was taken earlier to take up, on experimental basis, recovery of the materials of a few defunct tube-wells and to estimate the cost involved for their rejuvenation/recovery. This involves writing of the defunct tube-wells which has been undertaken. The process is time consuming in view of the fact that Survey report giving various details in respect of defunct tube-wells is to be prepared first. However, pending writing off the defunct tube-wells it has been proposed to provide new tube wells in place of the defunct tube-wells during the Seventh Five-Year Plan through a State Plan Scheme.

6.45. It may be mentioned in this connection that many villages in the interior areas were inadvertently omitted from the list of identified problem villages prepared earlier. Government have undertaken re-survey of all the areas to identify such problem villages which were earlier omitted from the list, and also other villages where scarcity problem has developed in the meantime because of exploitation of ground water and consequent going down of the water table. It is expected that the final list of such villages would be available by December, 1984 so that suitable programme for supply of drinking water in such villages could be taken up during the Seventh Plan.

#### **Rural Water Supply**

6.46. According to the programme drawn up for the International Water Supply and Sanitation Decade (1981—91), all the villages are required to be covered with adequate drinking water facilities by 1991. During the Seventh Plan period, out of the total of 283.40 lakhs Rural Population projected for the year 1991, about 169.12 lakh population are likely to be covered by the end of the Sixth Plan leaving a balance of 114.28 lakhs to be covered by the end of the decade. It has been proposed to cover 90 per cent of remaining population i. e., 102.85 lakhs during the Seventh Plan period and the balance 11.43 lakh is proposed to be covered during the last year of the decade in 1990-91.

6.47. First priority will be given to cover fully all the identified problem villages of the Sixth Plan period (27,007 villages). As mentioned earlier a survey is being undertaken to include the left out villages in the list of identified problem villages. Those villages which will be identified as problem villages afresh would also required to be covered on priority basis. Subject to availability of funds, the remaining villages will be covered to achieve the 90 per cent population coverage by the end of the Seventh Plan period.

6.48. As per Decade Plan, 70 per cent of the population is proposed to be covered by hand pump tube-wells and 30 per cent of the population is proposed to be covered with piped water supply scheme. Thus, the programme would ensure fully coverage of all the problem villages hitherto identified and also proposed to be identified as problem villages by the end of the Seventh Plan period.

#### **Rural Roads**

6.49. Improvement of rural roads under the Minimum Needs Programme with a view to providing all-weather road communication to the villages having population of 1,500 in the plain areas and cluster of villages in the tribal areas. For this purpose, the State Government had identified 475 roads with a total length of 4,601 Kms. for construction of road improvement. By the end of 1979-80, it has been possible to complete 256 roads with a total expenditure of Rs. 16.49 crores against the approved outlay of Rs. 26.00 crores. With the completion of these projects, it has been possible to cover 512 village having population of 1,500 and more with all-weather roads with road length of 3,492 Kms.

6.50. During the Sixth Five-Year Plan there was a back log of 219 roads spilled over from the previous plan. In addition 96 rural roads which were taken up by the then Rural Engineering Organisation were also included for improvement. By 1982-83, all the 219 spill over roads have been completed along with 19 rural roads taken up during Sixth Plan period. During 1983-84, 53 Nos. of rural roads and 59 arterial roads have been taken up for improvement. During the Sixth Plan period, a total length of 2,612 Kms. of M.N.P. roads have been completed. It has been possible to provide road communication to 950 villages having population of 1,500 and above and 60 villages having population of more than 1,000 according to M.N.P. standards. In some cases, cross drainage works of more than 20 metre length works are still necessary to make them all-weather. This programme has been included by improvement of rural roads and arterial roads as may be necessary to provide all-weather road links to the villages. In this process, out of about 1,700 villages having a population of 1,500 and more, 1,462 villages have been connected all-weather road communication. The stress during the Seventh Plan is to complete all the incomplete works on priority basis and also to provide all-weather communication in a phased manner to the Grama Panchayat headquarters from blocks/subdivisional headquarters.

#### Rural Electrification

6.51. The rural electrification programme are financed through loan assistance from Rural Electrification Corporation earmarked funds under Minimum Needs Programme and out of the Electricity Board's own resources under rural electrification and energisation of lift irrigation points. Besides, under the Special Programme in Agriculture (S.P.A.) funds are provided through loan assistance from Commercial Banks with refinancing arrangement with NABARD. By the end of 1979-80 17,231 villages out of the total number of 46,992 inhabited villages in the State have been electrified. This comes to 37 per cent of the total number of villages. During the Sixth Plan Period it was programmed to electrify 6,400 villages and to extend power supply to 25,842 pumps in the State. The number of villages electrified during the Sixth Plan Period yearwise is given below:—

	Targets	Achievement	Cumulative total
Up to 1979-80		..	17,231 (37%)
During 1980-81	1,200	1573	18,804 (40%)
1981-82	1,200	1226	20,030 (46%)
1982-83	1,200	1250	21,280 (45%)
1983-84	1,210	1240	22,520 (48%)
1984-85	1,225	..	..

6.52. From above it may be seen that during the Sixth Plan 6,494 villages would be electrified against a target of 6,400. It has been proposed to achieve cent-percent village electrification in the Seventh Plan provided adequate resources are available. As on 31st March, 1984 70 per cent State population have got access to electricity.

6.53. In this connection it may be pointed out that the target of village electrification for 1984-85 depends on availability of additional resources to the extent of Rs. 1.25 lakhs under R. E. C. (Normal) schemes.

6.54. The progress of L. I. Point energisation during the Sixth Plan is as below:—

Year	Target	(No. of pump sets energised)	
		Achievement	Cumulative total
Pump energisation up to 1979-80	-	12,958	12,958
1980-81	5310	3236	16,194
1981-82	5300	2929	19,123
1982-83	9000	3777	22,900
1983-84	7900	3491	26,391

6.55. The achievement with regard to energisation of pumps has not been satisfactory during the Sixth Plan Period. All out efforts are being made to improve the energisation programme by having more Co-ordination with the District Rural Development Agency and the field level functionary of the State Electricity Board. The State Electricity Board are also taking steps to procure all the materials required for giving service connections so that power supply to pump sets can be given as soon as they are ready to take power.

6.56. By the end of the Sixth Plan Period, 23,749 villages, out of the total number of 46,992 inhabited villages would have been electrified in the State. This brings the level of village electrification to 50.28 per cent to the State as against 60.6 per cent already achieved at the national level by May, 1984.

6.57. In respect of pump sets energisation against the target of 34,150 pump sets to be energised during the Sixth Plan Period, the achievement by the end of the Sixth Plan Period would be of the order of the 20,073 pump sets. This will increase the total number of pump sets energised in the State to 33,031 by the end of the Sixth Plan.

6.58. During the Seventh Plan period, it is proposed to cover all the remaining 23,247 villages to achieve cent per cent electrification of villages in the State. Further, it has been programmed to energise 40,000 pump set during the Seventh Plan period, which includes 26,500 pump sets to be energised through SPA programme.

#### House sites and housing assistance to rural landless labourers

6.59. The State Government are implementing the scheme of distribution of house site to homesteadless families from the year 1974-75. This scheme was modified in 1975-76 in order to provide assistance to the families for construction of their houses under the comprehensive scheme for integrated housing scheme.

6.60. Under the original scheme four decimals of house-sites is given to single homesteadless families free of premium both in semi-urban and rapidly developing areas as well as in rural areas. Any excess area beyond four decimals which is to be justified by needs is settled on payment of 50 per cent of the prevailing marked value.

6.61. Progressively, from the year 1974-75 till March, 1984 house-sites have been distributed to 2,74,535 families as given in following table--

Category	No. of families	Extent of land (in acres)
Scheduled Tribe ..	93,216	5,565
Scheduled Caste ..	75,886	4,773
Others ..	105,433	6,895
Total ..	274,535	17,233

6.62. Construction assistance is provided to a part of the beneficiaries under the house-site allotment programme. According to the scheme approved by the State Government, the total cost of the house to be constructed is Rs. 2,000 out of which Rs. 1,500 is given as grant by the State Government and the balance Rs. 500 is contributed by the beneficiaries by way of labour. Previously with this Rs. 2,000 tiled houses were constructed but recently the cost of tile and timber has gone up and the specification has been revised to that of a thatched house. The yearwise allotment of funds and the number of houses constructed for homesteadless workers are as follows --

Year	Amount spent (Rs. in lakhs)	No. of houses constructed
1980-81	15.00	1,239
1981-82	50.00	1,557
1982-83	57.01	3,800
1983-84	60.00	4,000



6.63. The target for the current year (1984-85) is to complete 6,667 houses for which a provision of Rupees one crore has been made. Three hundred sixty two houses have been completed by July, 1984.

6.64. During the Seventh Plan period, it is proposed to provide an outlay of Rs. 10,25.00 lakhs towards construction assistance for building houses to the rural landless labourers. The target is to cover 68,333 beneficiaries. For the year 1985-86 an outlay of Rs. 125 lakhs has been suggested with a target of constructing 8,333 houses.

#### Environmental improvement of Urban slums

6.65. Environmental improvement in slum areas was taken up during the Fifth Plan period in the City of Cuttack. Only 13 out of 30 identified slum pockets were covered by improvement of link roads, drinking water supply, public sanitary facilities, community bath lighting and other community facilities.

6.66. The Sixth Plan target for coverage under environmental improvement of slums had been fixed at 37,000 slum population. In the first three years of the Sixth Plan i. e. 1980-81, 1981-82 and 1982-83 the programme was confined to Cuttack City only. The yearwise coverage of slum population is as follows:-

1980-81	..	5,000
1981-82	..	7,000
1983-84	..	16,350

For each of these years the State Plan allocation was only Rs. 15 lakhs.

6.67. During the year 1983-84 the original target of coverage under this programme was 20,000 slum population i. e. Cuttack City (10,000), Bhubaneswar (2,000), Sambalpur (2,000), Burla (2,000), Hirakud (2,000) and Rourkela Civil Township N. A. C. (2,000). The budgetary provision was Rs. 15 lakhs for this purpose and the urban local bodies had programmed to spend Rs. 20 lakhs. However, Government of India under the incentive scheme, prescribed an additional target of 30,000 slum population at an estimated cost of Rs. 45 lakhs. The additional coverage of slum population totalling to 30,000 was extended to the towns of Bhubaneswar, Sambalpur, Rourkela C. T. N. A. C., Rourkela S. T. N. A. C., Berhampur, Puri, Jagatsinghpur, Jharsuguda, Bargarh, Kendrapada and Jajpur Road. In all the programme was taken up in 14 towns.

6.68. Against the target of 50,000 the physical achievement has been 45,000 slum population. The shortfall of 5,000 was to be made good in April, and May, 1984. This was because of late receipt of funds from Government of India.

6.69. During 1984-85 the target was to cover slum population of 12,600 under MNP with a provision of Rs. 20 lakhs in the State Plan. However, the target is anticipated to be exceeded by covering the slum population of 14,600.

6.70. During the Seventh Plan period an outlay of Rs. 3.00 crores has been proposed for this programme with a target of covering 1.20 lakhs slum population. For the year 1985-86 the target is to cover 23,600 slum population with an outlay of Rs. 60 lakhs.

#### Nutrition

6.71. The nutrition scheme consists of supplementing the feeding programme for children and expectant and nursing mothers. Mid-day meal centres have been opened in identified schools to benefit children in the age-group of 6-11 years and for supplementing the feeding programme for poor undernourished children in the age-group of 0-6 especially in blocks with highly concentrated Scheduled Caste and Scheduled Tribe population. Existence of nutritional deficiency among the women and

children affects neuropsychological development of the child. In the beginning of the Sixth Plan period the coverage under an strike of feeding programme in the State was 13.16 lakh persons. The coverage has gone up to 20.30 lakh persons. The number of beneficiaries covered during 1984-85 are as follows:—

Source	No. of beneficiaries covered during 1984-85
(1)	(2)
1. School (CARE)	5,53,000
2. CARE urban	..
3. Pre-School (CARE)	} 7,08,000
4. Pre-School (S. N. P.)	
5. W. F. P.	3,03,000
6. State Government	
(a) Pre-School	3,69,000
(b) School	97,000
<b>Total</b>	<b>20,30,000</b>

The food stocks are received mainly from the International agencies like CARE and World Food Programme. However, the administrative cost and transportation charges are borne by the State Government out of their own resources. It is proposed to cover 3.50 lakh beneficiaries by the end of Seventh Plan period.

6.72. The achievements under the immunisation programme during the year 1982-83 and 1983-84 and the programme for the year 1984-85 are indicated below:—

Item	Achievement in 1982-83	Achievement in 1983-84	Target for (000 Nos.) 1984-85
(1)	(2)	(3)	(4)
D. P. T.	330.6	305.14	500
D. T.	344.8	333.57	500
Polio	95.0	167.94	400
B. C. G.	499.6	603.44	500

6.73. During the Seventh Plan period, it is proposed to cover 6 lakh additional beneficiaries under Special Nutrition Programme with local food, Out of which 1.52,600 beneficiaries are proposed to be covered in 1985-86.

6.74. As the CARE Feeding Programme will be withdrawn gradually, it is proposed to provide mid-day meal programme under State Plan. Accordingly 3.50 lakh beneficiaries are proposed to be covered during the Seventh Plan period in a phased manner. In the year 1985-86, it is proposed to cover about 1.80 lakh beneficiaries under the upgradation programme. It is proposed to cover 6 lakh more beneficiaries during the Seventh Plan period.

## CHAPTER 7 TRIBAL SUB-PLAN

7.1. A new strategy for development of tribal areas was given a clear focus through the concept of Tribal Sub-Plan during the 5th Five-Year Plan period. In order to implement the Sub-Plan Programmes' 21, I. T. D.As. were constituted covering 118 out of 314 blocks in the state. Alongwith promotion of the economic well-being of individual tribal Families, due emphasis was put on development of basic infrastructure which paved the way for meaningful implementation of family oriented Programmes. The Sub-Plan approach during the Sixth Five-Year Plan was to strike a balance between area development approach and coverage of individual beneficiaries through Income Generating Schemes. The objective was to ensure that atleast 50% of the tribal families are given adequate financial and technical assistance under different Income Generating Schemes to enable them to earn substantial additional income. Accordingly, 5.50 lakhs tribal Families were targetted to be covered under various anti-poverty programmes of ERRP, IRDP and these funded out of Special Central Assistance and State Plan resources.

7.2 The total estimated flow of resources during the Sixth Plan period to the Tribal Sub-Plan area was of the order of Rs. 70,058.53 lakhs. The break-up is as follow :—

	(Rs. in lakhs)
(i) From the State Plan Funds	.. 53,632.53
(ii) Special Central Assistance	5,659.00
(iii) Central and Centrally Sponsored Schemes	.. 10,767.00
<b>Total</b>	<b>.. 70,058.53</b>

7.3. 36% of the total outlay of the State during Sixth Plan period was earmarked for investment in the Tribal Sub-Plan area. This was a significant step-up over similar investment of about 23% in the Fifth Plan.

### (1) Financial Achievement

7.4. During 1980-1983, 1983-84 and 1984-85, the flow of resources was of the order of Rs. 37,407.22 lakhs, Rs. 12,667.94 lakhs and Rs. 16,440.44 lakhs respectively. The yearwise break-up and the sources of funding are indicated below:—

Sources	(Rs. in lakhs)		
	Flow of funds during		
	1980-83	1983-84	1984-85 (anticipated)
1. State Plan	.. 2,83,54.93	86,62.93	1,15,19.17
2. Special Central Assistance	.. 29,97.35	13,27.51	15,39.54
3. Central and Centrally Sponsored Scheme	.. 60,54.94	26,77.50	33,81.73
<b>Total</b>	<b>.. 3,74,07.22</b>	<b>1,26,67.94</b>	<b>1,64,40.44</b>

### (2) Physical Achievement:

7.5. As stated earlier, 5.50 lakhs tribal families were to be assisted under various anti-poverty programmes in the State during the Sixth Plan period as indicated below:

1. I. R. D. P.	.. 2,80,654
2. E. R. R. P.	.. 1,50,000
3. Scheme (Out of Special Central Assistance and other State & Central Plan)	.. 1,19,346
<b>Total</b>	<b>.. 5,50,000</b>

7.6. The Schedule Tribe families economically assisted under different anti-poverty programmes in the Sub-Plan areas are indicated below:

Schemes	1980-83	1983-84	1984-85 (Till October 1984)	Total
1. F. R. D. P.	1,03,431	59,394	12,001	1,74,829
2. L. R. R. P.	53,016	25,265	2,173	80,454
3. Special Central Assistance and other Plan Schemes.	82,211	33,407	22,447	1,38,065
<b>Total</b>	<b>2,38,658</b>	<b>1,18,066</b>	<b>36,624</b>	<b>3,93,348</b>

7.7. In order to achieve the objectives under Family Oriented Schemes, it is vitally important that there is requisite infrastructure support. Accordingly, additional Irrigation Potential by harnessing hill streames, providing lift irrigation facilities and execution of Minor irrigation project were taken up in Tribal Sub-plan Areas. Due emphasis was put on construction of rural roads with a view to linking the tribal villages with tribal markets, Growth Centres and Administrative Units. Soil Conservation measures for checking soil erosion, promotion of education including Non-formal, strengthening of credit and marketing structure, electrification of tribal villages, drinking water supply, prevention of podu cultivation by horticulture plantation and health facilities at the door steps of the tribals were provided. Achievement made during 1980-84 in respect of infrastructural development in the tribal sub-plan areas are shown in the Annexure I.

7.8. As per the approach to the Seventh Five Year Plan (1985-90) of the Planning Commission, the guiding principles of the Seventh Plan continue to be growth, equity and social justice, self-reliance, improved efficiency and productivity. To ensure fast movement towards social justice a sharper focus on employment and poverty alleviation has been visualised. The basic priority during the Seventh Plan has been kept as food, work and productivity.

7.9. The objectives for tribal development during the Seventh Five-Year Plan as recommended by the working group would be as follows.

7.10. In consonance with the objectives of National Planning, Programmes for alleviating poverty amongst the S. T. by raising productivity in the field of agriculture, horticulture, animal husbandry, forestry, cottage industries etc. would constitute the core schemes.

7.11. Supporting activities like provision of irrigation, co-operative, and institutional credit, infrastructure for small and village industries and arrangements for supply of raw-materials and inputs, besides, training and marketing arrangement should be commensurate with the physical programmes under this objective.

7.12. Education, both formal and non-formal, should be given high priority. Low literacy pockets and girl's education should receive special attention. The potentiality of education and vocational training programmes in promoting self-reliance and self-employment should be recognised in the tribal context.

7.13. Elimination of exploitation in the fields of land transfer, agricultural tenancy, money lending, bonded labour and debt bondage, forestry, liquor vending and trade will occupy a high priority.

7.14. Areas and groups facing special problems and which have not received benefits in the past plan programmes should receive special attention during the Seventh Plan period. Assuming an increase of 2½ times over the likely investment made in the tribal sub plan area in respect of Special Central Assistance during the Sixth Plan period, the investment during the Seventh Plan period would be as follows: —

	(Rs. in crores)
1. State Plan	1,788.88
2. Special Central Assistance	141.48
3. Central & Centrally Sponsored Schemes	308.20
4. Institutional Finance	74.00
<b>Total</b>	<b>2,312.56</b>

**Physical Programme—Coverage under Income Generating Schemes**

7.15. It was estimated that about 90 per cent of the total Scheduled Tribe families, i. e., 11 lakhs were below the poverty line at the beginning of the Sixth Five Year Plan. 4.50 families are expected to be economically assisted under different income generating schemes by the end of Sixth Plan. In absence of any detailed survey it is not possible to assess the actual number of families already crossed the poverty line. However, it is anticipated that 30 per cent of these families (1,35,000) would be able to cross the poverty line during the Sixth Plan period with the help of assistance received under different programmes. Thus, at the beginning of the Seventh Plan period 9.65 lakhs Scheduled Tribe families are expected to remain below the poverty line. Out of them 3.15 lakhs Scheduled Tribe families will need second and subsequent assistance for adequate income generation to cross the poverty line. Out of the remaining 6.50 lakh tribal families i. e., 3.25 lakhs are proposed to be newly covered during the Seventh Plan. Therefore altogether 6.40 lakhs Schedule Tribe families are proposed to be given assistance during the Seventh Plan period for their economic development with the objective of enabling 50 per cent of them, i. e., 3.20 lakhs to cross the poverty line. These families are proposed to be assisted under the following programmes including 3.20 lakhs new families;

I. R. D. P.	..	2,80,000
E. R. R. P.	..	1,80,000
Special Programmes with Special Central Assistance and other State Plan schemes.		1,80,000
	Total ..	6,40,000

*Programme for 1985-86*

I. R. D. P.	..	56,000
E. R. R. P.	..	36,000
Special Programme with Special Central Assistance and State Plan resources.		36,000
	Total ..	1,28,000

7.16. A tentative Sector-wise outlay under special central assistance proposed for the Seventh Plan is suggested below. —

		(Rs. in crores)
1. Income Generating Schemes	..	25.00
2. Critical Infrastructure	..	20.00
3. I. T. D. A. Establishment	..	5.00
4. Implementation of economically viable schemes for S. Ts. through S. C. & S. T. D. F. C. C.	..	3.00
5. Academy of Tribal Dialects	..	0.25
6. Bee-keeping	..	1.00
7. Education	..	25.25
8. Evaluation and Monitoring	..	0.75
9. E. R. R. P.	..	37.50
10. Soil Conservation	..	1.00

	(Rs. in crores)
11. Settlement ..	1.25
12. Development of alternative and renewable energy programme ..	0.60
13. Setting of Pallibastra Unit ..	1.00
14. Sericulture ..	2.60
15. Drinking Water Supply ..	2.05
16. Communications ..	4.11
17. Co-operation (T. D. C. C. share capital & enrolment of members in LAMPS). ..	6.05
18. Health ..	1.00
19. International Trade Fair ..	0.15
20. Publicity and State Level Exhibition ..	0.15
21. Schemes for Special Groups (Tribal Women, dispersed tribals, migrant tribals, etc.). ..	3.77
<b>Total</b> ..	<b>141.48</b>

#### Programme for 1985-86

7.17 During 1985-86, the sub-plan outlay from different sources has been estimated at Rs. 318.19 crores as detailed below: —

	(Rs. in crores)
1. State Plan ..	208.86
2. Special Central Assistance ..	28.30
3. Central & Centrally Sponsored Schemes ..	66.03
4. Institutional Finance ..	15.00
<b>Total</b> ..	<b>318.19</b>

7.18. The Sectoral break-up in respect of funds quantified for the Sub-Plan area for the year 1985-86 under Central and Centrally Sponsored Schemes has been shown under column 6 of the Annexure II.

7.19. In respect of the Special Central Assistance projected for the year 1985-86, the Sectoral break-up is indicated below: —

	(Rs. in crores)
1. Income Generating Schemes ..	5.00
2. Critical Infrastructure ..	4.00
3. I. T. D. A. Establishment ..	1.00
4. Implementation of economically viable Schemes for S. T. through S. C. & S.T.D.F.C.C. ..	0.75
5. Academy of Tribal Dialects & Culture ..	0.05
6. Bee-Keeping ..	0.20
7. Education ..	5.05
8. Evaluation and Monitoring ..	0.15
9. E.R.R.P. ..	7.50

	(Rs. in crores)
10. Soil Conservation	.. 0.20
11. Settlement	.. 0.25
12. Development of alternative and renewable energy programme	.. 0.12
13. Setting up Poly Bastra Units	.. 0.20
14. Sericulture	.. 0.52
15. Drinking Water Supply	.. 0.41
16. Communication	.. 0.80
17. Co-operation	.. 1.21
18. Health	.. 0.20
19. International Trade Fair	.. 0.03
20. Exhibition & Publicity	.. 0.03
21. Schemes for Special Group (Tribal women, migrant tribals and displaced tribals, etc.)	0.63
Total	.. 28.30

7.20. The physical targets proposed to be achieved with Special Central Assistance under different sectors during 1985-86 are indicated below :—

- |   |   |
|---|---|
| 1. Income generating schemes  | .. 30,000 families will be covered  |
| 2. Critical Infrastructure Development Schemes  | .. C.D. Works/Mini Irrigation Projects/ Rural Electrification/Development of Nursery/Anti-Exploitative measures, etc. are to be taken up.       |
| 3. I.T.D.A. Establishment   | .. 21 I.T.D. As and Headquarters staff will be maintained.  |
| 4. Implementation of economically viable schemes for Scheduled Tribes through S.C. & S.T.D.F.C.C. | for 7500 S.T. will be assisted<br>—   |
| 5. Academy of Tribal Dialect and Culture  | .. Maintenance of 19 Language Training Centres and development of tribal dialects, etc.   |
| 6. Bee-Keeping  | .. Maintenance of Bee-Keeping Centres and providing honey extracting units to the beneficiaries, etc.   |
| 7. Education  | .. Construction and completion of educational institution buildings, hostels, to meet boarding charges of Ashram Schools and High Schools, etc. |
| 8. Evaluation & Monitoring  | .. To evaluate sectoral programmes under I.T.D. As and strengthening of Evaluation Cell.  |

- |  |  |
|--|--|
| 9. F.R.R.P.  | .. To Cover 26,000 families under Anti-poverty programmes.   |
| 10. Soil Conservation  | .. Maintenance of Cashew Plantation, Coffee, Bamboo, Sisal and other economically viable commercial plantations, water harvesting structure, Land Development, Soil erosion measures.  |
| 11. Settlement   | .. To cover the unsurveyed villages of Sub-Plan area.  |
| 12. Development of alternative and renewable energy programme.                           | Implementation of various measures for conservation of energy.   |
| 13. Setting up Poly Vastra Units   | .. Establishment of 59 Units   |
| 14. Sericulture  | .. Subsidy to tribals for Mulberry plantations, construction of rearing sheds and supply of equipments, quality seed cocoons, raw materials to tassar spinners and reelers, organisation of new T.R.C.'S., price fluctuation grant to T.R.C.S. |
| 15. Drinking Water-Supply  | .. 205 Tube-wells will be installed in non-identified problem villages in Tribal Sub-Plan areas.   |
| 16. Communications   | .. To connect villages with growth centres, market places with all-weather roads.  |
| 17. Co-operation   | .. To provide share capital to T.D.C.C. and enrolment of Tribal members in LAMPS.  |
| 18. Health   | .. To provide health facilities at the tribal door steps.  |
| 19. International Trade Fair   | .. Participation of the State in the International Trade Fair.   |
| 20. Exhibition and Publicity   | .. To organise State Level Exhibition to create awareness among the Tribals.   |
| 21. Schemes for special groups (Tribal women, migrant tribal groups, displaced tribals). | Specific Schemes for healthy rehabilitation of tribal women, migrant tribal groups and displaced tribals will be taken up.   |

#### **Development of Primitive Tribes**

721. Micro level planning is essential for all-round development of most backward tribes. 10 Micro Projects have been started in tribal areas covering seven primitive tribes. These projects aim at developing the core economic sectors, like agriculture, horticulture, soil conservation, animal husbandry, etc. Besides facilities of drinking water, education and health are also being provided in these projects. The total amount allotted so far in favour of Micro Projects during Sixth Plan period is Rs. 206.07 lakhs. By the end of 1983-84, 5191 tribal families have been covered under Micro Projects.



7.22. Proposals are under way to start 6 more Micro projects during 7th Plan period. The requirement of funds for the said programmes during the seventh Plan period is estimated at Rs. 550 lakhs. The requirement for the year 1985-86 will be of the order of Rs. 100 lakhs.

**Modified Area Development Approach :**

7.23. So far 37 MADA pockets have been identified outside Tribal Sub-Plan area each having a total population of 10,000 or more of whom 50 per cent and above are tribals. In these pockets different schemes have been identified for implementation of individual benefit oriented schemes and community benefit oriented programmes for the welfare of dispersed tribals. These projects have been functioning since 1978-79. A sum of Rs. 511.53 lakhs has been allotted during Sixth Plan period for these MADA Pockets.

7.24. During 7th Plan period it is proposed to start 13 more new MADA pockets in the State. The total requirement for the ongoing and the new projects during the Seventh Plan period would be of the order of Rs. 1,375 lakhs. The annual provision for the year 1985-86 is estimated at Rs. 200 lakhs.

**ANNEXURE-I**

Physical achievements made in the Sub-Plan area during the period (1980-84)

Sl. No. (1)	Programmes (2)	Unit (3)	Physical achievement (4)
<i>Horticulture</i>			
1.	Raising of Seedlings	.. Lakhs	13.12
2.	Banana Package Plantation	.. Hect.	277
3.	Pine apple development	.. Hect.	85
4.	Trainees-cum-Beneficiaries under Fruit Technology	.. Nos.	22,412
5.	Insitu Plantation	.. Hect.	4,271
6.	Maintenace of Old Plantation	.. Hect.	3,952
<i>Animal Husbandry</i>			
7.	Veterinary Hospital	.. No	16
8.	Veterinary Dispensaries	.. No	8
9.	Live stock Aid Centres	.. No.	140
10.	Dairy Co-operative Union	.. No	2
<i>Soil and Water Conservation</i>			
11.	Soil Conservation Measures	.. Hect.	57,000
<i>Fisheries</i>			
12.	Training in Fisheries	.. No.	45
13.	Production of Quality Spawn	.. Swan in Million	70.71
14.	Re-modelling of Fish farms	.. No	23
<i>Forest</i>			
15.	Quick growing species	Hect.	5,710
16.	Economic Plantation	Hect.	4,090

(1)	(2)	(3)	(4)
17. Minor Forest Produce Plantation	Hect.		79,0
18. Mixed Plantation	Hect.		7,302
<i>Land Reforms</i>			
19. Survey and Settlement Operation	No. of villages		3,752
<i>Minor Irrigation</i>			
20. Flow Irrigation	Hect.		9,730
21. Lift Irrigation	Hect.		16,510
22. Renovation of M. I. Tanks	No.		120
<i>Power</i>			
23. Electrification	Nos. of villages		1,942
24. Energisation of Pump Sets	Ditto		1,477
<i>Roads</i>			
25. P. W. D. Roads	Kms.		6230.79
26. Rural Roads	Kms.		6257.00
27. Municipal Roads	Kms.		624.45
28. P. S. and G. P. Roads	Kms.		360.00
<i>Education</i>			
29. Primary Schools	Nos.		1,066
30. Addl. Section in existing Schools	Nos.		615
31. Opening of P.-S., M. E. School	Nos.		190
32. New High Schools	Nos.		15
33. Construction of Girls' Hostels	Nos.		55
<i>Drinking Water</i>			
34. Sinking of Tube wells	Nos.		2,076
<i>Housing</i>			
35. Housing Scheme of H. and U. D. Deptt.	Nos.		108
36. V. H. P.	Nos.		450
<i>Nutrition Programme</i>			
37. Midday Meal	Nos.		18,900
38. Special Nutrition Programme	Nos.		1,49,000

## ANNEXURE—II

Statement showing total outlay and the flow of funds under Central/Centrally Sponsored Schemes

(Rs. in lakhs)

Sl. No.	Sector	Seventh Plan 1985-90		Annual Plan 1985-86	
		Total outlay	Flow of funds	Outlay	Flow of funds
(1)	(2)	(3)	(4)	(5)	(6)
1.	Crop Husbandry	4190.55	1496.85	746.00	248.66
2.	Horticulture	265.50	88.50	53.00	17.66
3.	Soil Conservation	4240.00	1413.33	725.50	241.83
4.	Animal Husbandry	356.15	118.72	72.05	24.01
5.	Fisheries	719.75	239.91	66.45	22.15
6.	Forest	825.00	275.00	168.50	56.16
7.	I. R. D.	7122.00	2374.00	1300.00	433.33
8.	N. R. E. P.	5000.00	1666.66	1200.00	400.00
9.	D. P. A. R.	1463.00	487.66	293.00	97.66
10.	Special IRD programme for assistance to marginal and small farmers for agricultural production.	3925.00	1308.33	785.00	261.66
11.	R. L. E. G. P.	..	..	2250.00	750.00
12.	Land Reforms	285.00	95.00	45.00	15.00
13.	Co-operation	1947.25	649.08	318.00	106.00
14.	Irrigation	671.45	223.81	671.45	223.81
15.	Command area development	2255.00	751.66	300.00	100.00
16.	Power	3724.80	1241.60	2010.00	670.00
17.	Industry	2823.14	941.04	477.18	159.06
18.	Transport	627.00	209.00	86.00	28.66
19.	Roads and Buildings	2407.68	802.56	846.47	282.15
20.	Social and Community Services	7376.21	2458.73	1229.32	409.77
21.	Sports and Culture	119.00	39.66	29.00	9.66
22.	Technical Education	111.69	37.23	19.10	6.37
23.	Science and Technology	30.00	10.00	15.00	5.00
24.	Health and Family welfare	18123.49	6011.16	3975.00	975.00

(1)	(2)	(3)	(4)	(5)	(6)
25.	Drinking water supply ..	17177.50	5725.83	2175.00	725.00
26.	Urban Development and Housing ..	1012.25	337.41	158.00	92.66
27.	Labour and Employment ..	770.40	256.80	152.40	50.80
18.	Backward Classes welfare ..	683.50	227.83	161.20	53.73
29.	Social Welfare Economic service ..	639.31	213.10	120.55	40.18
	Total ..	87567.62	30819.79	19660.78	6603.18

## CHAPTER 8

### SPECIAL COMPONENT PLAN FOR SCHEDULED CASTES

#### Demographic profile

8.1. In Orissa 93 Communities have been notified as Scheduled Castes. According to 1981 Census the population of Scheduled Castes in Orissa is 38,65,543 which constitutes 14.66% of the total population of the State. This is 3.7% of the total Scheduled Caste population in the Country. The growth rate of Scheduled Castes during 1971-81 decade was 16.75% as against the general growth rate of 20.17% of the State. The total number of Scheduled Caste households in the State is 7,79,808 as per 1981 Census.

8.2. Out of the total 38,65,543 S. C. population the vast majority numbering 35,02,195 reside in rural areas. This is 15.06% of the total rural population in the State. Only 3,63,348 S. C. people remain in urban areas which is 9.4% of the total Scheduled Caste population.

#### Occupational Pattern

8.3. The total number of workers among the S. Cs. is 16,24,142 according to 1981 Census which includes 2,18,586 classified as marginal workers who are engaged in some economic activities over a period of less than six months. The average number of workers per household is 2.08. The number of workers in different occupational categories among the Scheduled Castes as per 1981 Census is indicated in the table below :-

Category of workers (1)	Number			% to total workers among Scheduled Castes (5)
	Male (2)	Female (3)	Total (4)	
1. Total workers ..	11,32,560	4,91,582	16,24,142	100.00
2. Cultivators ..	3,74,967	31,636	4,06,603	25.03
3. Agricultural labourers ..	4,74,143	1,92,067	6,66,210	41.02
4. Household Industry, manufactu- ring, processing, serving and repairs.	44,047	25,506	68,553	4.22
5. Other Workers ..	2,09,744	54,446	2,64,190	16.26
6. Marginal Workers ..	29,659	1,88,927	2,18,586	13.47

8.4. The significant fact is that the percentage of agricultural labourers among the S. C. workers is much higher compared to the cultivators. The workers belonging to other services and household industries, etc. are engaged in their traditional occupations which need re-orientation with latest technology and skill and proper marketing arrangements for economic viability.

#### Specially Vulnerable Groups among the Scheduled Castes

8.5. The sweepers and scavengers, nomadic and semi-nomadic and denotified communities among the Scheduled Castes are considered Specially Vulnerable groups. 15 castes have been identified under these groups. Their population was 4,07,245 as per 1971 Census which is likely to be 4,75,000 during 1981 with 16.75% growth rate.

### Literacy

8.6. The rate of literacy among the Scheduled Castes is 22.41% against the general literacy rate of 34.23% in the State as per 1981 Census. Out of the total 866,106 literate persons among the Scheduled Castes 685,397 are male and 180,709 are female. Thus, the female percentage of literacy among the Scheduled Castes is 4.7% compared to 17.7% of male literacy. Much attention is needed to remove the lag in the literacy level of the Scheduled Castes and particularly that of the women among them.

### Social disabilities

8.7. The Scheduled Castes still suffer the stigma of untouchability in some parts of the State. Although the social evil of untouchability has lost its form in direct practice due to enforcement of the P. C. R. Act, 1955, continuous publicity against the evil and various steps to bring about social integration, still it prevails upon in some veiled form or other, particularly in rural areas. Growing consciousness among the Scheduled Castes about their civil rights and the transitory period of economic development, making these communities vulnerable for atrocities. The fight against untouchability and adequate measures to check atrocities are to continue.

### Land distribution

8.8. Much attention has been given for alienation of Government Waste Land and Ceiling Surplus land to the landless Scheduled Caste persons for agricultural purposes. During 1974--84 decade 80,664 Scheduled Caste families have been allotted with 140,728 acres of land which is 22.8 per cent of the land distributed during this period. 32,857 Scheduled Caste families have been allotted with 38,152 acres ceiling surplus land by March, 1984 which is 31.4 per cent of the total ceiling surplus land distributed by this time. During the last decade (1974--84) homestead land have been allotted to 75,886 S. C. families having no such land. Efforts would continue for providing land to the landless S. C. families both for agriculture and homestead purposes.

### Regulatory measures

8.9. Transfer of land belonging to Scheduled Castes to non-Scheduled Castes without written permission of competent authority is void under the provisions made in the O. L. R. Act, 1960. Provisions have also been made in the Act for restoration of the property to the transferer or to his heirs in case of illegal transfer or unauthorised occupation. Till March, 1984, 6,544 acres of land has been restored to 7,032 S. C. persons in 6,466 cases under the provisions of the Act. The Orissa Money Lenders Act, 1939 exercises regulatory control on money lending and the Orissa Debt Relief Act, 1980 is a measure towards liquidation of rural indebtedness. The minimum wages payable to labourers is prescribed from time to time under the provisions of the Minimum Wages Act enforced in the State. The Bonded Labourer System (Abolition) Act, 1976 is applicable throughout the State. The Bonded labourers identified and freed are economically rehabilitated. Till March 1984, 9,364 Scheduled Caste bonded labourers have been identified, 9,745 have been freed and 6,512 have been rehabilitated. These protective measures helping the Scheduled Castes for their economic growth, need be enforced with greater emphasis.

### Sixth Five-Year Plan 1980-85

8.10. The Special Component Plan for Scheduled Castes formulated and implemented from the beginning of the Sixth Five-Year Plan with two main objectives of (i) implementing family and individual oriented income generating programmes for the economic development of the Scheduled Castes and (ii) providing minimum essential facilities and services in Scheduled Caste Bastis to ameliorate the working and living conditions. Funds are quantified from the divisible component of all the developmental sectors to the Special Component Plan for the development of Scheduled Castes. This is supplemented by proportionate central share under relevant Central/Centrally Sponsored Plan Schemes and Special Central Assistance made available to the State by the Government of India under Special Component Plan.

8.11. The flow of funds to the Special Component Plan out of State Plan outlays was estimated to be Rs. 122.09 crores from the total divisible component of Rs. 992.45 crores under different sectors. Rs. 34.61 crores was the anticipated flow of funds from the Central share under Centrally Sponsored Schemes and the amount anticipated as Special Central Assistance was Rs. 23.34 crores. Thus, the total size of the Special Component Plan was estimated to be of the order of Rs. 180.04 crores, besides flow of institutional finance, both from Co-operative and Commercial Banks. As against this, the actual flow of funds during last 4 years and the anticipated flow during 1984-85 are furnished in the following table:—

(Rs. in crores)

Source	Sixth Plan 1980—83 (Estimated)	1983-84 (Actual)	1983-84 (Actual provisional)	1984-85 (Antici- pated)	Total
(1)	(2)	(3)	(4)	(5)	(6)
From Divisible Component of State Plan resources.	122.09	56.34	34.73	31.58	122.65
From Central Share under Centrally Sponsored Plan Scheme.	34.61	15.43	9.21	10.71	35.35
Special Central Assistance under Special Component Plan.	23.34	13.67	5.54	5.50	24.71
<b>Total ..</b>	<b>180.04</b>	<b>85.44</b>	<b>49.48</b>	<b>47.79</b>	<b>182.61</b>

8.12. The working group on development of Scheduled Castes during 1980—85 recommended that at least 50 per cent of the S. C. families living below the poverty line should be assisted during the Sixth Plan period enabling them to cross the poverty line. Accordingly, the State Government fixed the target to economically assist 4 lakhs S. C. families during the Sixth Plan period for adequate additional income generation. The J. R. D. P. launched as a nation wide anti-poverty programme covering the entire rural area, was to take care of 1.5 lakh S. C. families. 143,964 S. C. families have been covered till 1983-84 and the target is to cover 35,917 families during 1984-85 under the Special Programme of E. R. R. P. launched by the State during the Plan period, 85,235 Scheduled Caste families have been assisted till 1983-84 and the proposed coverage is 31,800 Scheduled Caste families during 1984-85. Besides, composite programmes are implemented for the specific occupational groups among the Scheduled Castes like weavers, leather workers, fishermen, cultivators, sericulturists, etc., with arrangements for supply of raw materials, marketing of products, development of technology and skill and introduction of modern tools, utilising State Plan resources and Special Central assistance. Scheduled Caste persons are also assisted for implementation of other economically viable income generating schemes. 127,543 Scheduled Caste families have been covered under these special programmes and other schemes till 1983-84. Altogether 356,741 Scheduled Caste families have been economically assisted till 1983-84 and 91,868 families are proposed to be covered during 1984-85. Thus, the target of assisting 4 lakh Scheduled Caste families during the Sixth Plan period is likely to be achieved.

8.13. Some of the important achievements in providing services and minimum facilities to ameliorate living and working conditions of Scheduled Castes during Sixth Five-Year Plan period are indicated below:

(1)	Achievement during 1980-84	Target for 1984-85	Total 6th Plan (Anticipated)
(1)	(2)	(3)	(4)
1. Electrification of Scheduled Caste villages ..	385	105	490
2. Provision of street lights in Scheduled Caste Basits.	1,664	800	2,464
3. Provision of Drinking water sources in S. C. Basits (Rural Tube-wells and Sanitary Wells).	5,747	1,343	7,090
4. Housing facilities--			
(a) Housing facilities to those engaged in unclean occupation.	766	46	812
(b) Housing facilities under I. H. S. and Housing Scheme of H. and U. D. Department	5,145	4,000	9,145
(c) Housing facilities for weaker sections in flood prone areas.	11,099	..	11,099
5. Community Centres in Scheduled Caste Basits.	161	..	161
6. Conversion of dry latrines to pour-flush sanitary latrine.	1,934	5,289	7,223

#### Seventh Five-Year Plan (1985-90)

8.14. The Draft on Approach to the Seventh Five-Year Plan by the Planning Commission indicate that the strategy for Special Component Plan for development of Scheduled Caste aiming at their economic and educational development and bringing about their working and living conditions should be geared up and intensified. The thrust of the programme should be on (a) Economic Development through Beneficiary Oriented Programmes for raising their income, (b) Baste Oriented Schemes providing essential facilities like drinking-water, drainage, street lighting, link roads, Primary and Adult Education Institution, Health Units, etc., (c) Elimination of scavenging through an accelerated drive for conversion of dry latrines into water borne latrines and rehabilitation of those displaced on this account, (d) Educational development and (e) Administration and personnel reforms. 50% of the S. C. families living below the poverty line are to be enabled to cross the poverty line through anti-poverty programmes. Pending receipt of detailed instructions from Government of India about the strategy and approach during the Seventh Plan period, the above recommendations are the guiding principles for development of Scheduled Castes.

8.15. The total State Plan outlay during the Seventh Five-Year Plan of the sectors amenable for quantification of development of Scheduled Castes is proposed to be Rs. 3,341.44 crores out of which Rs. 438.74 crores is the estimated flow to the Special Component Plan which is 13% of the total outlays of these sectors. The sectoral break up of the State Plan outlays and the amount quantified to the Special Component Plan for the development of Scheduled Caste is indicated in the enclosed Statement S. C. P.—



8.16. The flow of funds to the Special Component Plan out of Central Share under the Central/Centrally Sponsored Schemes is approximately estimated to be Rs. 52.19 crores.

8.17. In addition to the flow of funds from State Plan outlays and out of Central share under Central/Centrally Sponsored Schemes, an outlay of Rs. 60.00 crores is anticipated to be received as Special Central Assistance under Special Component Plan for the development of Scheduled Castes during 1985-90 to be utilised for the purposes as briefly mentioned below:—

(i) Assistance to Scheduled Castes families in shape of subsidy, back up services & other facilities for economic development.	Rs. 55.00 crores
(ii) Provision of economic infrastructure directly relevant to economic development programmes for Scheduled Castes.	Rs. 4.00 crores
(iii) Strengthening of administrative machinery, Monitoring Cell and for taking up of Survey and Evaluation, etc.	Rs. 1.00 crores
Total ..	Rs. 60.00 crores

8.18. It is not possible at this stage to make a realistic assessment of Institutional finance required for development of Scheduled Castes under various sectoral programmes. It is roughly estimated that the flow of Institutional finance for the Scheduled Castes development during the Seventh Plan period will be of the order of Rs. 100.00 crores. Thus the total size of the Special Component Plan for Seventh Plan is estimated to be Rs. 650.43 crores as follows:—

(a) From State Plan resources	Rs. 438.24 crores
(b) From Central Share under Centrally Sponsored Schemes.	Rs. 52.19 crores
(c) Special Central Assistance under Special Component Plan.	Rs. 60.00 crores
(d) Institutional Finance	Rs. 100.00 crores
Total ..	Rs. 650.43 crores

#### Family Coverage

8.19. It was estimated that 90% of the total 7.8 lakhs Scheduled Castes house-holds i. e. 7 lakhs Scheduled Castes families were below the poverty line at the beginning of the Sixth Five-Year Plan. 4.4 lakh Scheduled Caste families are expected to be economically assisted under different income-generating programmes by the end of the Sixth Plan. In absence of any detailed survey conducted, it has not been possible to find out exactly how many of these families assisted have been able to cross the poverty line. It is anticipated that about 30 per cent of these families will be able to cross the poverty line during the Sixth Plan period with the help of the assistance received. Thus, at the beginning of the Seventh Plan period, 5.70 lakh S. C. families are expected to remain below the poverty line. Out of them, 3.10 lakh S. C. families will need second and subsequent assistance for adequate income generation to be able to cross the poverty line. Out of remaining 2.60 lakh S. C. families, 2.0 lakh families are proposed to be newly covered during the plan period. Altogether 5.10 lakhs Scheduled Castes families are proposed to be given

assistance during the Seventh Plan period for their economic development with the objective of enabling 50 per cent of them, i. e., about 2.50 lakhs Scheduled Caste families crossing the poverty line during the plan period. These families are proposed to be assisted under the following programmes including 2.0 lakh new families.

(1) I. R. D. P.	1,88,500
(2) E. R. R. P.	1,80,000
(3) Fisheries (State Plan)	1,350
(4) Handloom (State Plan)	1,500
(5) Sericulture (Mulberry) (State Plan)	1,700
(6) Special Programme with Special Central Assistance	1,36,950
	<hr/>
Total ..	5,10,000
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#### Programme for 1985-86

8.20. The total size of the Special Component Plan for the year 1985-86 is estimated to be Rs. 98.50 crores as below:—

		[ Rs. in crores
(a) From State Plan resources		56.10
(b) From Central share under Central/Centrally Sponsored Scheme		10.40
(c) Special Central Assistance—		
(i) Assistance for economic development programmes	11.00	} 12.00
(ii) Economic infrastructure	0.80	
(iii) Strengthening of administration, monitoring and evaluation.	0.20	
(d) Institutional finance		20.00
		<hr/>
Total ..		98.50 crores
		<hr/>

8.21. It is proposed to cover 1,00,000 Scheduled Caste families under different family oriented income generating schemes of anti-poverty programmes as per the details given below :—

(a) I. R. D. Programme	..	37,700
(b) E. R. R. P. Programme	..	36,000
(c) Fishery State Plan (FFDA & Brakish water fishery)	..	360
(d) Handloom (State Plan)	..	100
(e) Sericulture-Mulberry (State Plan)	..	100
(f) Special schemes with Special Central assistance	..	25,740
		<hr/>
		1,00,000
		<hr/>

8.22 Physical target envisaged during Seventh Plan and for 1985-86 in providing essential facilities, under programmes for educational development and other infrastructural facilities for the development of Scheduled Castes with flow of funds from State Plan outlays in different sectors, are shown in the statement in Special Component Plan 2.

## CHAPTER 9

## 20-POINT PROGRAMME

9.1. The 20-Point Programme has given a new re-orientation to the Nation's development and a new emphasis to the poverty amelioration programmes. In view of Orissa's backwardness and heavy concentration of people below the poverty line, this programme has a great significance for the State and the State Government are fully committed to implement the programme most effectively. Therefore, the 20-Point Programme has been fully dovetailed into the State Plan and with this different programmes have been re-oriented for accelerating the pace of achievement in various sectors. Particular care has been taken to allocate adequate funds in the budget every year for different schemes under 20-Point Programme. During the sixth Plan period more than 85 per cent of the annual Plan allocations have been provided for this purpose. The emphasis in the Seventh Plan, is on rural employment through poverty alleviation programmes like IRDP, NREP and RLEGP. These programmes will be integrated with agricultural and rural development so as to provide the required infrastructure support to create productive employment. Hence 20-Point Programme will be continued during the Seventh Plan period on the same pattern with increased investment.

9.2. The State Government have set up Monitoring Committees at different level and the programmes are reviewed by the officials and non-officials in different forums starting from the block to the State level. The committees set up at different levels take stock of the manner of implementation of the programmes and suggest remedial measures to remove the operational constraints in the field. Each district has been placed in charge of a Member of the Council of Ministers so that the implementation of the various programmes can be monitored in depth through the District Level Committee under his Chairmanship. Recognising the fact that the peoples participation is most important in effective implementation of the programmes at the grass-root level, the State Government have associated people's representatives in various committees set up at different levels for review of the 20-Point Programme. These monitoring arrangements will be continued during the Seventh Plan period.

## 1. (a) Increase of the Irrigation Potential

9.3. The following table gives the summary picture of the irrigation potential expected to be created by the end of Sixth Plan from different categories of Irrigation Projects:—

## Irrigation Potential

(In lakh hectares)

Sl. No.	Category of Irrigation Projects	Potential created by 1979-80	Sixth Plan target	Potential created during 1980-84	Potential targeted for 1984-85	Cumulated potential anticipated by Sixth Plan end
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Major and Medium	7.37	1.86	1.01	0.27	8.65
2	Minor (Flow)	3.25	0.81	0.40*	0.09	3.74
3	Minor (Lift) (in Public Sector)	0.88	0.48	0.69	0.40	1.97
4	Minor (Lift) (In Private Sector)	1.40	2.80	1.25*	0.36	3.01
		12.90	5.95	3.35*	1.12	17.37

\* Provisional

As may be seen above, against the target of achieving additional irrigation potential of 5.95 lakh hectares the likely achievement by the end of the Sixth Plan would be 4.47 lakh hectares. The shortfall is attributed mainly to escalation costs requiring additional funds to achieve the original target. However the target under lift irrigation in the public sector has exceeded by more than two times.

9.4. It was assessed that an additional outlay of about Rs. 65 crores was necessary to achieve fully the target under Major and Medium Irrigation Projects during the Sixth Plan on account of escalation of costs. It was, however, not possible to substantially augment the Plan allocation and consequently the targetted potential was revised downwards to 1.28 lakh hectares.

9.5. With a view to accelerating the pace of creation of additional irrigation potential under Minor (Flow) irrigation, steps are being taken to augment the plan allocation. The final allocation under Minor Irrigation (Flow) during Sixth Plan is proposed to be Rs. 57 crores against the original outlay of Rs. 42.50 crores.

9.6. There were 331 incomplete M. I. Projects which had spilled over from the Sixth Plan. The strategy adopted in the Sixth Plan was to complete them all. In the first four years, 300 of them have been completed and the remaining 31 are expected to be completed during the current year. Besides, 17 new M. I. Projects taken up during the Sixth Plan period were completed during the first four years.

9.7. A massive dugwell programme has been launched over the years. This programme has become quite popular among the farming community because of its reliability. During the Sixth Plan period, it was programmed to construct 4 lakh dugwells in the State. Against this target, during the first three years, the achievement has been 1,20,587 dugwells. A target of 70,000 dugwells was fixed for 1983-84. The achievement against this is yet to be assessed. During the Sixth Plan period, it was programmed to instal 15,000 filter point tubewells in the State. During the first three years, however, the achievement has been rather low being 1,109 only. The target for 1983-84 was fixed at 3,000 filter point tubewells, the achievement against which has so far not been assessed. Considering the present level of achievement the targets for 1984-85 have been kept at the same levels as last year.

9.8. In order to provide more irrigation potential through minor irrigation sources, Government have taken a decision that each Block in the State shall be provided with 500 to 1,000 acres of additional irrigation by March, 1985. Funds required for this purpose are made available from NREP, RI EGP, DPAP and funds provided by the Harijan and Tribal Welfare Department through MIDAs. The strategy has been to provide irrigation by extension of existing Irrigation systems, renovation of tanks, lift irrigation and through water harvesting structures. It has been assessed that out of 314 Blocks in the State, 160 Blocks will have such facilities for 1,000 acres or more. Another 88 Blocks will have provision for 500 to 1,000 acres of Additional irrigation facilities and only 64 Blocks where there is limited potential will have less than 500 acres of irrigation.

9.9. One of the important inputs for increasing the Agricultural production is to provide the irrigation facilities. At the time of launching the Sixth Plan Programmes, the State Government had declared their objective to double the net irrigation potential in a period of 10 years from the beginning of the Sixth Plan. This objective may not be possible to achieve unless adequate resources are provided for creating irrigation potential. During the Sixth Plan period, additional irrigation potential to the extent of 4.47 lakh hectares would be achieved from all sources of irrigation over and above the potential of 12.90 lakh hectares created in the beginning of the Sixth Plan. During the Seventh Plan period additional irrigation potential

of 5.41 lakhs hectares is proposed to be created through State Plan resources. The sourceswise break-up is as follows :

Source	Potential in lakh hectares
Major and Medium Irrigation ..	1.88
Minor Irrigation (Flow) ..	0.33
Lift Irrigation (Public Sector) ..	1.20
Private Lift Irrigation ..	2.00
Total ..	<u>5.41</u>

9.10. Within the limit of resources of the State Government they are unable to provide more funds for creation of additional irrigation potential. If the Central Government agree to provide about Rs. 390 crores during the Seventh Plan period an additional irrigation potential of about 1.10 lakh hectares can be created by the end of Seventh Plan provided the Rengali Irrigation, Upper Kolab Irrigation and Subarna-rekha Irrigation Projects are fully funded during the Seventh Plan period. The main thrust in the minor irrigation (Flow) schemes is to complete the ongoing projects and take up new projects selectively in the drought prone and tribal areas.

#### **1 (b) Development and Dissemination of Technologies and Inputs for Dry Land Agriculture**

9.11. About 80 per cent of the cultivable area in Orissa is rainfed, where the annual rainfall is mostly erratic causing a set back in agriculture production. Therefore, to increase agricultural production and productivity in rainfed areas, both intensive and extensive approaches have been adopted for development of dry land farming technology. Development of watersheds has been taken up under the intensive approach covering various activities including agriculture, soil conservation, orchard development, pisciculture and afforestation etc. So far, 568 Nos. of miniwater sheds have been identified. Detailed plans have been prepared for 254 nos. of watersheds. Execution of various kinds of soil conservation measures such as contour bunding, land development, construction of water harvesting structure are in progress over 232 Nos. of mini water sheds.

#### **Diversification of Cropping pattern**

9.12. Under the extensive approach one of the measures taken to make the dry land farming a success, is diversification of high land from paddy to non-paddy crops like pulses, oilseeds, maize and ragi, etc. Through this measure it has been possible to divert 4.64 lakh Hects. of high land to pulses and oilseeds till 1983-84 including 54,000 Hects. in 1983-84 alone exceeding the target of 49 thousand hectares fixed for the year. This has been done through intensive extension activity under the Training and visit system and provision of incentives like seed, free distribution of seed-kits of pulses and oilseeds, etc. In 1984-85 an area of 36,000 Hects of paddy lands is proposed to be diverted to non-paddy and drought resistant crop. Till August 1984, an area of 89,000 Hects. of paddy land have been diverted to non-paddy crops.

9.13. Another measure taken to make the dryland farming a success is mixed cropping. Various mixed cropping practices suitable to the area and climate such as paddy + arhar, groundnut + arhar, mung + arhar have been popularised by motivating the farmers to adopt these practices. During 1983-84 mixed cropping practices were effectively implemented in 525,000 Hects. against the target of 50,000 Hects. Large number of seed minikits of arhar and groundnut were distributed free of cost to small and marginal farmers to encourage them to adopt this practice in dry land areas. It is proposed to extend this practice to an additional area of 93,500 Hects. in 1984-85. Till August 1984, 89,700 Hects. have already been covered.

9.14. Large number of minikits of seeds of arhar and groundnut were distributed free of cost to small and marginal farmers to effectively popularise the practice in the State particularly in drought prone areas.

### 3. Special Efforts to Increase Production of Pulses and Vegetable Oil Seeds

9.15. Steps have been taken to increase production of pulses and oil seeds by increasing the coverage both in irrigated and non-irrigated areas and by increasing the yield rates through use of improved seeds, application of phosphatic fertilisers and adoption of pest control measures. Increase in the coverage has been possible through diversification of high land from paddy to pulses and oils seeds, raising crops on residual moisture in ricefallows, and riverine belts of the coastal districts and raising the crop as a third crop in the irrigated areas. A break through has been achieved in popularising groundnut crop in the State where the success has been substantial.

#### 3. (a) Strengthening and Expansion of coverage of Integrated rural Development programme

9.16. During the Sixth Plan 7,08,312 beneficiaries have been assisted till March, 1984 under the IRDP in Orissa against a target of 942,000. The coverage has been steadily rising over the years. From a modest coverage of 100,419 during 1980-81, the achievement rose to 217,073 beneficiaries during 1983-84. This achievement is much higher than the target of 188,400 the percentage being 115 per cent.

9.17. According to the guidelines of the Government of India, at least 30 per cent of all IRDP beneficiaries should be from the Scheduled castes and Tribes. So far, 143,964 Scheduled Caste 162,825 Scheduled Tribes families have been assisted under the programme (from 1980-81 to 1983-84) against the target of 150,000 and 280,654 respectively fixed for the Sixth Plan. They represent 43 per cent of all the beneficiaries. Lately, their proportion to the total number of beneficiaries has further improved, being 49 per cent in 1983-84.

9.18. It is proposed to cover 188,400 families including 35,917 Scheduled Caste and 62,200 Scheduled Tribe families during the year 1984-85 against which the achievement by end of September 1984 is 39,111 including 8,545 Scheduled Caste families and 10,166 Scheduled Tribe families.

9.19. A reference may be made here to the State Government's own scheme of Economic Rehabilitation of the Rural Poor (ERRP). The Programmes, launched in 1980-81, seeks to assist the poorest 10 families in each of approximately 50,000 villages of the State. Under this programme, 269,928 beneficiaries have been covered during the years 1980-81 to 1983-84. The original target of coverage for the Sixth Five Year Plan was 5 lakhs beneficiaries. This was subsequently scaled down to 4 lakhs beneficiaries due to constraint of resources. During the current year (1984-85), the target is to cover 1.06 lakhs beneficiaries. The achievement during the current year (up to September 1984) is 11,500.

9.20. The E. R. R. P. is intended to benefit the poorest families in the villages. Unlike in I. R. D. P., a large number of beneficiaries covered under land-based and pisciculture schemes are extended benefits on full subsidy basis. In the case of beneficiaries covered under Animal Husbandry and Artisan schemes, the subsidy is 75 per cent. This programme is specially beneficial to the Scheduled Castes and Tribes since more than 2/3rd of the beneficiaries covered belong to these categories.

#### 3 (b) National Rural Employment Programme (N. R. E. P.)

9.21 Rural poverty arises basically out of unemployment and under-employment which limit the size of family income. Generation of employment, thus, is important for containment of Rural poverty. This National Rural Employment Programme (N. R. E. P.) seeks to increase the level of Rural employment through provision of funds for execution of labour-intensive works. The Sixth Plan outlay for the State under N. R. E. P. has been fixed at Rs. 5,600 lakhs, to be shared equally by the Central and State Governments. This outlay is estimated to generate about 560 lakhs mandays of employment. But the likely expenditure during the Sixth Plan period would be of the orders of Rs. 6,424.82 lakhs and this would generate 678.18 lakhs mandays of employment. As a result of execution of N. R. E. P., community assets of various forms are being created.

**RLEGP**

9-22. This programme is similar in its objective with the N. R. E. P. and seeks to tackle in a more direct and specific manner the rural un-employment problem specially for landless people during the lean agricultural periods when the work is scarce. During 1983-84, a provision of Rs. 450 lakhs was made out of which an amount of Rs. 354.14 lakhs was released to the D. R. D. As. The balance amount is to be utilised during the current financial year. Besides during the current year, budget provision to the extent of Rs. 1,797.00 lakhs has been made with the objective of generating 175.80 lakhs mandays of employment in the rural areas against which the achievement up to September 1984 has been of the order of 2.65 lakhs mandays.

9-23. Decision has been taken to take up lift irrigation projects and school buildings by utilising the left over balance of the previous year. It has been decided that construction of 4,704 primary school building will be taken up during the current year including 519 primary school buildings programmed during the last year at a cost of Rs. 20,300 each. Construction of rural link roads, minor irrigation work and execution of soil conservation programmes will also be taken up under the RLEGP.

9-24. The overall size of the programme for 1984-85 would be of the order of Rs. 2,246 lakhs (including 25 per cent excess provision over the current year's allocation of Rs. 1,797 lakhs). In a addition to taking up special programmes as listed above, it has been decided to provide in each village some durable community assets of value of Rs. 5,000 to 10,000. These works would be village link roads, construction or renovation of village tanks, construction of Panchayat Ghars and other community works like Youth Club/Mahila Samiti buildings, Social Forestry Programmes, Soil Conservation works and Lift Irrigation Programmes. Wherever funds available under RLEGP are not found to be sufficient, part of the investment could be financed from N. R. E. P. allocation. Detailed master plan for execution of the RLEGP. are being finalised

#### **4. Implementation of Agricultural Land Ceiling Distribution of surplus Land and Completion of Compilation of Land Records by Removing all Administrative and Legal Obstacles**

9-25. As a result of implementation of ceiling laws, progressively, 53,183 ceiling cases had been instituted till the end of March, 1984 out of which 52,188 cases had been disposed of leaving a balance of only 995 cases. A net area of 1,56,898 acres, have been vested in Government, out of which a net area of 1,34,922 acres have been taken over possession. From the taken over area 1,21,479 acres, of surplus land have been distributed among 96,665 beneficiaries which includes 32,867 Scheduled Caste and 36,733 Scheduled Tribe beneficiaries as detailed below.

Caste/Community	Number of persons benefitted	Area settled (Acres)
Scheduled Caste	32,867	38,152
Scheduled Tribe	36,733	51,361
Others	27,065	31,966
Total	96,665	1,21,479

During the year 1984-85 a target of 9,000 acres has been fixed for distribution of surplus land in the State against which the achievement is 1,355 by end of the September, 1984. During the Seventh Plan period, 36,000 acres of land would be distributed and the target for the year 1985-86 is 7,000 acres.

9.26 The cumulative distribution of ceiling surplus land upto August, 1984 is summarised in the following statement --

(i)	Number of cases registered	..	..	53,381
(ii)	Number of cases disposed of	..	..	7,445
(iii)	Number of cases pending	..	..	932
(iv)	Net area vested (in acres)	..	..	1,58,512
(v)	Net area taken over (in acres)	..	..	1,41,647
(vi)	Area distributed (in acres)	..	..	1,22,652
(vii)	Number of beneficiaries	..	..	98,034

9.27. Out of 51,909 villages of the State, the Survey and Settlement operation was completed in respect of 31,645 villages by the end of Fifth Five-Year Plan. At the beginning of Sixth Five-Year Plan such operation was pending for the remaining 16,979 villages excluding 3,285 villages earmarked for consolidation operation. It was originally programmed to complete the Survey and Settlement operation in respect of these 16,979 villages during the Sixth Five-Year Plan at an outlay of Rs. 3,401 lakhs. As the amount projected under plan was subsequently reduced from Rs. 3,401 lakhs to Rs. 500 lakhs, the target for completion of villages originally programmed had to be reduced to 12,508 villages leaving 4,471 villages to be taken up during the Seventh Plan. Out of 12,508 villages programmed during the Sixth Five-Year Plan (1980-85) Survey and Settlement Operation in respect of 8,311 villages has been completed during the first four years. The target for the year 1984-85 is to cover 1,200 villages. Upto August, 1984 the operation has been completed in 874 villages.

9.28. The target for the Seventh Plan is to cover 19,409 villages including 8,072 Tribal villages by survey and settlement operations.

#### 5. Review and Effective Enforcement of minimum Wages for Agricultural Labour

9.29. Minimum Wages for employment in Agriculture has been raised from base level of Rs. 4.00 per day in early 1980 to Rs. 7.50 per day recently in Phases. Enforcement of payment of minimum wages is done through a large number of inspections conducted by Inspectors appointed under the Minimum Wages Act. In 1983-84 more than 12,000 inspections were conducted against target of 10,080. The programme of inspection for the year 1984-85 has been kept at 10,746 out of which 5,694 inspections have been completed, and 4,853 violations detected by end of September, 1984 and appropriate action taken.

9.30. To oversee implementation of prescribed minimum wages in agriculture, Tahasildars, Additional Tahasildars, Revenue Supervisors and Revenue Inspectors of Revenue Department and District Welfare Officers and Assistant District Welfare Officers of H. & U. W. Department have been declared as Inspectors under the Minimum Wages Act, besides sixty-nine Officers of the Labour and Employment Department. In addition, honorary organisers have also been posted in 40 backward Blocks of the State. Annual and monthly targets of inspections have been fixed for these Inspectors by the concerned District Collectors.

#### 6. Rehabilitation of Bonded Labour

9.31. In the State, 32,642 Bonded Labour have been identified out of whom 30,383 have been released and 19,821 rehabilitated by end of March, 1984. Rehabilitation of released Bonded Labour was taken up in a modest way during the 1978-79 only in three districts. During that year, there was



an allotment of only Rs. 9.67 lakhs. During the 1983-84, the programme was extended to all 13 districts and a budget provision of Rs. 3 crores was made. The number of beneficiaries assisted under this programme during different years is given below :—

			Target	Achievement
Upto	1980-81	..	..	344
During	1981-82	..	270	270
	1982-83	..	7,500	12,8
	1983-84	..	7,500	6,366
	1984-85	..	7,500	2,159

(Upto September, 1984).

9.32. Rehabilitation of Bonded Labour has been dovetailed into the State Programme of E. R. R. P. with a view to extending maximum benefits to the beneficiaries. Under the E. R. R. P., benefits upto Rs. 9,000 can be given to each beneficiary in schemes like annual cropping, plantations, pisciculture etc. The maximum permissible expenditure under the centrally sponsored scheme, is Rs. 4,000. In the schemes mentioned above, the excess amount is borne by the State Government under the E. R. R. P. 6.4 More than 10,000 released bonded labourers are still to be rehabilitated. During the course of the year also a few more Bonded labourers may be identified. During the Seventh Plan, period, it is proposed to identify more bonded labourers and to rehabilitate 37,500 beneficiaries under the scheme. The target for the year 1985-86 is 7,500.

#### 7. Accelerated programme for the Development of Scheduled Castes and Scheduled Tribes

9.33 The target for coverage of Scheduled Caste families under different beneficiary oriented programmes (I. R. D. P., E. R. R. P., special Central Assistance) in the Sixth Plan was 4 lakh families out of which 3,56,707 families were covered till the end of 1983-84. The target for 1984-85 has been kept at 91,868 families out of which the achievement till end of September 1984 is 20,307. During 1983-84 we had made very good achievement under this item (108 %). During the current year also it is expected to achieve the target in full. Thus the achievement under this item will exceed the target of Sixth Plan by the end of the 1984-85.

9.34 The target for coverage of Scheduled Tribe families under different beneficiary oriented programmes (I. R. D. P.) E. R. R. P., Special Central Assistance) under the Sixth Plan was 5.50 lakh families. Till 1983-84, 3,56,724 families were covered under this item. A target of 1,44,221 families to be assisted, has been kept during the year 1984-85 out of which achievement has been 33,129 till end of September, 1984. During the current year, the performance is expected to be better on account of the strengthening of the field machinery and identification of new beneficiaries under the Artisan based units.

9.35 Scheduled Caste and Scheduled Tribe families have also been benefitted under the State Plan schemes in Agriculture, Horticulture, Soil Conservation and similar other avocations. Besides, Infrastructure development programmes have also been taken up in Harijan and Tribal basties. These include provision of drinking water, link roads, electrification, housing community centres etc., For people engaged uncleaned occupation in urban areas, housing facilities, infrastructure development establishment of primary school for Harijan students, provision of scholarships, free supply of garments to students residing in Sevashrams, financial assistance to students for post-matric education etc. have been taken up. In distribution of house sites and ceiling surplus lands, adequate benefit has also flowed to the S. C. and Schedule tribes population in the State.

### B. Supply of Drinking Water to All Problem Villages

9.36. Out of the 46,902 inhabited villages (1971 census) in the State, 27,077 have been indentified as problem villages. Upto the end of 1979-80, only 3,461 villages were fully covered under drinking water programme. But during the subsequent four years (between 1980-81 to 1983-84) the total coverage of completed villages was 10,818 bringing the cumulative total of completed villages to 14,279 as a result the number of well-less category villages was reduced from 15,228 (at the beginning of the Sixth Plan) to 6,759 by the end of 1983-84 during which period 40,420 tube wells and 9,508 sanitary wells have been installed. The programme for the current year (1984-85) is to cover 100 villages fully and 6,659 villages partly under the tube-well programme against which the achievement is 756 and 1,949 respectively by end of September, 84.

9.37 The total No. of tube wells under all programmes including those sunk with the funds available for relief measures on natural calamities like floods, cyclone and drought are as follows :-

Year	No. of tubewells under plan programme	No. of tubewells under all programmes including plan programme
By 3/80	11,846	11,846
1980-81	4,734	9,745
1981-82	7,993	8,650
1982-83	7,110	11,910
1983-84	8,737	12,704
	40,420	54,355

9.38. Planning Commission in their review for the month of March, 84 have given Orissa the top position in the country in its performance in this sector by achieving 159.3% of the target. In consideration of the satisfactory achievement in the field of drinking water supply, Government of India have granted Rs. 4.50 crores as an award.

9.39. A decision has been taken that in future all problem villages shall be covered by tube-wells and not by sanitary wells. This will require 20,421 additional tube-wells to be installed in order to cover all problem villages basing on the norm of one tube-well for 250 population the programme is expected to spill over to the Seventh Plan in order to cover all the problem villages fully. But by the end of the Sixth Plan i.e. 1984-85 all villages are expected to be covered with at least one spot source of drinking water.

9.40. In addition to the above, a programme has been worked out with the assistance of DANIDA for water supply in the coastal districts in 20 blocks of Balasore, Cuttack and Puri. It envisages providing pipe water supply to 26 villages, tube-wells in 2,010 villages and small drinking water sources like rain water tanks, in a few other villages. It is expected to be taken up from the current year (1984-85). Detailed agreement with the DANIDA is yet to be reached. Pilot schemes have been taken up in respect of two piped water programmes and 50 tube-wells.

9.41. Increase in the number of defunct tube-wells is posing a problem. Presently, there are 8,710 defunct tube-wells in different districts of the State. A decision has been taken to recover the materials in a few defunct tube-wells on experiential basis. Pending writing of these tube-wells after investigation it has been proposed to provide new tube-wells during the Seventh plan through a State plan scheme.

9.42. Re-survey has been taken up to identify certain problem villages inadvertently omitted from the list earlier prepared. It is expected that a final list of such villages would be available by December '84.

9.43. According to the programme drawn up for the International Water-Supply and Sanitation Decade (1981—91), all the villages are required to be covered with adequate drinking facilities by 1991. During the Seventh Plan period, out of the total of Rs. 283.40 lakhs Rural Population Project for the year 1991, about 169.12 lakh population are likely to be covered by the end of the Sixth Plan leaving a balance of Rs. 114.28 lakhs, to be covered by the end of the decade. It has been proposed to cover 90 per cent of remaining population i.e. 102.85 lakh during the Seventh Plan period and the balance 11.43 lakhs is proposed to be covered during the last year of the decade in 1990—91.

9.44. First priority will be given to cover fully all the identified problem villages of the Sixth Plan period (27,077 villages) as mentioned earlier, a survey is being undertaken to include the left out villages in the list of identified problem villages. Those villages which will be identified as problem villages afresh would also be required to be covered on priority basis. Subject to availability of funds, the remaining villages will be covered to achieve 90 per cent population by the end of the Seventh Plan period.

9.45. As per Decade Plan, 70 per cent of the population is proposed to be covered by hand pump tube-wells and 30 per cent of the population is proposed to be covered with Piped Water-Supply Schemes. Thus, the programme would ensure fully coverage of all the problem villages hitherto identified and also proposed to be identified as problem villages by the end of the Seventh Plan period.

**9. Allotment of House sites to Rural Families who are without them and expansion of the Programme for Construction Assistance to them.**

9.46. A programme for distribution of house sites to home steadless families has been undertaken by the State Government from the year 1974-75. Four decimals of housesites is given to a single homesteadless family free of premium both in semi-urban and rapidly developing areas as well as in rural areas. Any excess area beyond 4 decimals (to be justified by needs) is settled on payment of 50% of the prevailing market price. The target fixed by the Planning Commission during 1983-84 was 20,000 families, against this target, house sites were allotted to 52,438 families (262%). The percentage achievement under the programme was the highest in the country during the year as reviewed by Planning Commission. Progressively, from the year 1974-75 till March, 1984 house sites have been distributed to 2,74,535 families out of which 93,216 are S. T. families and 75,886 are S. C. families. A target for distribution of house sites during 1984-85 has been kept at 25,000 against which the achievement by end of September 1984 is 8,928. Under this item, the Sixth Plan target was 50,000. From the above, it would appear that the achievement has far exceeded the target.

9.47. Construction assistance is provided to a part of the beneficiaries under the house site allotment programme. According to the scheme approved by the State Government, the total cost of the house to be constructed is Rs. 2,000- out of which Rs. 1,500 is given as grant by the State Government and the balance Rs. 500 is contributed by the beneficiaries by way of labour. Previously, with this Rs. 2,000 tiled houses were constructed but recently since the cost of tile and timber have gone up the specification has been revised to that of a thatched house. The yearwise allotment of funds and the number of houses constructed for home steadless workers are as follows:—

Year	Amount spent (Rs. in lakhs.)	No. of houses constructed
1980-81	15.00	1,239
1981-82	50.00	1,557
1982-83	57.01	3,800
1983-84	60.00	4,000

9-48. During both the years 1982-83 and 1983-84, the targets under the programme were fully achieved. The Sixth Plan target under this item was 9764. From the above it would appear that the achievement has far exceeded the target. The target for the current year is to complete 6,667 houses for which a provision of rupees one crore has been made. Out of this, 1,453 houses have been completed by September, 1984.

9-49. During the Seventh Plan period, it is proposed to provide an outlay of Rs. 1025.00 lakhs towards construction assistance for building houses to the rural landless labourers. The target is to cover 68,333 beneficiaries. For the year 1985-86 an outlay of Rs. 125.00 lakhs has been suggested with a target of constructing 8,333 houses.

#### 10 (a) Improvement of the Environment of Slums

9-50. The Sixth Plan target for coverage under environmental improvement of slums had been fixed at 37,000 slum population. In the first three years of the Sixth Plan i. e. 1980-81, 1981-82 and 1982-83 the programme was confined to Cuttack City only. The yearwise achievement was as follows:

1980-81	..	5,000
1981-82	..	7,000
1982-83	..	16,350

For each of these years the budgetary provision was only Rs.15 lakhs.

9-51. During the year 1983-84 the original target of coverage under this programme was 20,000 slum population in Cuttack City (10,000), Bhubaneswar (2,000), Sambalpur (2,000), Burla (2,000), Hirakud (2,000), and Rourkela C. T. N. A. C. (2,000). The budgetary provision was Rs 15 lakhs for this purpose and the urban local bodies had programmed to spend Rs.20 lakhs. However, Government of India under the incentive scheme, prescribed an additional target of 30,000 slum population at an estimated cost of Rs 45 lakhs. The additional coverage of slum population totalling to 30,000 was extended to the towns of Bhubaneswar, Sambalpur, Rourkela C. T. N. A. C., Rourkela S. T. N. A. C., Berhampur, Puri, Jagatsinghpur, Jharsuguda, Baragadh, Kendrapara and Jajpur Road. In all the programme was taken up in 14 towns.

9-52. Against the target of coverage of 50,000 slum population, the achievement has been 45,000. The short-fall of 5,000 was made good in April and May, 1984. This was because of late receipt of funds from Government of India. During the current year 1984-85 it is proposed to cover a slum population of 12,600 against which the achievement is 9,500 by end of September, 1984. However, the target is expected to be exceeded by covering the slum population of 14,600.

9-53. The scheme of integrated development of small and medium towns is under implementation in 6 towns of the State namely, Sambalpur, Puri, Balasore, Rourkela, Dhenkanal and Jeypore. One more scheme for Khurda town has been submitted to Government of India. Another scheme for Jagatsinghpur is under preparation. Some more towns are also to be covered under this programme during the Seventh Plan.

9-54. During the Seventh Plan period an outlay of Rs.3.00 crores has been proposed for this programme with a target of covering 1.20 lakhs slum population. For the year 1985-86, the target is to cover 23,6000 slum population with an outlay of Rs.60 lakhs.

#### 10 (b) Implementation of the programme of house building for Economically weaker sections

9-55. In the Sixth Plan, a beginning was made to construct 20,000 houses under the flood housing scheme in eight districts of the State for economically weaker sections. Each house under the scheme was estimated to cost Rs.4,000 for which HUDCO loan assistance was obtained to the extent

of 75%, the balance 25% being met as margin money by the State Government. Till the end of 1983-84, a total number of 27,860 houses were constructed for economically weaker sections of the society. During the year 1983-84, alone, the achievement was 101.14% of the target fixed for the year. A target of 1,500 E. W. S. houses has been kept for the year 1984-85 against which the achievement is 700 by end of September, 1984.

9.56. In urban areas the Orissa State Housing Board, Bhubaneswar Development Authority, Rourkela Regional Improvement Trust and the Berhampur Regional Improvement Trust are constructing houses for economically weaker sections. The cost of the house was Rs.8,000 previously which is now being raised to Rs.12,000. These schemes are also being taken up with loan assistance from HUDCO.

#### 11. (a) Maximisation of Power Generation

9.57. The power system in Orissa is predominantly hydroelectric. There is only one Thermal Power station at Talcher with an installed capacity of 470 M. W. and a firm power generation of 330 M. W. the existing installed capacity of completed power projects in the State is 1,134 M. W. with a firm capacity of 614. In addition, four multi purpose, projects namely, Rengali, (Stage-I), Upper Kolab (Stage-I), Upper Indrabati and Hirakud (Stage-III) having total installed capacity of 977.5 M. W. and firm power capacity of 395 M. W. are under execution.

9.58. During 1983-84, a target for generating 3,859 M. W. from different installed projects was fixed against which the achievement was 4,032 M. W. The Balimela Power Station achieved an all time maximum of 7.8 M. U with average generation of 366 M. W. In the Thermal power generation, there is scope for improvement as the project is facing problems of low quality coal and non-functioning of Electrostatic precipitator. All attempts are being made to remove the constraints and improve the Thermal generation. For taking up an overall improvement in the performance of the Thermal Power generation, an estimate of Rs.46 crores have been prepared. Since only a small amount of Rs.1.50 crores have been provided in the current year's budget for the purpose, Government of India have been requested for providing requisite funds to the O. S. E. B.

9.59. In the Seventh Plan period, the position regarding generation of power is expected to improve, with the commissioning of two units of Rengali and one unit of Upper Kolab Project and the increase of generation in the 6th unit of Talcher Thermal Power Station.

9.60. Government's ambitious industrial policy has stepped up the demand on power supply for which a new Thermal station with an installed capacity of 840 M. W. has been proposed to be set up in the Ib river valley. A project report of Rs.757.60 crores has been submitted to the C. E. A. for clearance. In addition to the above, it is contemplated to instal at least 10 small/mini Hydel projects in the State. Reports in respect of two of these projects (Potteru and Bargarh canal) has been sent to C. E. A. for clearance. Clearance in respect of the Potteru project has been received in the meantime.

9.61. By the end of the Sixth Plan the installed capacity of Power generating unit in the State is 1,134 M. W. with a firm power capacity of 614 M. W. During the Seventh Plan period, Rengali State-land Upper Kolab Project would be commissioned which would provide additional installed capacity of 340 M. W. with firm power capacity of 155 M. W. Besides Rengali Stage-II, one unit of Ib Thermal, six sets of Gas Turbine, small hydel projects (30 M. W.) and Potteru and Bargarh canal Head Regulator are proposed to be commissioned during the Seventh Plan period. All these Projects on completion will provide 618 MW with firm power capacity of 278 MW. 11(b) :

#### Improvement of the Functioning of the Electricity Authorities

9.62. It has been contemplated to constitute a Power Generation Corporation to take up construction of the new Thermal Project with a view to increasing efficiency and completing the project in time. A separate cadre of engineers working in the Thermal Power unit has been created to boost up the

morale of the officers and staff working in it. It is expected that this step will improve the efficiency and consequently higher generation of power. Alongside these steps, important measures have been adopted to reduce the loss on account of transmission. During the last year, such loss has been reduced to about 18% from 18.13%. During 1983-84, 21.63% more power was sold compared to the year 1982-83.

#### 11(c) Electrification of all villages

9.63. During the Sixth Plan, it was programmed to electrify 6,400 villages and provide power to 95,842 pump sets. Against this, 5,289 villages had been electrified till the end of 1983-84. Against a target of 1,225 villages programmed for electrification during 1984-85, 72 villages have been electrified by the end of September '84. By the end of Sixth Plan, 6,514 villages would be electrified against a target of 6,400. During the Seventh Plan, however, cent per cent coverage of village under village electrification is contemplated depending upon availability of resources.

9.64. Regarding energisation of pump sets, a target of 35,790 was kept during the Sixth Plan period, out of which till the end of 1983-84, a total number of 13,433 pump sets were energised. A programme to energise 6,640 pump sets have so far been energised. For this purpose, the cluster approach has been adopted so that more pump sets can be energised within the limited resources. Small land holdings, apprehension about quality of power supply, higher debt burden, non-familiarity with the practice of selling water, greater flexibility of diesel pump sets etc. have been principal constraints in motivating farmers to take up a larger programme of pump set energisation. However, efforts have been accelerated to overcome these hurdles and, of late, the programme is picking up.

9.65. By the end of the Sixth Plan period 23,745 villages, out of the total number of 46,992 inhabited villages would have been electrified in the State. This brings the level of village electrification to 50.28 per cent in the State as against 60.6 per cent already achieved at the national level by May, 1984.

9.66. In respect of pump sets energisation against the target of 34,150 pump sets to be energised during the Sixth Plan period, the achievement by the end of the Sixth Plan period would be of the order of 20,073 pump sets. This will increase the total number of pump sets energised in the State to 33,031 by the end of the Sixth Plan.

9.67. During the Seventh Plan period, it is proposed to cover all the remaining 23,247 villages to achieve cent per cent electrification of villages in the State. Further, it has been programmed to energise 40,000 pump sets during the Seventh Plan period, which includes 26,500 pump sets to be energised through SPA Programme.

#### 12(a); Vigorous Implementation of Afforestation, Social and Farm Forestry

9.68. During the Sixth Plan period a target of planting 2,009.81 lakh number of trees was fixed against which till the end of 1983-84, 3,075.76 lakh number of trees were planted. During 1983-84 alone 1,047.89 lakh number of trees were planted against a target of 935 lakhs trees. During 1984-85, a target of 1,100 lakh trees have already been planted by end of September, 1984. Achievement during the current year is expected to exceed the target. Besides, the Forest Department, various other organisations like Agriculture, H & T W. Department, S.I.D.A., Social Forestry Programme under N.R.E.P., R.L.E.G.P and D.P.A.P. are also entrusted with the plantation programme. A major constraint in the way of fixing a higher target is lack of resources. Against the requirement of Rs.683 lakhs during the current year, it has been possible to locate Rs.283 lakhs only. The balance amount is expected to be available from N.R.E.P./R.L.E.G.P.

#### 12(b):-Development of Bio-Gas and Other Alternative Energy Sources

9.69. In order to give a boost to the programme for adoption of alternate energy sources, an agency i.e. "The Orissa Renewable Energy Development Agency" has been formed in this State with the Chief Secretary as its Chairman. It has undertaken a programme for popularisation of wind mills, solar cookers, fuel from night soil, Photo Voltaic pumps, Aero generators mini/micro hydel projects, besides biogas plants.

9-70. During the Sixth Plan period, a Programme was made to set up 6,342 number of bio-gas plants in the State against which till the end of 1983-84, 2,777 bio-gas plants have been set up. During 1983-84, against a target of 1,000 plants, the achievement was 1,322 (132.20) per cent. During 1984-85 it has been programmed to instal 2,500 plants out of which 598 plants have already been installed till the end of September, 1984. A higher operational target has, however, been kept so that the target can be over-achieved. During the Seventh Plan period, a target of covering 39,500 family type bio-gas plants has been fixed which includes 3,500 plants for the year 1985-86.

9-71. Regarding wind mills against a target of 50, already 36 wind mills have been installed. There is a programme for manufacture of 5,000 solar cookers during 1984-85 out of which 78 have already been sold. A small night soil digester plant has been installed at Puri Town which meets the fuel requirement of 60 rural families.

### 13 Promotion of Family Planning on voluntary basis as a people's movement

9-72. During the Sixth Plan, a target of 7.61 lakhs sterilisation was fixed for the State, out of which achievement till the end of March, 1984 was 5,25,384. During 1984-85 the target has been fixed at 2,38,000 against which the achievement till the end of September, 1984 has been 38,908. A target of 1.52 lakhs was kept under I. U. D. users. The cumulative achievement by end of March, 1984 was 1.12 lakhs. For 1984-85 a target of 76,000 has been kept and the programme is under implementation. For C. C. Users a target of 3.95 lakhs has kept for the Sixth Plan against which the achievement by March, 1984 has been 2.90 lakhs. During 1984-85 the target has been fixed at 2.00 lakhs and the programme is being vigorously pursued.

9-73. During 1983-84 under I, U. D insertion only, the target was exceeded. But on account of shortage of doctors and other paramedical staff, shortage of instruments and vehicles, the achievement under sterilisation could not reach the target. Adequate measures have been taken during the current year for removal of these constraints so that the target can be achieved fully.

9-74. As a measures of incentive, the State Government have introduced a scheme of awards for their field workers and also for District Magistrates, S. D. Os., B. D. Os and others who achieve considerable success in family welfare programmes. The "Green Card" system has also been introduced to provide incentive to the employees, who voluntarily accept terminal methods of family planning.

### 14(a). Substantial Augmentation of Universal Health care Facilities

9-75. A target was fixed to open 20 more P. H. Cs. (10 in tribal and 10 in non-tribal areas) during the Sixth Plan period. Out of this, till the end of 1983-84, 16 P. H. Cs have been established and during the current year (1984-85) 7 more P. H. Cs, are to be established. Besides construction of 5 additional P. H. Cs. are under progress in tribal areas. Before the Sixth Plan, 314 P. H. Cs. existed in the State out of which 12 more upgraded by providing 24 additional beds to each P. H. C. During the Sixth Plan, 5 more P. H. Cs have been upgraded by the end of 1982-83. Services of specialists in paediatrics and Gynaecology have been provided in all the upgraded P. H. Cs. alongwith necessary equipment and ambulance vehicles.

9-76. Before the beginning of the Sixth Plan, the State had 2,038 Sub-Centres. During the Sixth Plan period, it was programmed to establish 2,300 additional Sub-Centres. Out of this, the total achievement up to end of 1983-84 is 1,749. During 1984-85, a target has been fixed to establish 340 Sub-Centres and steps are under way of their establishment.

9-77. The Seventh Plan proposal have been formulated keeping in view the national health policy of "Health for all by 2,000 A. D." According to the existing norm, an additional Primary Health Centre is required to be provided for more than one lakh population in the non-tribal area and one for 50,000 population in the tribal areas. Accordingly, it has been proposed to establish 100 additional P. H. Cs. during the Seventh Plan. The target for the year 1985-86 is to cover 20 additional P. H. Cs.

9-78. As per the norm of opening one Sub-Centre for a population of 5,000, the State requires 5,540 Sub-Centres. In the beginning of the Sixth Plan there were 3,038 Sub-Centres in the State. During the Sixth Plan period 2,089 Sub-Centres were added, bringing the total number of Sub-Centres to 4,127 by the end of the Sixth Plan. A programme of establishing 1,277 more Sub-Centres during the seventh plan period has been envisaged. The target for 1985-86 is proposed to be 402 Sub-Centres. It is also proposed to construct buildings for 300 Sub-Centres, during the Seventh Plan period.

9-79. Two Ayurvedic dispensaries and two Homoeopathic dispensaries are proposed to be upgraded to that of subsidiary Health Centres during the current year. It is also proposed to establish 15 Subsidiary Health Centres in Ayurvedic and 15 Subsidiary Health Centres under Homoeopathic during the Seventh Plan period. In addition to the above 25 Homoeopathic Community Health Centres are proposed to be done during the year 1985-86.

#### **14(b)—Control of Leprosy, T. B. and Blindness.**

##### **Control of Leprosy**

9-80. For control of leprosy, a composite programme comprising health education, early identification of cases after mass survey, and regular treatment of identified cases followed by rehabilitation of disabled and cured cases have been adopted. Under this programme 42 Leprosy Control units, 16 upgraded Leprosy Control units, 16 Urban Leprosy Centres, 2 upgraded Urban Leprosy Centres and 10 temporary hospitalisation wards, 227 S. E. T. centres 38 non-medical supervisors, 10 District Leprosy Units and one upgraded Leprosy Unit are functioning in the State. By the end of 1983-84, 301,181 Leprosy cases were detected, 129,771 cases were treated and 23,379 cases were discharged. During 1984-85 a target has been fixed to detect 45,000 new cases out of which 20,304 have already been detected. Out of them, 19,541 have been treated. During the same period it has targeted to discharge 20,000 cases out of which 3,415 cases have been discharged.

9-81. There is a proposal to set up a rehabilitation centre at Puri at a cost of Rs. 53.93 lakhs for which the Government of India have agreed to provide assistance of Rs. 18.50 lakhs. They have been requested for higher order of assistance for this programme. For proper rehabilitation of leprosy patients, steps have been taken to bring eligible persons under the Old Age Pension Scheme.

##### **Control of T. B.**

9-81. It is estimated that there are 5 lakh persons in the State suffering from active T. B. out of which 2 lakhs are infective category. For control and treatment of these cases, 3 T. B. hospitals, 14 District T. B. Centres, including T. B. Wards attached to District Headquarters Hospitals, one Anti-T. B. Demonstration Unit attached to S. C. B. Medical College, Cuttack and ten-bedded T. B. wards attached to 11 Subdivisional Hospitals are already in operation. Besides, immunisation programme for protecting persons up to the age-group of 20 and special measures for collection of sputum for investigation have also been taken up by trained technicians. During 1983-84, against a target of 37,500 kept for detection of new T. B. cases, 23,590 cases were detected and 23,350 cases were treated. For 1984-85, the target has been kept at 38,500 for detection of new T. B. cases and their treatment out of which 9,473 cases have been detected and 7,956 cases have been treated.

##### **Control of Blindness**

9-83. During 1982-83, 1,22,405 cases of blindness were examined and 14,600 cases were operated. During 1983-84 it was programmed to examine 2 lakh cases and operate 30,000 cases against which 3,37,640 were examined and 17,000 were operated. For 1984-85 a similar target has been fixed as for 1983-84 against which 80,433 cases have been examined and 1,609 cases have been operated so far. The State is implementing the national programme for prevention of visual impairment and to control blindness. All the District Headquarters Hospitals and Capital Hospital at Bhubaneswar have been provided with Specialist and additional beds including instruments and equipments. Besides, 60 P. H. Cs in the State have been provided with special equipments for eye examination and operation. Three mobile units have also been attached to three medical colleges for taking up eye examination and operation in camps at out of way places.



**15(a) Accelerated Programme of Welfare for Women and Children**

9-84. A number of programmes designed to promote the welfare of women including rehabilitation and training to destitute women, establishment of Craft Centres and marketing of the articles produced, establishment of short stay homes and legal aid in dowry prohibition cases etc. have been under operation. 54 organisations have been running in the State to take care of neglected orphan and destitute children to which the Government provide 90 per cent financial assistance. In the Integrated Child Development Scheme (I. C. D. S. P.) package of services like supplementary nutrition, immunisation, health check up, referral services, health services and non-formal education facilities are provided. These are supplemented with functional literacy for adult women.

9-85. Up to 1982-83, 28 I. C. D. S. projects were operating in the State (13 in rural areas, 14 in tribal areas and one in urban slum areas). During 1983-84, 16 I. C. D. S. projects were opened (9 in tribal and 7 in rural areas). Each of these projects have been provided with a Child Development Project Officer. Further strengthening of these projects by posting supervisors is being taken up. During the current year no new project under I. C. D. S. is to be set up in the State.

9-86. After training in the five training centres in the State Anganwadi workers are appointed in these projects for implementation of this programme in the rural areas. So far 2,420 such workers have been trained. Besides two Home Economic Centres are also functioning in the State to impart training to women functionaries like Job training are refresher training to L.V. I. Ws, and training of associated women workers.

9-87. In the field of functional literacy of adult women in I. C. D. S. projects, non-formal education is provided to illiterate women in order to enable them to acquire the skills of literacy in functional literacy classes. This programme also promotes better awareness among the women about modern methods of health and hygiene and child care. For this purpose, 2,200 functional literacy centres were opened. Till end of June 1984, 73,568 women have attended the functional literacy centres. For improvement of their social status, appropriate programmes for women and child welfare like women's training, establishment of sales centres, incentive awards to Mahila Samitis, income generating activities for Mahila Samitis, maintenance of orphans, destitute women, Balwadis crech programme, etc. are under progress.

9-88. Under welfare of children in need of care and protection for orphans/destitute women, a sum of Rs. 104.44 lakhs have been spent from 1980-81 to 1983-84 in which 10,783 children have benefitted. Under the Balwadi and Special Nutrition Programme, 341 buildings have been constructed during 1979-80 to 1983-84. 2,975 posts of Anganwadi workers have been filled up only by women workers out of the sanctioned strength of 3,680. Three working women hospitals have been constructed in the State under Centrally Sponsored Programme. Besides, voluntary organisation have also been associated to take up women and Children Welfare Programmes in the rural area.

**Development of Women and Children in the Rural Areas Scheme (D.W.C.R.A.)**

9-89. D. W. C. R.A is also under implementation in the State alongwith the training scheme for women to take up jobs in non-traditional trades like electronics, pharmaceuticals, export oriented projects, etc.

**15(b)-Nutrition Programmes for Pregnant Women, Nursing Mothers and Children, especially in Tribal, Hilly and Backward Areas.****Nutrition Programme**

9-90. During 1982-83, 20,31,000 beneficiaries were covered under various nutrition programmes School CARE (URBAN), Pre-School (CARE), Pre-School (S.N.P., etc.) During 1983-84 20,26,000 beneficiaries were covered under the same programme. During 1984-85, a target has been kept to cover 20, 30, 000 beneficiaries and the scheme is being implemented.

9.91 During the Seventh Plan period, it is proposed to cover 6 lakh additional beneficiaries under Special Nutrition Programme with local food. Out of which 1,52,600 beneficiaries are proposed to be covered in 1985-86. As the CARI feeding programme will be withdrawn gradually, it is proposed to provide mid-day meal programme under State Plan. Accordingly, 3.50 lakh beneficiaries are proposed to be covered during the Seventh Plan period in a phased manner. In the year 1985-86, it is proposed to cover about 1.80 lakh beneficiaries under the upgradation programme. It is proposed to cover 6 lakhs more beneficiaries during the Seventh Plan period.

#### Immunisation Programme

9.92. The achievements under the immunisation programme during the year 1982-83 and 1983-84 and the programme for the year 1984-85 are indicated below:—

Item	(in 000 Nos.)		
	Achievement in 1982-83	Achievement in 1983-84	Target for 1984-85
(1)	(2)	(3)	(4)
D. P. T.	330.6	305.14	500
D. T.	344.8	333.57	500
Polio	95.0	167.94	400
B. C. G.	499.6	603.44	500

#### 16 (a) Spread of Universal Elementary Education for the Age-Group 6-14 with Special Emphasis on Girls

##### Universal Primary Education

9.93. The target for enrolment for the age-group 6-11 was fixed at 31.58 lakhs during the Sixth Plan period against which the achievement during 1982-83 was 30.06 lakhs. During 1983-84, the entire target of 30.41 lakhs was achieved. During 1984-85, 31.95 lakhs have already been achieved out of the target of 32.06 lakhs. For enrolment in the age-group of 11-14 target fixed for the Sixth Plan was 7.78 lakhs. During 1982-83 6.79 lakhs were achieved. Against a target of 7.17 lakhs during 1983-84, the achievement was 7.05 lakhs. During 1984-85, against a target of 7.78 lakhs, an achievement of 7.67 lakhs has already been made.

9.94. For enrolment of girls in the age-group of 6-11, the Sixth Plan target was fixed at 12.53 lakhs. During 1982-83, the achievement was 11.82 lakhs. During in 1983-84 against a target of 11.95 lakhs, the achievement was 11.98 lakhs. During the current year (1984-85), the achievement has been 12.80 lakhs against a target of 12.68 lakhs. For enrolment of girls in the age-group of 11-14, the Sixth Plan target is fixed at 2.71 lakhs. During 1982-83, the achievement has been 2.32 lakhs. During 1983-84, the achievement was 2.43 lakhs against a target of 2.46 lakhs. During 1984-85, the achievement has already been 2.58 lakhs against target of 2.71 lakhs.

9.95. During the first two years of the Sixth Plan period 800 new L. P. Schools were opened and 1,050 Schools were upgraded to U. P. Schools. During the same period 421 U. P. Schools were upgraded to M. E. Schools and from 1980-81 to 1983-84, 1,400 additional Primary School teachers were appointed in the existing Schools.

### **Achievements Under Non-Formal Education**

9-96. The Sixth Plan in Orissa envisages opening of 8,000 Primary stage and 5,600 middle stage Non-formal Education Centres in order to achieve the goal of universalisation of Elementary Education. The cost in this connection (except Girls Centres) is to be shared by the Government of India and the State Government on 50:50 basis as per revised norm of Government of India. Prior to 1983-84, 2,400 Primary level Non-formal Centres and 1,600 Middle level Centres were functioning. During 1983-84, 3,560 Primary level N. F. Centres have been opened. Out of these, 560 Centres are exclusively for Girls. In addition to the above new 560 Girls Centres, Government have also decided to open 1,000 general centres and 2,000 girls centres during current financial year 1984-85. The enrolment in the non-formal stream in the age-group of 9—14 has been proposed at 2.64 lakhs for the current year against which the achievement by end of September, 1984 is 1.63 lakhs.

#### **Non-Formal Education Centres Exclusively for Girls**

9-97. Towards end of the last financial year 1983-84, a total number of 560 girls Primary stage N. F. Education Centres were opened in this State as per the decision of Government of India on 90:10 sharing pattern (i.e., 90% Central share+ 10% State share) with a view to increasing the enrolment and to educate the non-enrolled girls students in age-group (6—11). Apart from the above, there is a proposal for opening of 2,000 more such Girls Centres in the State during the current financial year 1984-85. The enrolment of girls in the non-formal stream during 1984-85 (by end of September, 1984) is 0.63 lakh against a target of 0.58 lakh.

9-98. Government have taken a decision to give preference to lady candidates for appointment as Primary School teachers. As a result, during 1983-84, 500 lady teachers have already been appointed in the Primary Schools. The Government of India assistance for appointment of 200 women teachers in Primary Schools during 1983-84 was received late for which it is being utilised during the current year. A proposal has been sent to Government of India for appointment of 1,200 lady teachers with an expenditure of Rs. 56,60,160 during 1984-85.

9-99. During the Seventh Plan period, it has been proposed to enroll of the children in the age-group 6—11 by 1990. While 98.3 per cent of the child population would be covered through formal schools, the balance will be covered through non-formal schools. It has been proposed to enroll a total of 43.40 lakhs children in the age-group of 6—11 including over aged children i. e., 37.62 lakh under formal schools and 5.75 lakh under non-formal schools.

9-100. In the age-group of 11—14 years it is expected that 7.78 lakhs children would have been enrolled by the end of Sixth Plan covering 32.7 per cent in the formal schools. If the students in the non-formal schools are added the percentage achieved by the end of Sixth Plan is 39.45 percent. During the Seventh Plan period it has been proposed to cover 65 per cent of the children in the age-group of 11—14 which includes the non-formal centres also.

#### **16 (b)— Simultaneous Involvement of Students and Voluntary Agents in the Programmes for Removal of Adult Illiteracy**

9-101. There were 3,900 centres operating during the year 1982-83 with an enrolment of 1.17 lakh adults for providing literacy amongst the adults in the age-group of 15—35. The number of centres has been increased to 4,500 subsequently. The Sixth Plan target for this purpose was fixed at 5.85 lakhs. During 1982-83, against a target of 1.17 lakhs, the achievement was 1.35 lakhs. During 1983-84 the target of 1.59 lakhs, was fully achieved and during 1984-85 the target has been kept at 2 lakhs against which the achievement has been 1.47 lakhs so far. It is also expected to be achieved fully. During 1984-85, the number of centres is proposed to be enhanced to 6,850 for this purpose.

9-102. Out of the total illiterate adults of 55.35 lakhs in the State in the age-group of 15-35 years, by the end of 1984-85, 2.115 lakhs learners would have been covered. Therefore, the balance 51.58 lakh illiterate persons are proposed to be covered by the end of the Seventh Plan period. The target for the year 1985-86 has been proposed to cover 4.33 lakh illiterates in the State. This is proposed to be achieved through adult Education Centres under Central sector, State sector, Voluntary Agencies, Nehru Yuvak Kendra, NSS and others.

**17- Expansion of Public Distribution System through more Fair Price Shops including Mobile Shops in Farflung areas and Shops to cater to Industrial Workers, Students Hostel and Making Available to Students Text Books and Exercise Books on Priority Basis and Promotion of a Strong Consumers Protection Movement**

9-103. A target of opening 4000 Consumers Co-operative outlets (fair price shops) was fixed for the Sixth Plan period. The achievement has been 5091 including 87 opened in educational institutions. The State has a total number of 19,733 fair price shops including private fair price shops. Even though the target fixed for the Sixth Plan period has been over achieved, an additional target of 215 Consumers Co-operative outlets has been programmed to be opened during 1984-85 out of which 33 have been opened till the end of September, 1984. The State Government have a programme to open at least one Consumer Co-operative outlet in every Grama Panchayat of the State. The total number of Grama Panchayats is 4,342. Apart from meeting requirement of essential commodities of the consumers, these co-operative outlets have been utilised for sale of Janata cloth, text books published by the Board of Secondary Education and Text Book Press as well as the paper supplied at concessional rates.

**18 (a) -Liberalisation of Investment Procedures and Streamlining of Industrial Policies to Ensure Timely Completion of Projects**

9-104. The State Government have adopted a progressive industrial policy which provides a package of incentives and concessions to entrepreneurs along with a well defined set of administrative measures aimed at rapid industrialisation of the State. Various assistance is provided through a single point contact forum for large and medium scale industries under the Industrial Promotion and Investment Corporation of Orissa Ltd. Similar facilities are available to small scale industries through the District Industries Centres. All efforts are made by these institutions to clear proposals for setting up of new industries and expansion of existing ones administratively within a three week period. A High Power Nodal Committee under the Chairmanship of Chief Secretary has been set up to solve various problems of entrepreneurs obviating the time consuming processes of inter-departmental references. Constant efforts are being made to review the prescribed rules and procedures so as to offer better incentives and remove procedural bottlenecks to accelerate the pace of industrialisation in the State.

9-105. Governments participation in the capital investment of different industries is being routed mainly through the Orissa State Financial Corporation and the Industrial Promotion and Investment Corporation Ltd. Both these institutions are working as the State Retinancing Agents on behalf of different national level institutions for industrial finance. Substantial delegations have been made in favour of these Corporations.

9-106. As a result of such policy measures, 71 large and medium scale industries have come up in the State during the last four years. These Industries account for a total investment of over Rs. 152.56 crores with a direct employment potential of nearly 13,914 persons. Besides 92 large and medium industries with a total investment of Rs. 261 crores offering direct employment to nearly 20,476 persons have been identified and are now in various stages of implementation.

9-107. The Sixth Plan outlay for large and medium industries is Rs. 3400 lakhs. During the first four years, the expenditure has been of the order of Rs. 3827 lakhs. The current year's Budget provision is Rs. 1900 lakhs. Together, the expenditure is going substantially exceed the Sixth Plan provision initially made. The tempo of industrialisation in the State has reached such a stage that it needs to be kept up by adequate investment.

9-108. In accordance with the Industrial Policy of Government of India, the State Government have decided to have Nucleus Industrial Complexes in Chandaka near Bhubaneswar and in the backward districts of Balangir, Kalahandi Mayurbhanj and Dhenkanal. Substantial progress has been achieved in locating industries in Chandaka Complex. The Industrial Complexes at other places are at various stages of implementation.

9-109. The Government of India have declared Balasore, Phulbani and Balangir as No-Industry Districts. ORITCO is preparing the detailed bankable scheme for No-Industry Districts as per the norms of IDBI and Central Government Guide-line. IDCO is preparing the estimate for Infrastructure Development. For Balasore, the Project Cost has been estimated tentatively at Rs. 19.75 crores, which includes the expenditure incurred by State Government on power, Roads and Bridges during 1983-84 and budget provision for 1984-85. For Balangir and Phulbani the scheme will be prepared by ORITCO subsequently.

9-110. The Government have set up the following corporations in the State for implementation of the Industrial Development Programme by setting up a number of units of production. These corporations are as follows:—

Name of the Corpn.	Total investment (in crores)	Total No. of units set up	Employment generated No. of persons
Industrial Promotion and Investment Corporation of Orissa Ltd. (IPICOL)	83.61	66	7440
Industrial Development Corporation (I. D. C)	78.80	15	7352

#### **Infrastructure Development Corporation of Orissa**

9-111. During the 6th Plan, this Corporation had a programme of developing 2000 acres of land putting up 1075 industrial sheds and 672 industrial houses out of which it has developed 1318 acres of land, and has set up 605 industrial sheds till the end of 1983-84. The industrial housing scheme is under operation.

#### **Orissa State Financial Corporation**

9-112. This corporation has been established for providing term loan and quick financial assistance to different projects taken up in the State. From 1980-81 to 1983-84, it has sanctioned Rs. 178.15 crores as loan out of which it has disbursed Rs. 106.53 crores.

#### **Industry**

9-113. During the Sixth Plan period, Orissa had adopted a dynamic Industrial Policy and has built up the tempo of industrialisation in the State. This tempo has to be continued during the Seventh Plan period. The infrastructure Industrial Development Corporation as proposed to develop 3940 acres of land construction of 1990 industrial sheds and 1320 houses during the Seventh Plan period. The activities will be concentrated more on the no-industry districts of Balasore, Balangir and Phulbani. IPICOL as a major promoter of industries in the state, propose to complete 61 spillover projects of the Sixth Plan and to promote 104 new projects during the Seventh Plan period.

#### **18 (b) All facilities to handicrafts, Handlooms, small and village Industries to enable them to Grow And Update Their Technology.**

##### **Small Scale Industries**

9-114. The target for setting up of 14,000 small scale industrial units with capital investment of Rs. 104.71 crores generating employment for 1,03,860 persons has been proposed for the Sixth Plan period. During the first four years of the Plan, 11,116 small scale industrial units have been set up with a capital investment of Rs. 9,779 lakhs providing employment to 82,290 persons. With fulfilment of the target of 3000 units for the current year, it is hoped to exceed the target of the Sixth Five-Year Plan by the end of 1984-85.

### Artisan based Industries

9-115. The target for the Sixth Plan is to set up 2,43,000 artisan units in the State within investment of Rs. 25.55 crores which would provide employment 3,42,380 persons in the rural areas. By the end 1983-84 already 2,72,652 such units have been set up with a capital investment of Rs. 46.39 crores providing employment to 4,41,901 persons. The achievement under the artisan sector has been quite significant and has already exceeded the Sixth Plan target. The State has secured top-most position among different State in respect of the development in the artisan sector. However, it has been found from the recent reviews that a large number of units in the service and business sectors have been set up which has resulted in concentration of certain trades and abocations in certain areas. Action has already been taken to reduce further concentration and to diversify the units.

### Handlooms

9-116. In keeping with the emphasis laid on the growth and technical development of handlooms under the 20-Point Programme, high priority has been accorded to handloom development programme during the Sixth Plan period. The main thrust of this programme is on covering 85,000 active looms by end of Sixth Plan out of the total 1.05 lakhs looms existing in the State in the organised sector with the twin objectives of providing sustained and gainful employment to 1.7 lakhs weavers thereby substantially increasing production of handloom fabrics to meet burgeoning cloth requirement of the masses. Against this target, the achievement up to end of 1983-84 is 80,456. The target for 1984-85 has been kept at 6,000 against which the achievement up to end of September, 1984 has been 2,282.

9-117. *Looms modernised*—The target for modernisation looms by end of the Sixth Plan period is 72,006 against which the achievement up to end of 1983-84 is 49,163. During 1984-85, a target of 15,199 is fixed out of which 3,490 has already been achieved by end of September, 1984. During 1983-84 the target was fully achieved and it is expected during the current year also the target will be achieved.

9-118. *Production of cloth under organised sector*—The target for production of cloth under organised sector was 850 lakh square meters out of which 666.79 lakhs square meters has been achieved during 1983-84 itself. During 1984-85 a target of 850 lakh square metres has been kept against which 306.57 lakh square meters has already been produced by end of September '84. It is expected that the target during the current year will also be achieved. In the small scale industries 21,000 Small Scale Units are proposed to be set up to provide employment to two lakh persons. In the artisan sector, 3.75 lakh units would be established to provide employment to 7.5 lakh persons. Handicraft products will be encouraged through co-operatives. The production of handicraft is proposed to be increased to 40 crores to provide employment to one lakh persons. In the Handloom sector the main emphasis will be on improving the quality of the life of the Handloom weavers by providing facilities like housing, insurance, coverage, etc. The production of Handlooms will increase from the present level of 90 million meters to 126 million meters per annum by the end of the Sixth Plan. In Sericulture, the annual silk production will be increased to 2.50 lakh Kgs. per annum from the existing level of 1 lakh Kg. per annum. This will also provide gainful employment to about 25,000 people. The incentives and the concessions offered during the Sixth Plan period will be reviewed basing on the past experience and suitably re-oriented to increased production for fully utilisation of the capacity already created.

### 19. Continuation of Strict Action Against Smugglers, Hoarders and Tax Evaders and Check up Black Money

9-119. State Vigilance Organisation has been geared up to detect cases of Tax Evasion, Smuggling and Hoarding, etc. During the year 1983-84, this organisation has conducted several special raids and have detected 1,081 cases of Sales tax evasion, 726 cases of smuggling of timber and other forest produce, detection of 829 cases for violating Weights and Measures Act, 192 cases of Food Adulteration, 142 cases of various offences under Motor Vehicle Act and 20 cases under Essential Commodities Act. These detections have helped the State Government to increase their revenue. During this year also, such raids are continued by the State Vigilance Organisation.

9-120. In order to vigorously check the smuggling of timber and other forest produce, the provision of the Orissa Forest Act was amended to empower the Divisional Forest Officers to confiscate any vehicle used for smuggling purposes. This has resulted in seizure of vehicles along with the forest produce smuggled. This also helped to increase the forest revenue by enforcing the seizure of vehicles.

9-121. The departmental officers also conducted organised raids to detect cases of Sales tax evasion, malpractices in Weights and Measures, food adulteration cases, violation of Motor Vehicle Taxation Act and detection of cases under Essential Commodities Act. The departmental activities will be stepped up during the Seventh Plan period to be more vigilant in checking tax evasion, hoarding and other offences.

**20. Improving Working of Public Enterprises By Increasing Efficiency capacity Utilisation and Generation of Internal Resources.**

9-122. The State Government have established 31 Public Sector Undertakings besides two Co-operative Corporations. The working of Public Sector Undertakings including Statutory Corporations is periodically reviewed by the respective Boards of Management of concerned undertakings. Official Review Committees under the Chairmanship of the Secretary of the concerned Administrative Department have been reviewing the performance of different Undertakings every month. The Planning & Co-ordination Department as the nodal Organisation for Public Sector Undertakings lays down operational policies and undertakes half-yearly and annual reviews of performance of different Public Sector Undertakings.

9-123. The High Level Committee under the Chairmanship of the Minister, Finance reviews the performance of selected Undertakings from time to time. During the year 1983-84 this Committee had reviewed the performance of Orissa State Seeds Corporation Limited, Orissa Forest Corporation Limited, Industrial Development Corporation Ltd., Konark T. V., Orissa State Financial Corporation, Orissa Lift Irrigation Corporation Ltd. Industrial Promotion Investment Corporation Ltd. and Orissa Small Industries Corporation Ltd.

9-124. According to revised guidelines the Project Approval Committee under the Chairmanship of the Chief Secretary examines all new investment proposals of various State Government Undertakings which involve capital investment of Rs.5 lakhs or more except in case of IPICOL where the said limit is Rs. 17 lakhs for backward districts and Rs. 12 lakhs for other districts. This Committee met 4 times during 1983-84 and considered 14 proposals referred to it.

9-125. The Official Level Committee set up by the State Government for evolving suitable guidelines to bring about uniformity in the functioning of different State Government Undertakings met several time during the course of the year and has already formulated its recommendations. The Committee has already submitted an interim report to the Government which is under examination. The final report of the Committee is expected shortly.

## CHAPTER 10

## EXTERNALITY AIDED PROJECTS

**A. IDA-Assisted Projects.**

10.1. The following I. D. A. Assisted Projects are under implementation.

**(1) National Agricultural Extension Project.**

10.2. The I. D. A. Assisted Orissa Agricultural Development Project (Credit No. 682-IN) was in operation since July 1, 1977 and the Project has been completed in June 30, 1984. Although a multi-component project, the major focus was on reorganisation of Agricultural extension and research and it was one of the first I. D. A. Assisted Projects to support the training and visit extension methodology on a Statewise basis. Over all physical performance has been good and most targets achieved during the project period. A major advance in rice productivity has occurred, particularly for autumn and winter (Kharif) rice which together account around 95% of the gross area planted to the crops. This increase appears to have been the trigger for diversification into other crops. Productivity increase in the case of these other crops has been more variable and project period averages have been depressed by the particularly severe drought in 1979-80. However, because of the major expansion in area planted, production of the non-rice crops has increased by between 40 and 70% while rice production, despite a fall in area planted of 6% has also increased by 4%.

10.3. The multi-state National Agricultural Extension Project is operative in the States of Madhya Pradesh, Rajasthan and Orissa for five years to provide continuing assistance initiated under the I. D. A. Assisted extension projects. The Project is retro-actively financed from July 1, 1984. The total Project cost for Orissa portion is Rs. 1986.29 lakhs (about US 18.1 million) inclusive of contingencies. The I. D. A. would reimburse about 60% of the total Project cost. The year-wise details of base cost has been indicated in the annex-I exclusive of total physical contingencies of TRs 10,821 and price contingencies of TRs. 30,903. The proposed Seventh Plan out lay on NARP is TRs. 1,96,030 and out lay for 1985-86 is TRs. 32,900. The Project provides to support the following components.

10.4. *Incremental staff* : To strengthen the extension set up there is provision for additional No. of 96 subject Matter Specialists in Agronomy, Plant Protection, Horticulture and Land and Water Management etc. Appointment of 130 supporting staff to up grade existing administrative envisaged.

10.5. *Information Support* : A small press unit and support staff would be added in 12 Agriculture Range Offices to prepare and distribute technical literature and audiovisual materials for use by field extension workers.

10.6. *Monitoring and Evaluation* : A Monitoring and Evaluation unit would be established in the Department of Agriculture headed by a J. D. A. He will have supporting staff both at Headquarters and at field Offices.

10.7. *Civil Works* : The project provides for 3,000 VAW, 318 AEO, and 139 AJAO/DAO/SMS quarters, 13 small training halls and 15 Office buildings.

10.8. *Transport* : Adequate transport facilities were provided in the O. A. D. P. Therefore, under this project replacement of 2 Cars and 38 Jeeps have been provided. To facilitate movement of VAW, AEO and SMS, loan would be provided to purchase 750 bi-cycles and 300 Motor Cycles/Mopeds.

10.9. The Project also provides for training, equipment and various incremental operating expenses



**(ii) Major and Medium Irrigation Projects (I.D.A. Assisted)**

10-10. One of the main objectives of the Seventh Plan to achieve break through in rice production particularly in the Eastern Region. Orissa is a rice producing State and unless there is a massive thrust in Irrigation with additive outlay over and above Rs. 860.00 crores, the break-through may not be possible in this State.

10-11. The outlay for I.D.A. assisted Major and Medium Irrigation in Seventh Plan is proposed to be Rs. 679.52 crores. The proposed annual out lay for 1985-86 is Rs. 84.04 crores.

10-12. Out of 36 ongoing projects of Seventh plan 20 projects were taken up prior to Sixth Plan. The spill over cost of these projects against updated cost is Rs. 1,186.07 crores. The State Government had taken steps to accelerate its development through external credit/loan assistance.

10-13. The projects so far covered under external credit/loan assistance and in pipeline to be sponsored for the same are as follows: —

Name of Project	(Rupees in crores)	
	Project cost	Approximate credit value
1. Mahanadi Barrage Project (Credit 1978-IN) ..	92.65	69.72
2. Subarnarekha Project (Bihar & Orissa) (Credit 1289-IN) ..	163.73	114.30
3. Upper Indravati Hydro Power Project (Credit 1356-IN) ..	481.00	326.40
4. Orissa Irrigation-II Projects (Credit 1397-IN) ..	133.86	105.00

10-14. In addition to these Rengali Irrigation Project and six new projects are proposed to be posed for I. D. A. credit assistance during the Seventh Plan. 18 medium Irrigation projects are now being executed under World Bank credit No. 1397-IN. These are Dumerbahal, Pilasalki, Ramiala, Kuanria, Daha, Remal, Sarafgarh, Jharbandh, Talasara, Gohira, Sunel, Kansabahal, Bankabal, Kanjhari, Hariharjore, Harbhangi, Upperjonk, and Badinala. Out of these 18 projects the last 3 projects will spill over and completed during the Seventh plan. Six medium projects, namely, Kasei, Rukura, Deo, Baghalati, Sapua, Badajore and Upper Samakoi are taken up for I. D. A. assistance in 7th Plan.

10-15. The additional potential creation during the Seventh Plan is likely to be 188.34 thousand hectares Kharif, 103.99 thousand hectares Rabi and 292.33 thousand hectares gross. The potential creation through major and medium irrigation projects at the end of Seventh Plan would be 1022.19 thousand hectares Kharif, 490.26 thousand hectares Rabi, and 1512.45 thousand hectares gross,

**(iii) Hydro Electricity Projects (I. D. A. Assisted)**

10-16. Upper Indravati Hydro-Electricity Project is a World Bank Project. The estimated cost of the project was Rs. 380.50 crores. By the end of 6th plan Rs. 39.85 crores will be spent and the balance amount likely to be required in the Seventh Plan is Rs. 333.82 crores. The rest Rs. 6.98 crores will be provided in the Eighth Plan.

10-17. Government of Orissa have accorded administrative approval for the project for an estimated cost of Rs. 208.15 crores. During the subsequent appraisal the project cost has been revised to Rs. 481.00 crores including physical contingencies but excluding escalation,

10-18. The project provides for construction of 4 dams, 8 dykes across the river Indravati and its tributaries and construction of a power station with an installed capacity of 4 ~~3~~ 150 M. W.

10-19. Loan agreement with the World Bank group was signed on 8th June 1983 for Loan of S. D. S. 156 million and U S 156.4 million procurement of Turbine Generator sets and auxiliaries 11 K. V. bus duct, 11/220 K. V. power transformer, unit auxiliary station services transformer, 220 K. V. circuit breakers, P.T.C.T. 220 K.V. isolators, L.A.H.O.T. crane, R.F. valve etc. Will be taken up.

**(iv) N.C.D.C. III— Co-operative Storage Project**

10.20. The storage godown space required in the State is estimated at 6.45 lakhs M.T. against which storage capacity of 3.62 lakhs M.T. would be available by the end of 6th Five-Year Plan. With a view to meet the deficiency of 2.63 lakhs M.T. storage capacity N.C.D.C. as well as World Bank have already cleared N.C.D.C. III storage project at a cost of Rs. 23.47 crores to be implemented during 1984-85/1987-88. Under N.C.D.C.—III project the following sub-projects (Storage godown) have been cleared:

Name of the beneficiary	No. of godowns	Capacity
PACS (100T) ..	741	74,100
RCMS (250T) ..	375	1,04,250
(500T) ..	21	
Federation (100T) ..	24	50,000
(200T) ..	13	
T.D.C.C. (500T) ..	1	8,500
(1000T) ..	8	
O.C.C.F. (250T) ..	13	25,750
(500T) ..	17	
(1000T) ..	10	
(2000T) ..	2	
<b>Total</b> ..	<b>1,225</b>	<b>2,62,600</b>

10.21 Out of Rs. 23.47 crores required for these projects, a sum of Rs. 2.40 crores will be required during 1984-85 which relates to Sixth Five-Year Plan period. The balance amount of Rs. 21.07 crores will be required during 1985-86 to 1987-88 of the Seventh Plan period. According to the financial pattern 50% of the project cost is to be made available to the O. S. C. B. as loan directly from the N. C. D. C. 25% will be made available as Central assistance, 20% is to be borne by the State Government from its own resources as share capital/subsidy and the rest 5% is to be borne by the Society. Thus a sum of Rs. 421.40 lakhs being 20% of the total project cost is to be provided in the State Plan during Seventh Plan period.

**(v) Cashewnut Project**

10.22. This is a I. D. A. assisted Multi-State Project involving four States, namely, Andhra Pradesh, Karnatak, Kerala and Orissa. The Project is implemented since 1980-81 and will be completed during the year 1984-85.

10.23 The Project provides for :—

(a) New plantation on 5,000 hect. and improvement of existing plantations on 2,500 hect. by the State Cashew Development Corporation.

(b) New plantation on 5,000 hect. by small holders.

(c) Staff, buildings, roads, vehicles and equipments for the Corporation.

(d) Staff, vehicles, equipments and operating cost for the departmental cashew units.

(e) A 500 hectare pilot scheme to determine appropriate cashew planting practices on coastal dune land.

(f) A training programme for departmental and corporation cost.

10.24. The Project is implemented in seven districts of the State, i.e., Balasore, Cuttack, Dhenkanal, Ganjam, Keonjhar, Mayurbhanj and Puri.

10.25. The Project envisages the following pattern of financing of the programme.

(a) *Corporation Programme*

- (i) Government subsidy of Rs. 500 per hectare for new planting.
- (ii) Bank loans for two-third of the Balance.
- (iii) Equity to be subscribed by the State Government to meet the balance one-third. Subsidy is not provided for improvement of existing plantations.

(b) *Small holders programme.*

- (i) 5 per cent farmer equity contribution.
- (ii) 25 per cent Government subsidy which has been fixed at Rs. 615/ per hectare and
- (iii) loan by the commercial banks for the balance. Subsidy is assumed to be paid in three equal annual instalments.

10.26. I. D. A. assistance will cover 48% of the Project cost. As in the case of other externally aided projects the State Government will receive 70% of the external assistance as plan additionally.

*I.D.A. Assistance*

**Physical and Financial target with achievement**

10.27. *Small holders programme*—The project provides 5,000 hect. of new plantation under this programme with an estimated cost of Rs. 123.14 lakhs (loan+incremental project cost). During last 4 years of the project, i. e. from 1980-81 to 1983-84 as against the physical target of 4,250 hect. only 3,320 hect. have been achieved with an estimated cost of Rs. 50.60 lakhs (i.e. Rs. 37.90 lakhs as loan and Rs. 12.70 lakhs as subsidy). The balance 1680 hect. is left to be covered during the year 1984-85

10.28 *Sand dune pilot Scheme*—Against the project target of 500 hect. plantation with an estimated cost of rupees sixteen lakhs over a period of five years only 77 hect. has been covered with an estimated cost of Rs. 1.94 lakhs. Further plantation has been postponed.

10.29. *Corporations Programme* —The total target fixed for the Orissa State Cashew Dev. Corporation was 10,500 hect. of new plantation and rehabilitation of 2,500 hect. of existing plantations during the project period. By end of 1983-84 the corporation was able to surpass the target of rehabilitation by achieving 2,516 hect. As regards new plantation, the corporation could able to achieve only 6,305 hect. till end of 1983-84 against the target of 8,925 hect., during that period. Thus the corporation is required to achieve the balance of 4195 hect. of new plantation during the year 1984-85.

**Budgetary burden during the Seventh Plan**

10.30. Although the project and credit agreement has been done to complete the project during the 6th Plan period i. e., by end of the year 1984-85 now it is felt that the balance physical target of the small holders as well as corporations programme, could not be achieved in the year 1984-85. As such, with the assurance and suggestion of the World Bank and Government of India a proposal has been sent to Government of India for one year extension of the Project period up to 1985-86. As per the revised proposal the physical and financial target of the Project for the small holders and Corporation's programme is given in Annex-II and Annex-III respectively. Total requirement for the year 1985-86 is Rs. 235.44 lakhs. The proposed total outlay in the 7th Plan for the scheme is Rs. 77.50 lakhs and for the year 1985-86 is Rs. 14 lakhs.

**(vi) Inland Fisheries Project**

10.31. The Fisheries Project covers five States namely, Bihar, Madhyapradesh, Orissa, Uttar Pradesh and West Bengal. The estimated cost of the project including duties and taxes is Rs. 35.05 crores. The I. D. A. Credit would constitute about 50% of the estimated cost. In respect of Orissa the total cost was estimated at Rs. 4.69 crores. Subsequently it has been revised to Rs. 5.24 crores.

10.32. The project for Orissa provides for the following programmes.

(i) As per the revised programme provision for construction of four hectares two of 25 hectares each and one of 14 hectares and another of 13 hectares (totalling 77 hect.) for production of Carp fingerlings.

(ii) Provision of credit to fish farmers for improvement of fish farms comprising a total of 16,000 hect. pond area.

(iii) Provision of approach roads for linking project hatcheries with existing communication (at the average rate of three kilometres per hatchers) and

(iv) Provision of funds to establish and strengthen Fish Farm Development Agency (FFDA) one in each Project District to provide extension service and assistance to fish farmers.

10.33. The Orissa Fish Seed Development Corporation was incorporated in December, 1979. The Eleven participating Districts (Balasore, Bolangir, Cuttack, Ganjam, Phulbani, Puri, Dhenkanal, Mayurbhanja, Koraput and Kalahandi) are provided with F. F. D. As to arrange institutional finance for pond development by pisciculturists.

10.34. Under the Seventh Five Year-Plan provision for Hatcheries has been made which is detailed as follows:

10.35. *Hatchery*: under Sixth Five Year Plan a target was fixed for the construction of 70 ha. of modern fish seed hatcheries under Inland Fisheries Project with World Bank Assistance through Orissa Fish Seed Development Corporation.

10.36. *Funding Pattern*— (i) 30% of hatchery construction cost is to be provided by the State Government towards equity share to the Corporation.

(ii) Entire cost of construction of approach road to the hatcheries to be born by the State Government.

10.37. The hatchery construction is expected to be completed during first 2 years of the 7th Five-Year Plan for which a provision of Rs. 41.00 lakhs has been kept in the plan. This will be in addition to Rs. 31.00 lakhs of equity share and Rs. 5.48 lakhs towards approach road construction.

(i) Government contribution towards equity share of OFSDC	Outlay in lakhs
..	Rs. 11.00
(ii) Approach road construction	Rs. 30.00
Total	Rs. 41.00
The provision for 1985-86	Rs. 19.00 lakhs.
(i) Share capital	Rs. 9.00 lakhs.
(ii) Approach road construction	Rs. 10.00 lakhs
	Rs. 19.00 lakhs

Provision under Seventh Plan has been indicated in Annexure IV.

#### Social Forestry (SIDA-assisted)

10.38. A Social Forestry Project with Swedish assistance (SIDA) is being implemented in 9 out of 13 districts of the State at a total outlay of Rs. 23.00 crores for the period 1984-85 to 1987-88. This has been agreed to by Government of India and Government of Sweden as per an agreement between two Governments. The Swedish contribution to the Government of India will be 70% of the Project cost out of which 70% will be available to the State as Plan additionality. Thus the State will get 49% from the Centre and remaining 51% will be the State share. The Swedish contribution will be available to the State as quarterly advances on preferring claims before commencement of each quarter.

10.39. The first two years of this project are covered in the 6th Plan, and the subsequent 3 years in the 7th Plan. In the first two years, the expected expenditure is of the order of Rs. 1.80 crores as against the projected expenditure of Rs. 5.10 crores as per the Project Document. Thus an amount of Rs. 3.26 crores will pill over to the 7th Plan for expenditure over and above the sum of Rs. 17.93 crores, projected for expenditure as per the appraised project document during the first 3 years of the Seventh Plan. Thus as per the appraised Project the total expenditure in the first 3 years of the 7th Plan will be in the order of Rs. 21.19 crores. The Phase-I of the project will be over by 1987-88, after which Phase-II of the project is likely to commence as seen from the externally aided projects of other States, such as Gujrat, U. P., West Bengal etc.

10.40. Phase-II of the project which will commence from 1989-90 will have only its first two years during the Seventh Plan period. The State Government are very keen that the project should spread over all the 13 districts of the State instead of 9 at present. During the Phase-II (last two years of the 7th Plan) a number of new schemes have been included in this project. In addition to the 5 plantation schemes over and above the nurseries, which are contribution schemes from the 6th Plan, these new schemes will be strip Plant actions (road, canal and rail side), Recreation forestry, Environmental Planting around industry, Barren and Padu hill Planting, Dedicated Adaphi Scheme (Tassar rearing) and activating Goachers and Fodder reserves. These new schemes have been included basing on the recommendation of the sub-group of the Social Forestry of project for 7th Five-year Plan, constituted by the Ministry of Agriculture, Government of India. These new schemes will be due for implementation from the 4th year of the 7th Plan period. In addition to these plantation components supporting activities such as protection, Research, publicity, training, Monitoring and Evaluation etc., as included in the project document for the Phase-I will also continue in the 7th Plan. Considering the continuation of the existing schemes, inclusion of some new schemes, the likely price escalation and increase in wage rate, and spread over of the project to 13 districts, the expected actual outlay for the first two years of the 7th Plan would be Rs. 28.94 crores. Thus the total Seventh Plan outlay will be of the order of Rs. 50.00 crores with which the physical target of about 1.05 lakhs hectares of plantations and 900 lakhs of seedlings distribution is proposed. Out of this outlay of Rs 50.00 crores, the Swedish contribution that will be available to the State Government of India as Plan additionality by quarterly advances will be of the order of Rs. 24.50 crores. Out of the total physical target indicated above, about 54,000 ha. will be achieved in the 1st three years of the 7th Plan period i. e. between 1985-86 to 1987-88 alongwith distribution of 4.97 crores seedling as per the project document, already approved by the State Government and agreed to between the Government of India and Government of Sweden.

10.41. In the Annual plan, 1985-86, a provision of Rs. 4.87 crores has been kept out of which Rs. 2.48 crores (51%) is likely to be the State share and Rs. 2.39 crores (49%) will be SIDA assistance. During 1st year of the 7th Plan, target of 12,320 hectares of plant actions and 120 lakhs seedling distribution has been proposed for all the 9 districts covered by the project. The financial outlay includes maintenance cost of previous two years's plantations (Annex-IV).

#### C. Indo swiss Project

10.42. The Swiss aided cattle development project for Ganjam, Sundergarh and Sambalpur districts with a project period of 10 years has been accepted by the Swiss Development Corporation. Project details for the first two years of the programme have now been prepared for implementation in Ganjam district to start with pending final clearances of Swiss authorities. The project cost has been estimated at Rs. 409.40 lakhs covering a period of 10 years. For implementation of this project, a provision of Rs. 230.00 lakhs has been proposed under the Seventh Plan and Rs. 18.00 lakhs for the annual plan of 1985-86.

#### D. Cross Breeding of Cattle and Buffaloes through Frozen semen technology with German assistance

10.43. The Federal Republic of Germany have conveyed their willingness for providing assistance to the implementation of a programme of cross breeding of cattle and buffaloes using frozen semen technique in the district of Bolangir and Mayurbhanj. The assistance will be non-recurring in nature, such as supply of equipments, breeding bulls, frozen semen doses etc. for establishment of a frozen semen station and semen bank with A. I. units. The State Government will have to meet the recurring operational cost of the Scheme and provide land and buildings. Although the size of the financial assistance to be received from the Federal Republic of Germany has not been indicated, a tentative provision of Rs. 50.00 lakhs has been proposed for the Seventh Plan and Rs 10.00 lakhs for the annual Plan of 1985-86.

#### E. Dairy Development Programme in Phulbani, Balangir and Koraput districts with Danish assistance

10.44. It is proposed to avail of the Danish assistance for Dairy Development Programme in Phulbani, Bolangir and Koraput districts during the 7th Plan period. Although the size of assistance has not been spelt out by the Danish authorities a tentative provision of Rs. 50.00 lakhs has been proposed as Seventh Plan outlay and Rs. 5.00 lakhs for the annual Plan of 1985-86.

**ANNEXURE I**

*National Agricultural Extension Project (Orissa Sub-Project)  
Base cost Estimates (TRs.)*

	1984-85	1985-86	1986-87	1987-88	1988-89	Total
1. Incremental Staff Salaries ..	24,22.0	31,02.0	37,40.0	40,60.0	42,84.0	1,76,08.0
2. Civil Works ..	12,26.20	3,00,30.0	3,44,00.0	2,75,60.0	..	10,42,52.0
3. Vehicle, Equipments, etc. ..	24,95.0	29,60.0	32,60.0	18,35.0	10,35.0	1,15,85.0
4. Operating Cost ..	15,20.4	24,64.4	26,32.4	26,32.4	26,324.4	1,18,82.0
5. Training Cost ..	21,35.1	24,36.6	24,35.1	24,36.6	21,35.1	1,15,78.5
<b>Total</b> ..	<b>2,08,34.5</b>	<b>4,09,93.0</b>	<b>4,64,67.5</b>	<b>3,85,24.0</b>	<b>1,00,86.5</b>	<b>1,56,905.5</b>
Physical Contingencies ..	..	..	..	..	..	1,08,21.0
Price Contingencies ..	..	..	..	..	..	3,09,03.0
					<b>Grand Total</b> ..	<b>19,86,29.5</b>
						or U. S. \$ 18.1 Million.

## ANNEXURE II

### *Cashewnut Project*

#### SMALL HOLDERS PROGRAMME

Project component		Total target/ project provi- sion upto 1984-85	Achievement by end of 1983-84	Balance	Proposed break up of the balance	
					1984-85	1985-86
1. Plantation (Ha.)	--	500	3320	1680	800	8.80
2. Plantation (Rs. in lakhs)	..	99.35	37.90	61.45	30.00	31.45
3. Subsidy (Rs. in lakhs)	-	30.00	13.24	16.76	8.00	8.76
4. Staff, vehicle and equipment and operating expenditure (Rs. in lakhs).		23.79	12.70	11.09	6.61	8.68
Total (2+3+4)	..	1,53.14	63.84	89.30	44.61	48.89

‡ Detailed cost component is shown in Table-2.

\*\* Inclusive of excess cost on staff in the additional year.

**ANNEXURE III**

*Cashew-Nut Project*

**REVISED COST ESTIMATED FOR ORISSA UNDER THE STATE CORPORATION COMPONENT**

Incremental Production Cost	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	Total
1. New plantation 10,500 ha.								
area in ha.	..	405	2,569	2,930	401	2,000	2,135	10,500
Cost in '000 Rs.	.. 57	528	3,251	3,300	1,674	6,063	6,654	21,527
2. Improved plantation 2,500 ha.								
Area in ha.	..	2,131	485	..	..	..	..	2,516
Cost in '000 Rs.	.. 38	532	1,737	847	1,383	252	..	4,789
Development cost total	.. 95	1,060	4,988	4,147	3,057	6,315	6,654	26,316
3. Incremental staff salary (Rs. in '000)	.. 175	424	1,687	1,687	2,093	2,237	2,897	10,515
4. Civil Works (buildings) (Rs. in '000)								
Plantation office	.. ..	..	..	—	—	170	170	340
Plantation stores	.. ..	34	..	85	136	15	15	210
Unit station	.. ..	—	..	13	72	55	55	195
Garrage/shed	.. ..	—	..	15	..	45	45	105
Manager's house	.. ..	..	..	..	..	75	75	150
Asst. Manager's house	.. ..	..	..	41	..	54	55	150
Minor staff housing	.. ..	..	..	90	82	814	814	1,800
Labour Housing	.. ..	..	20	58	80	671	671	1,500
Roads	.. ..	..	127	90	61	1,861	1,861	4,000
Services and utilised	.. ..	..	103	151	30	1,958	1,958	4,200
Total Cost:	.. ..	34	250	543	461	5,718	5,719	12,650
						Price contingencies:		1,122
								13,772



		1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	Total
5. Vehicles (Rs. in '000)	Car	1	..	..	..	1	..	Mobile Medical	Unit-2
	Jeep ..	1	1	1 (with trailer)	2	..	1 (Trailer-5)	1 (Trailer-I)	
	Cost.	112	71	104	167	74	200	491	1,219
	Total ..	112	71	104	167	74	200	491	1,219
6. Equipment Tools	..	10 Hand & food	Sprayer-53	Sprayer-45	Sprayer-18	Nil	76 Nos. of Motorised Sprayer-390 10 Nos. pump set-100	78 Nos. Motordise Sprayers-390 10 nos. pump set-100	906
						Tools-100	Tools-101		
	Equipment & furniture ..	72	27	29	78	19	150	150	926
	Total Cost: ..	82	80	74	96	19	740	741	1,832
7. Operating expenses (Rs. in '000)	..	223	327	416	395	419	1,153	2,153	6,086
<b>GRAND TOTAL</b>	..	<b>687</b>	<b>1,996</b>	<b>6,952</b>	<b>6,955</b>	<b>6,195</b>	<b>17,363</b>	<b>18,655</b>	<b>59,740**</b>

\*\* under incremental staff salary excess provision for Rs. 2,299 thousand has been shown over the project target due to extension of project period by one year.

**ANNEXURE IV**  
*Outlays and Expenditure*

(Rs. in lakhs)

Name of the Scheme/ Projects	Sixth five year plan 1980—85 agreed outlay	1980—83 Actual expenditure	1983-84 Expenditure provisional	1984-85		Seventh Plan 1985—90		1985-86	
				Approved outlay	Anticipated expenditure	Proposed outlay	Of which capital content	Proposed outlay	Of which capital content
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
<b>Inland Fisheries Project—</b>									
Hatcheries ..	20.10	22.63	10.75	3.00	3.00	41.00	30.00	19.00	10.00
<b>Social Forestry Project—</b>									
Externally aided projects (STDA assisted)	..	..	14.68	170.00	170.00	5000.00	..	487.00	

## CHAPTER 11

### AGRICULTURE

11.1. The Seventh Plan aims at an accelerated rate of Agricultural development and self-sufficiency in food grains and edible oils at higher levels of consumption. The programmes for agricultural development will be integrated with programmes for alleviation of rural poverty and concentrate on less developed backward regions. Greater emphasis will be placed on extension work to ensure that the average yield per hectare are raised to the maximum level. Special programmes will be formulated and implemented during the Seventh Plan period for effecting a break-through in rice output. Similar programmes will also be drawn up to raise the output of oil-seeds, millets and pulses, with particular attention to the problems of transmission of known techniques for raising productivity in semi-arid and dry regions. The problems of dry land cultivation will be tackled on special basis.

11.2. The broad strategies to be adopted for increased agricultural production in the State are (a) in non-irrigated and rain-fed areas agricultural production will be stabilised through adoption of latest technology of dry land/rain-fed farming and (b) in irrigated areas increased production will be achieved through adoption of multi-crop acumen with emphasis on optimum utilisation of irrigated land and irrigation potential particularly in command areas. Proper water management practices and increased cropping intensities combined with rational cropping patterns to optimise water uses have been planned.

11.3. As per the 20-Point Programme, there will be concentration of efforts to develop the watersheds and popularise the dry-land farming/rain-fed farming technology. The attempt in this direction has resulted in developing several mini watersheds and diversification of about 5.53 lakh hectares from the drought prone paddy crop to drought tolerant crops like pulses and oil-seeds. Mixed cropping practices have been popularised in 90,000 hectares by 1984-85. Although, there was slight fluctuation in the areas covered under diversification of crops and mixed crops during the years of favourable monsoon, there was a positive response in the direction of achieving the rainfed farming practices. Paddy crop even in medium and low lands suffer from moisture stress when there is early cessation of monsoon rains. Growing of early maturing varieties was therefore popularised through distribution of large number of seed minikits of early maturing varieties of paddy in every village of the State. With the Central assistance, large number of seed minikits of early maturing varieties were distributed freely, particularly to the small and marginal farmers. This had the added advantage of quick spread of improved/high yielding varieties of paddy among the farmers through multiplication and mutual exchange and also increased the possibility of raising a second crop on residual moisture due to early harvest of paddy.

11.4. In the command areas of major, medium and minor irrigation projects, adoption of appropriate cropping pattern is being popularised for maximum utilisation of the irrigation efficiency. Special attention has been given by taking up intensive extension activity in the major commands under the Command Area Development Agency. In the commands of lift irrigation projects and dug wells growing of light and medium duty crops and high value crops (in dug well ayacuts) are being popularised. These efforts will be continued during Seventh Plan period for wider adoption and attainment of larger area under the practices. Timely availability and efficient use of irrigation water are monitored through periodical co-ordination committee meetings of the field level extension personnel, irrigation officers and other concerned.

11.5. Concerted attention is being given to ensure the timely, easy and adequate supply of agricultural inputs like seeds, fertilisers, implements, plant protection chemicals, credit and above all the right technology. It will be necessary to intensify the monitoring of the supply of these inputs at different levels during the Seventh Plan period.

11.6. Agricultural extension machinery which has been working under the reorganised pattern through the Orissa Agriculture Development Project will continue during the next plan period under the National Agricultural Extension Project. The extension and training system will be strengthened, as per the recommendation of the World Bank Mission for better results in bringing technology from the laboratory to the farmers' fields. The extension organisation has an important role and will continue to hold the responsibility of motivating the farmers to adopt the latest technology of higher production.

11.7. Availability of good quality seeds to farmers still continues to be one of the major constraints of agricultural production. It is proposed to strengthen the organisation for seed production and distribution. Seed production in the State has been taken up by different agencies like Orissa University of Agriculture and Technology, Orissa State Seeds Corporation and the Directorate of Agriculture. Distribution of seeds is presently being taken up directly by the Agriculture Department through one sale depot in each block headquarters. For easy availability of quality seeds the number of sale centres is being increased through the co-operative outlets. Sale of seeds at subsidised rates will also be continued during the Seventh Plan period. Further, large number of seed kits of improved/high yielding seeds will be distributed to small and marginal farmers under various central sector schemes which are now in operation in the State. This programme has had positive effect in the spreading of the improved seeds through extensive multiplication and mutual exchange.

11.8. Despite impediments of short supply and inclement weather conditions etc., offtake of chemical fertilisers has not only increased during the Sixth Plan period, but has also showed marked increase in the rate of consumption from 8.3 kgs. per hectare in 1979-80 to 11.2 per hectare in 1983-84. However, there is wide variation in the rate of consumption between the districts. Attention will be given to bridge this gap between the districts through intensive extension efforts, supply of fertilisers at subsidised rates in tribal and under developed areas, increasing the irrigation facility and distribution of large number of fertiliser minikits to small, marginal and tribal farmers. The supply and distribution of fertilisers through co-operatives, Agro-Industries Corporation and private organisations will have to be strengthened besides ensuring constant flow of supply from the manufacturers. Effective monitoring at the State and Government of India level will improve the position of supply and distribution of fertilisers.

11.9. Adoption of the technology of timely plant protection measures greatly depends not only upon the extension agency but also depends much on the easy and timely availability of the requisite pesticides. Attention will be paid to ensure this by strengthening the distribution system.

11.10. The credit needs of the farmer will be met through co-operative societies and Nationalised Banks through the active co-ordinated efforts of the credit organisations and extension workers.

11.11. Simple type of improved agricultural implements and seed-cum-fertiliser drills are being popularised through demonstration and subsidised sale. The programme of manufacture of the improved implements, its popular use is proposed to be taken up through Central assistance. In dry land areas, it is proposed to distribute the seed-cum-fertiliser drills at subsidised cost.

11.12. During the Seventh Plan period, special efforts will be made to boost up the productivity of rice which is the major cereal crop of the State. The programmes of distribution of large number seed minikits of early maturing high yielding varieties and raising of advanced community nurseries will be expanded through central assistance. The Intensive Rice Production Programme which has been started on pilot basis in seven blocks in the State will be extended to 63 blocks from 1985-86 onwards. In addition it has been proposed to operate the Intensive wheat Production programme in the State through Central assistance during the next plan period with a view to increasing the wheat production in the State.

11.13. Various pulses, namely greengram, blackgram, Arhar are the major pulse crops of the State next to paddy. Concerted efforts to increase the production of pulses through larger coverage of area and increased productivity have yielded positive results during the Sixth Plan period. An intensive programme is proposed to be operated in the Seventh Plan under Central aid to boost up the production of pulses in the State.

11-14. The production of oilseeds is sought to be raised to meet the shortfall of the State's needs. A central sector scheme has started operating from 1984-85 to intensify the efforts to step up the production of oilseeds like groundnut, sesamum, mustard and Niger. This scheme will be continued and expanded during the Seventh Plan period. The various central sector/centrally sponsored schemes implemented in the State will continue during the Seventh Plan period. New schemes on pulses, rice and wheat production have been proposed for which tentative provisions have been shown in the statement enclosed (GN—6).

#### Agricultural production

11-15. In spite of climatological, technological and sociological constraints, which inhibit agricultural production, the year 1983-84 has stood as a new water mark in the progress of agriculture in the State. A break through has been achieved against the stagnation in production of both rice and other crops during the year. The statement below indicates the production in the base year of 1978-79 (1979-80 was drought year), previous highest production in the State, production during the year, 1983-84 and anticipated achievement in production in 1984-85.

Table 11-1

(in '000 tonnes)

Name of the Crop	Production in 1978-79 (base year)	Previous highest production and year of production	Production in 1983-84	Production in 1984-85 (anticipated)
Rice	4,402	4,531 (1975-76)	5,127	5,340
Pulses	791	1035 (1981-82)	1,059	1,100
Total foodgrains	5,765	5,977 (1980-81)	7,001	7,113
Groundnut	192	292 (1981-82)	399	500
Total—Oilseeds	472	590 (1981-82)	736	800

11-16. Not only the production has increased, the yield rates of major crops have also shown substantial increase as would be evident from the following table:

Table 11-2

(In quintal per hectare)

Name of the Crop	Yield rate in 1978-79 (base year)	Yield rate in 1983-84	Yield rate in 1984-85 (anticipated)
(1)	(2)	(3)	(4)
Kharif Rice	9.96	11.48	12.33
Summer Rice	12.90	20.00	20.48
Total Rice	10.07	11.94	12.71
Total pulses	5.05	5.20	5.24
Total Foodgrains	8.63	9.72	10.29
Groundnut	13.00	15.48	15.51
Total Oilseeds	6.43	7.22	8.16

11.17. It has been planned to bring about a practical and steady increase in foodgrain production from the level of 71.13 lakh tonnes in 1984-85 to 83.93 lakh tonnes by the end of Seventh Plan. The year wise projection is given below:

**TABLE 11.3**  
*Production of foodgrains*

Year	(in '000 tonnes)							
	Rice	Wheat	Maize	Jowar	Bajra	Other cereals	Pulses	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1984-85 (base year)	5,340	175	160	30	5	303	1,100	7,113
1985-86	5,607	160	195	30	5	351	1,103	7,451
1986-87	5,810	148	199	30	5	335	1,106	7,653
1987-88	6,007	174	202	30	5	332	1,111	7,861
1988-89	6,245	183	206	30	5	330	1,115	8,114
1989-90	6,500	202	209	30	5	328	1,119	8,393
Overall percentage increase by end of VII Plan over 1984-85.	22	15	31	..	..	8	2	18

11.18. *Rice*—Rice is the major cereal crop in the State which covers 75 per cent of the area in Kharif season. The main problem has been to stabilise the production in spite of fluctuating weather conditions from year to year. The other problem has been to increase the yield rate which had remained stagnant for a long time at less than one tonne per hectare. In the Sixth Plan, both the yield rate and production of rice has significantly increased as mentioned above by adopting the measures like, (a) diversion of lands not suitable for paddy to other crops, (b) supply of short-duration varieties of high-yielding certified seeds in greater quantity, (c) increase in use of chemical fertilisers, (d) increasing the area under irrigation, (e) increasing the intensity of cultivation in irrigated area, (f) adoption of timely plant protection measures, (g) adoption of better dry land farming practices and (h) strengthening of the extension system in the State.

11.19. Basing on the anticipated achievement in 1984-85 the level of production of rice will be increased to 65.00 lakh tonnes by 1989-90. The year wise break-up of the production, coverage and yield rate of rice are given below:

**TABLE No. 11.4**

*Production in '000 tonnes*  
*Area in '000 hectares*

Year	Area	Yield rate in Quintal/Hectare	
		Production	Yield rate
(1)	(2)	(3)	(4)
1984-85 (base year)	4,220	5,340	12.71
1985-86	4,220	5,607	13.35
1986-87	4,150	5,810	14.00
1987-88	4,100	6,007	14.65
1988-89	2,082	6,245	15.30
1989-90	4,052	6,500	16.04

11.20. The above targeted projection estimates an annual growth rate of 8.6 per cent during the Seventh Plan period as against the annual growth rate of 1.01 per cent during the Sixth Plan period. The above table will also indicate that the yield rate will be substantially increased while increasing production.

11.21. *Pulses*—Pulses constitute an important ingredient in daily diet. Orissa State has emerged as the biggest producer of greengram (mung) and blackgram (biri) in the Country. Special efforts have been made to increase production of pulses by (a) raising short-duration high yielding varieties of paddy and non-paddy crops so as to release the land for sowing mung/biri early in October under available moisture conditions, (b) raising of pulses as catch crops in irrigated areas and (c) raising pulses in tail end of canal irrigated areas as a third crop under irrigated conditions. Production of pulses which was 7.91 lakh tonnes in 1978-79 (base year for Sixth Plan) is anticipated to increase to 11.00 lakh tonnes in 1984-85 which will account for a growth rate of 6.5 per cent. During the Seventh Plan period efforts will be concentrated to raise production as well as yield rates. The year-wise break-up of the programme is given in the table below:

TABLE 11.5

*Area in '000 hect.*  
*Production in '000 tonnes*

	<i>Yield rate in Quintals/Hectare</i>					
	1984-85 (base year)	1985-86	1986-87	1987-88	1988-89	1989-90
Area	2,099	2,101	2,103	2,105	2,108	2,111
Production	1,100	1,103	1,106	1,111	1,115	1,119
Yield Rate	5.24	5.25	5.26	5.28	5.29	5.30

11.22. *Foodgrains*—The total production of foodgrains has recorded an increase from 57.65 lakh tonnes (1978-79) to 70.01 lakh tonnes by 1983-84. The anticipated level of production in 1984-85 is 71.13 lakh tonnes which accounts for an annual growth rate of 2.73 per cent. By the end of the Seventh Plan period it is proposed to reach the production level of 83.93 lakh tonnes of foodgrains which accounts for growth rate of 6.74 per cent.

11.23. *Oilseeds*—The major oilseeds of the State are Groundnut, Sesamum, Mustard and Niger. Production of oilseeds has been intensified in conformity with the policies spelt out under the 20-Point Programme by increasing the area through diversion of marginal paddy lands to oil seed crops. Amongst different crops that have been taken up in substitution of rice, Groundnut has been the most rewarding. Cultivation of groundnut in river bed areas and flooded tracts is unique in Orissa where the crop is raised with available moisture. The yield rates obtained in groundnut in both Kharif and Rabi seasons have been the highest in the country. Groundnut production has recorded a conspicuous rise from 1.92 lakh tonnes (1978-79) to 3.99 lakh tonnes (1983-84). It has been targeted to reach the production level of 5.05 lakh tonnes by 1989-90. Increase in production of mustard and sesamum will also be achieved through larger coverage of these crops under irrigated and non-irrigated conditions during Rabi/summer seasons. Niger is grown in hilly slopes in some of the tribal districts of the State during late Kharif. The coverage under the crop is around 1.60 lakh hectares with a productivity level of 6 quintals per hectare. The production of Niger is proposed to be raised through use of improved seeds.

11.24. The strategy to be adopted for achieving higher production and productivity during the Seventh Plan period can be enumerated as (a) provision of quality seeds at subsidised rates particularly of groundnut and mustard, (b) transport subsidy on soil amendment, (c) promoting use of phosphatic

fertilisers (which increase the groundnut yield) and potassic fertilisers (which are essential for boosting the yield of mustard) through subsidised supply, (d) subsidising purchase of plant protection chemicals and equipment for control of pests, and diseases particularly for groundnut and mustard, (e) expanding the area under mustard as a catch crop between two paddy crops in irrigated areas, (f) expanding the area under groundnut as a mixed crop and intercrop, besides growing this crop after rice in irrigation command and as an early rabi crop under unirrigated conditions in lands subject to fluvial action, and (g) expanding the area under groundnut and sesamum in kharif by diverting risk-prone rice areas.

11-25. The year wise break up of area and production of oilseeds are given in the table below :-

TABLE 11-6

*Area in '000 hectares*  
*Production in '000 tonnes*  
*Yield in Quintal/Hectare*

	1984-85 (base year)	1985-86	1986-87	1987-88	1988-89	1989-90
Area	980	1,000	1,020	1,045	1,075	1,098
Production	800	817	834	855	880	900
Yield rate	8.16	8.17	8.18	8.18	8.19	8.20

#### Special Programme for Drought Prone Blocks

11-26. During the Seventh Plan period the thrust to be towards rapid increase in productivity in low productivity areas by concentrating on the less developed regions. In Orissa, flood, drought and cyclone occur almost every year causing substantial loss in agricultural production. Due to erratic monsoon, drought conditions of varying intensity are experienced continuously in certain parts of the State. The National Committee on Development of Backward areas had identified chronic drought as one of the fundamental causes for the backwardness of an area. The Committee in their report on organisation of administrative and financial structure for backward area development has recommended the administrative pattern for implementation of development programmes in backward areas. The block has been accepted as the unit for planning and development. Integrated Area Development Programme has been suggested to be implemented through a project approach. The Committee have recommended that resources should be specifically earmarked for development of backward areas.

11-27. The State Government, in Planning and Co-ordination Department, had undertaken an exercise for identification of chronically drought affected areas in the year 1980. 136 blocks out of 314 in the State have been identified as chronically drought affected. In some of these 136 blocks some special programmes are being implemented. As a matter of fact, 39 blocks in the districts of Phulbani, Kalahandi, Balangir and Sambalpur are covered under Drought Prone Area Programme. 56 blocks are covered under Integrated Tribal Development Agency. In 14 of these blocks, both I.T.D.A and D.P.A.P. are operating. Thus, out of 136 blocks in 81 blocks special programmes are under implementation which are taking care of development programmes as well as beneficiary oriented poverty alleviation schemes. The remaining 55 blocks are not covered under any special programme, through the normal I. R. D. P., N. R. E. P. and E. R. R. P. programmes for rural development are being implemented in these blocks.

11-28. It has, therefore, been proposed to take up a special scheme for the remaining 55 blocks. It is proposed to take up viable economic plantations like cashew, coffee and other plantation through Soil Conservation Organisation in the high slopes and horticultural plantations on the marginal land which are currently left fallow for one or more years. Steps will be taken



to provide adequate irrigation facilities as may be suitable to the particular area. Facilities will be provided for adoption of proper types of agronomic practices. Development of mini-water sheds, construction of water harvesting structures farm ponds, etc. will also be taken up. A modest outlay of Rs. 10.50 crores has been proposed during the Seventh Plan period for this Special Programme and to start with Rs. 70 lakhs has been suggested for the Annual plan 1985-86.

#### **Science and Technology in Agriculture Development**

11.29. The Agriculture Plan basically includes programme of extension. However, the research programme which is mainly under-taken through the Orissa University of Agriculture and Technology contributes to the development of Science and Technology. The OUAT is engaged in research of various aspects of agriculture under the National Agricultural Research Programme. All India Co-ordinated Research Project and under the Research Schemes financed through externally aided projects. The findings of research are transmitted to the farmers through the extension agency under the land to laboratory programme. During the Seventh Plan period, a sum of Rs. 244.71 lakhs will be utilised on development of Science and Technology in agriculture. The proposed outlay for the purpose for the year 1985-86 is Rs. 42.03 lakhs.

#### **Agricultural Research and Education Schemes of Agriculture University**

11.30. The Orissa University of Agriculture and Technology (OUAT) was established at Bhubaneswar in 1962 by the Government of Orissa in accordance with the Orissa Act 20 of 1961. The University started functioning from 24th August 1962 with two Faculties of Agriculture and Veterinary Science and Animal Husbandry, which colleges were already established by the Government of Orissa in the year 1954 and 1955 respectively. Under the Act, the University was given the responsibility for planning, organising and implementing the agricultural education, research and extension programmes for the benefit of the people of Orissa. Subsequently, the College of Basic Sciences and Humanities and the College of Agricultural Engineering and Technology were started as constituent colleges under the University in the year 1964 and 1966, respectively. The University remained as a unicampus institution with the above two Faculties and the two colleges till the end of the academic year 1980-81. From the year 1981-82, with the assistance of I. C. A. R. and the State Government, the University achieved spectacular expansion and improvement in the field of teaching, research and extension.

11.31. Second college of Agriculture at Chiplima, a college of Fishery Science at Rangeilunda and a college of Home Science at Bhubaneswar have started functioning from the year 1982. With the financial assistance of the State Government, Degree Course Programmes in Civil and Mechanical Engineering (1981-82) and Electrical Engineering (1982-83) have also been started at Bhubaneswar under this University in the College of Agricultural Engineering & Technology, for the time being. Honours courses in the five Basic Science disciplines have also been started in the College of Basic Sciences & humanities from the year 1981-82. The College of Agricultural Engineering & Technology has become a full-fledged Faculty with the formation of five departments and opening of Post-Graduate Departments in Farm Machinery & Power and Soil & Water Conservation Engineering. An under-Graduate Department of Seed Technology and Post-Graduate teaching in Agricultural Statistics were started in the Faculty of Agriculture. In the Faculty of Veterinary Science & Animal Husbandry, Post-Graduate Courses were started in Gynaecology, Parasitology, Bacteriology and Virology in the year 1983. The Ph. D programmes under course credit system were started in seven disciplines in the Faculty of Agriculture and three disciplines in the Faculty of Veterinary Science & Animal Husbandry from the year 1983 and 1984 respectively. Three Krishi Vigyan Kendras have been established at Keonjhar, Semiliguda and Baliapal during this period with the full support of the financial I. C. A. R.

11.32. A proposal for establishment of the third College of Agriculture with emphasis on agro-forestry and horticulture is included in the Seventh Plan. The Seventh Plan proposals also contain further strengthening of the existing Faculties and Colleges at Bhubaneswar, Chiplima and Rangeilunda have been included under grant-in-aid to the O. U. A. T. under teaching.

11.33. The University offers semester system of teaching programme at the Under-graduate and Post-graduate levels in the Faculties of Agriculture, Veterinary Science & Animal Husbandry and Agricultural Engineering & Technology and Under-graduate level in Home Science, Fishery Science, Civil, Mechanical and Electrical Engineering and Honours level programme in Basic Science subjects. The main campus at Bhubaneswar thus provides an academic complex, consisting of five colleges a 350 hectares of Agriculture farm, a dairy farm, a poultry farm, a goat farm, a well-equipped workshop, a library with 1,06, 088 books and 545 periodicals and journals 563 units of residential accommodation for staff and ten hostels with a capacity for 1,494 students, a students' counselling centre, an employment guidance Bureau and a Dispensary to advance the skills and talents of students and staff as well as meet their needs.

11.34. Before the establishment of the University, the Research activities in the field of Agriculture and Animal Husbandry were being conducted by the Directorates of Agriculture and Animal Husbandry and Veterinary Services, respectively. The research activities were gradually handed over to the OUAT. At present all research stations of the Directorate of Agriculture, except the Coconut Research Station at Sakhigopal, Pulse Research Station at Nayagarh and Citrus Research Station at G. Udayagiri are operating under the University. Under the Orissa Agricultural Development Project, four Regional Research Stations at Chiplima, Bhubaneswar, Semiliginda and Keonjhar and six sub-stations spread over the State, representing different agro-climatic regions are managed by the University. Besides these, there are 13 Adaptive Research Farms, one in each Revenue District of the State where adaptive research in close collaboration with the State Department of Agriculture is undertaken. Under the National Agricultural Extension Project, there is a proposal for increasing the number of Adaptive Research Stations to 32 (13 + 19) and out of the proposed 19 new stations, six would be in the Tribal Sub Plan area.

11.35. The University has decided to participate in the National Agricultural Research Project (NARP) and accordingly a background paper was submitted to the I. C. A. R. The eligibility of the University for participation in it was approved by the Project Funding Committee of the I. C. A. R. in May, 1980. Subsequently, the Research Review Committee of I. C. A. R. recommended establishment of Six more Regional Stations/Sub-stations in other identified different agro-climatic zones of the State in addition to the existing four Regional Research Stations under the O. A. D. P. Till now, under N. A. R. P. four Research Stations at G. Udayagiri (Phulbani district), Bhawanipatna (Kalahandi district), Umerkote (Koraput district) and Ranital (Balasore district) have been established. Besides, one Special Research Station for salinity research at Motto (Balasore district) has also been started. Another Research Sub-station at Mahisapat (Dhenkanal district) is also due to be started under the N. A. R. P. in the current year itself. To manage these additional research activities, I. C. A. R. also sanctioned funds for the strengthening of the Office of Dean of Research under N. A. R. P. In order to meet the additional responsibilities for implementing the N. A. R. P., Research Wing of the University is proposed to be strengthened under grant-in-aid to the O. U. A. T. for which provision has been suggested.

11.36. In all, 55 Co-ordinated Projects, schemes, etc. sanctioned by the I. C. A. R., Government of India and State Government, are in operation in different Regional Research Stations and Sub-stations of the University. The All-India Co-ordinated Projects and other Centrally sponsored Projects have a component of State share at 25%. Since these are provided under the Central Plan sector, the State share of 25% is proposed under State Plan. About 26.6 per cent of this provision is earmarked for expenditure in the Tribal sub-plan areas.

11.37. The University is also engaged in the transfer of technology to farmers through different extension and training programmes which started with the establishment of the Agriculture College at Bhubaneswar in 1954. At present, the University has taken up six blocks for its extension Research Programme in Cuttack and Puri districts. Besides these, five I. C. A. R. sponsored extension schemes are in operation under the University. Recently, three Krishi Vigyan Kendras have been opened

at Semiliguda, Keonjhar and Balipal with the full assistance of I. C. A. R. for imparting Vocational training to the farmers. A fourth Kendra at Bhanjanagar is due to be started during the current year for which an I. C. A. R. Committee has already visited the place and submitted its report. The USAID initiated the Agricultural Production Programme (A. P. P.) and Farm Advisory Service Unit under the University. These were later handed over to the University when they left in 1974. The A. P. P. has been closed down with the transfer of N. D. P. to the district of Dhenkanal from Keonjhar. There is an Information Section under the Extension Wing with a Press and Photographic and audiovisual facilities to provide extension material and to motivate the farmers for adopting scientific methods of agriculture for increased production through pamphlets, news-letters, posters and various audiovisual aids. In order to meet the additional responsibilities for transfer of technology through the increased number of research stations and through the I. C. A. R. Schemes like Lab to Land Programme, more Krishi Vigyan Kendras to be organised, the Extension Division is proposed to be strengthened during the Seventh Plan period and proposals for this also are included under the grant-in-aid to the Ouat for the purpose.

11-38. Six buildings of the previous plan were completed in the earlier period of the Sixth Plan. From the year 1981-82 the University undertook a major construction programme of 20 new buildings in different campuses and Research Stations. Construction of a major portion of these buildings is undertaken by the State P. W. D. Some of these buildings have already been completed and the rest are nearing completion. Due to escalation of cost of building materials and labour, it will not be possible to complete the buildings as per initial estimates. It is necessary to provide funds for the completion of these buildings as per revised estimates.

11-39. The Seventh Plan proposals include infrastructure and campus development through grant-in-aid to the University under different items like, instrumentation Cell, development of Library, development of Administrative Block including Library, Staff quarters, Water Supply, hostels, farmers training hostel, Sports, games and other student amenities, Campus development and development of training Complex.

#### Horticulture

11-40. There are different agro-climatic zones in Orissa where various types of tropical fruits, vegetables and flowers can be grown round the year. Besides, development of Horticulture in the State has an important bearing on the economic conditions of rural population specially those of the weaker sections like Scheduled Castes and Scheduled Tribes communities. The high land in the State covers about 27 lakh hecets. A major portion of this area suffers periodically from drought conditions resulting in crop failures. Such area can easily be developed for growing perennial crops like fruits, spices, medicinal plants, etc. As against this the present area under such crops is little over 2 lakh hectares.

11-41. In order to achieve more area under Horticulture plantation during the Sixth Plan, a Massive Plantation Programme was undertaken, As a consequence 36,594 hectares were brought under the different Horticulture plantation during the Sixth Plan period. During the Seventh Plan period, it is proposed to cover an additional area of 39,500 hectares. The achievement in the Sixth Plan and the target proposed for different horticulture plantations during the Seventh Plan period are as follows :

	Achievement Sixth Plan	Target for Seventh Plan (in lakhs)
1. Coconut	17,132	17,000
2. Citrus	6,952	4,000
3. Mango	4,271	5,000
4. Misc.crops	6,084	8,000
5. Banana	1,531	3,000
6. Papaya	561	2,000
7. Pineapple	63	500
Total	36,594	39,500

11.42. (a) *Coconut*—About 6 lakh coconut seedlings have been planted on canal embankments. During the Seventh Plan canal embankment plantation and compact area plantation will be expanded. In order to popularise plantation of high yielding hybrid varieties coconut, it is also proposed to plant four lakhs hybrid coconut seedlings during the Seventh Plan period. It is also proposed to start five more coconut nurseries in the State to meet the additional requirement of coconut seedlings.

11.43. (b) *Citrus*—There are some tribal areas in the State, such as Paralkhemundi Agency, where orange plantations are taken up traditionally by the tribals. It is therefore easy to expand the area under orange plantation in such areas. In fact during the Sixth Plan 12.50 lakh citrus seedlings were planted by the tribals on the hilly slopes. Besides, there is wide scope to take up large scale Kagjilime plantation in the river basins as well as in some traditional areas of the State. It is therefore, proposed to cover 4,000 hectares additional area under citrus plantation (both Orange and Kagjilime) during Seventh Plan in the State.

11.44. (c) *Mango*—Mango can be grown in all the districts of the State. During the Sixth Plan, an area of 4,271 hectares was brought under mango plantation through *in situ* techniques. During the Seventh Plan, it is targetted to take up additional 5,000 hectares under mango plantation by planting Mango grafts and by *in situ* techniques. By bringing 5,000 hectares under mango plantation, it is expected that the existing local demand of the mango fruits in the State can be met to a large extent.

11.45. (d) *Banana*—The requirement of banana is largely met by importing from other neighbouring States. During the Sixth Plan Period it was possible to bring an area of 1,531 hectares under banana plantation. In order to meet the demand of the total requirement of banana fruits of the State, it is necessary to bring an additional area of 6,000 hectares under banana. During the Seventh Plan, it is however, contemplated to bring 3,000 hectares under banana in order to meet 50% of the local demand.

11.46. (e) *Pineapple*—There is also scope to extend area under pineapple cultivation. So far pineapple cultivation has not been taken up on a large scale in the State. It is, therefore, proposed to increase area under pineapple stage by stage. During the Seventh Plan, it is proposed to take up 500 hectares of additional area under pineapple cultivation.

11.47. (f) *Other fruits*—The plantation of fruit crops like papaya, Guava, Sapota, Litchi, Jackfruit, pomegranate, Ber, Bel, etc. can easily be taken up in a large scale in the State. During the Sixth Plan 6,084 hectares were brought under these fruit crops. It is however, targetted to take up 8,000 hectares additionally under misc. fruit crops. An area of 2,000 hectares will be brought under Papaya cultivation.

11.48. (g) *Production of planting materials*—In order to take up the above plantation programme during Seventh Plan, it is necessary to produce sufficient quality planting materials for the purpose. So far 48 fruit orchards, 22 Coconut Nurseries, 12 numbers of Banana Sucker Production Centres and 11 numbers of Pineapple Sucker Production Centres are existing in the State. In these Orchards/Nurseries/Sucker Production Centres the planting materials likely to be produced during the Seventh Plan period are Coconut seedlings 26 lakhs, Citrus seedlings 50 lakhs, Banana suckers 5 lakhs, Pineapple suckers 5 lakhs and Misc. planting materials 25 lakhs. It is proposed to establish ten new Progeny Orchards in suitable areas of the State (particularly in those districts which do not have Progeny Orchards,) for production of quality planting materials to meet the ever growing demand of the public and to meet the requirement under special programmes. Shortfall, if any, will be met by purchasing quality planting materials from outside the State.

11.49. (h) *Potato & Vegetables Productions*—During 1983-84, the Potato and Vegetable Development Scheme has been brought under the Directorate of Horticulture. Therefore, this Directorate is making arrangement for extensive development of potato and Vegetable cultivation in the State during the Seventh Plan. It is proposed to bring 60,000 hectares under potato and 1,50,000 hectares under other vegetables. It is also proposed to open 10 new Mushroom Spawn Production Centres and 20 new Kitchen Garden Centres during the Seventh Plan Period.

11-50. (i) *Fruit & Vegetable Processing*—As a part of the post harvest technology, so far 13 Community Canning Centres have been established covering all districts in order to impart training on fruit and vegetable preservation to the public, specially to housewives. During the Seventh Plan, it is proposed to open 20 new such centres from the Horticulture budget and 30 others by availing funds from other sources. At present, two processing factories are operating under the control of this Directorate. These factories will be modernised in the Seventh Plan, in order to increase the production capacity. Besides, private parties and co-operatives will be encouraged to establish such fruit processing factories and the necessary technical know-how will be provided by this Directorate.

11-51. (j) *Training facilities*—In order to take up extension programme for horticulture [plantation, it is felt necessary to provide the required technical training to the field level officers of the Department. The School of Horticulture at Khurda which has been established during the Sixth Plan will continue to operate by providing inservice training facilities for Malis (Gardeners). Also refresher courses will be introduced for Malis, Grafters and technical officers of this Department to upgrade their technical knowledge.

11-52. (k) *Botanical Garden*—Necessary development work will be taken up during Seventh Plan in the State Botanical Garden at Barang which is operating under this Directorate.

11-53. (l) *Plan, Information & Marketing Cells*—During the Seventh Plan period a publicity and information cell, a planning cell and a marketing cell will be established in the Directorate.

11-54. The above development programmes will be taken up with help of existing schemes, but considering the necessity of the State and demand of the modern society it is felt necessary to provide new dimension to Horticulture by introducing the following new schemes to the Organisation.

#### **Tissue-Culture Centre for propagation of plants**

11-55. With the development of modern technology of Tissue Culture it is necessary to open one Centre in the State for large scale propagation of certain plants during the Seventh Plan period. It is proposed to start the centre in 1985-86 and expand it in a phased manner. Trained technical personnel will be appointed and the requisite equipments will be purchased.

#### **Monitoring Mineral Nutrition of Fruit Trees**

11-56. The monitoring of mineral nutrition of fruit trees has become an essential part in commercial Horticulture. On the basis of data on leaf analysis of fruit plants, proper recommendations will be issued to Orchardists so that they may use adequate fertiliser and trace element nutrients for getting higher yields. It is, therefore, felt necessary to start this work by establishing the unit of this kind during the Seventh Plan period. The laboratory will be set up during 1985-86 for conducting leaf analysis of samples collected from fruit plants to determine their nutritional status and for proper recommendation to the Orchardists. Necessary technical staff and equipments would be provided in 1985-86 to the laboratory and this will be continued in the Seventh Plan.

#### **Adaptive Trial Centres for Tuber & Spice crops**

11-57. There is vast scope for development of tuber crops like yams, sweet potato, tapioca and spice crops like ginger, garlic, onion, black-pepper, turmeric, cardamum, cloves in the State. The climatic condition of the State is suitable for extensive development of these plantation crops and spices. Hence, it is proposed to establish two adaptive trial centres where in addition to conducting trials for developing a package of practices for these crops, planting materials will also be produced for demonstration in cultivators, fields. During the Seventh Plan, 1,000 hectares will be brought under tuber and spices crops. Target for the year 1985-86 is to cover 200 hectares.

### **Floriculture Development Scheme**

11-58. Our State has a bright prospect for commercial development of Floriculture, since the climate is suitable for growing most of the common flowers. Therefore, it is necessary to operate a new Floriculture Development Scheme during the Seventh Plan. Under this Scheme young entrepreneurs will be provided necessary training on commercial Floriculture, so that they may set up their own Flower Nurseries. The Scheme also envisages the standardization of agro-techniques for production of different types of flowers and study of economics of flower cultivation. During the Seventh Plan period it is proposed to train 500 young entrepreneurs covering 250 hectares. In 1985-86, 100 persons will be trained covering 50 hectares under flower cultivation.

### **Development of Medicinal & Aromatic Plants**

11-59 The Forests of Orissa are full of Medicinal and Aromatic Plants. But so far systematic attempt has not been made for their Development and extension of area. In order to make a systematic approach for the Development of these Plantations it is proposed to operate a new scheme for the purpose. Under the scheme the cultivators will be encouraged to take up Medicinal and Aromatic plantation by starting demonstrations. During the Seventh Plan 250 such demonstrations will be conducted at the rate of 50 demonstrations in each year. During 1985-86, 200 hectares will be brought under these plantations so as to cover, 1,000 hectares by the end of Seventh Plan.

### **Horticulture Development Scheme for Podu Ravaged Areas**

11-60 Shifting cultivation is rampant in Tribal Areas of the State. This causes a huge loss to Forest wealth as well as the environment in these areas is considerably changed. This results in erratic rainfall in the State. It is, therefore, contemplated to take up a large scale plantation of fruit trees in the slopes of podu ravaged hills as a part of afforestation measure. This scheme will operate from the second year of the Seventh Plan that is 1986-87. This programme will cover 25,000 hectares of podu ravaged areas under fruit plantation during the Seventh Plan period. This programme will also help to a large extent for economic development of tribal people.

11-61 The following schemes will continue under Horticulture Development Programme,

#### **Headquarters Organisation**

11-62 This is a staff oriented scheme meant to provide the needed support to the Organisation of the various Horticultural Development Programme. During the Seventh Five-Year Plan the Headquarters Organisation will be strengthened with a (a) Planning Cell, (b) Marketing Cell, (c) Audit Cell and (d) Publicity and Information Cell. The Planning Cell will be headed by one Deputy Director. In the First Year of the Seventh Plan that is 1985-86, the Planning Cell and the Publicity and information will be established. In the Information Cell, the necessary publicity and information materials will be published and distributed to cultivators as an extension measure.

#### **District Administration**

11-63 This is a staff oriented scheme at the district level which was originally intended to assist the Deputy Director of Agriculture in smooth implementation of Horticulture Development Programmes. After a separate Directorate of Horticulture was created and subdivisional offices were established, it is now felt necessary to have a Deputy Director of Horticulture at the District headquarters level to supervise and monitor the Horticulture Development Programmes of each district. All the 13 districts of the State will be covered under this scheme during seventh Plan period in a phased manner. During the first year of the seventh Plan, that is 1985-86 four offices of Deputy Director of Horticulture will be established. The necessary office staff and a vehicle will be provided to each district office.

#### **Package Programme for Banana**

11-64 The main objective of the Scheme is to bring more area under banana plantation in the State. During the Seventh Plan, it is contemplated to bring 3,000 hecfs. under banana. In 1985-86, it is proposed to bring 500 hecfs. under banana. The main strategy to be followed to achieve

the target of the Seventh Plan will be to encourage the Grower Co-operative Societies to take up banana plantation and the Societies will be provided with subsidy towards cost of suckers, inputs, marketing and transport. Besides, demonstrations will be conducted in 100 plots each having half acre patch every year.

#### **Pineapple Development**

11-65. The Scheme envisages to bring more area under pineapple cultivation in the State. This crop has a lot of potential, since preserved pineapple products have a large demand throughout the country. This scheme is financed from both normal plan and tribal sub-plan. During the Seventh Plan, it is proposed to take up 500 hectares additional area under pineapple cultivation in compact patches. The target for 1985-86 is to bring 100 hectares under pineapple cultivation. In order to achieve the target under this scheme the Grower Co-operative Societies will be encouraged to take up pineapple cultivation and the Societies will be provided with subsidy towards cost of suckers, inputs and for marketing and transport. Besides, demonstrations will be conducted in 100 plots each having 10 cents patch every year.

#### **Citrus Development**

11-66. The main objective of this scheme is to promote Citrus plantation in extensive areas of the State. The Scheme has both normal and tribal components. During Seventh Plan it is contemplated to cover 4,000 hectares additional area under citrus plantation (both orange and lime) and 50 lakh citrus seedlings will be produced for the purpose. The target for the year 1985-86 is to bring 800 hectares under citrus plantation and to produce 10 lakh citrus seedlings. The citrus plantations will be taken up mainly by providing subsidy to Growers' Co-operative Societies in shape of seedlings and inputs. Besides, subsidy will also be given towards marketing and transportation. In addition to expansion of area under citrus plantation, the rejuvenation of old citrus orchards will also be taken up during the plan period.

#### **Mango Plantation**

11-67. Under this scheme, mango plantation will be taken up in 5,000 hectares in the State during the Seventh Plan period. In the year 1985-86, 500 hectares will be brought under grafted mango and another 500 hectares under insitu method of plantation. The scheme is financed from both normal and tribal sub-plan. The Growers' Co-operative Societies will be encouraged to take up mango plantation and they will be provided with subsidies in shape of seedlings/grafts and inputs. Besides, subsidy will also be given for transportation and marketing.

#### **Fruit Development**

11-68. This scheme envisages to bring more area under other miscellaneous fruit crops like guava, sapota, litchi, jackfruit, papaya, pomegranate, ber, bel etc. This scheme has also both normal and tribal components. During Seventh Plan, 8,000 hectares will be brought under miscellaneous fruit crops and 2,000 hectares under papaya. For the year 1985-86, the targets are to take up miscellaneous fruit crops in 1,600 hectares and Papaya in 400 hectares. These plantations will be taken up mainly through the Growers' Co-operative Societies by providing them subsidies towards transportation and marketing as well as in shape of planting materials and inputs.

11-69. In order to supply quality planting materials to cultivators, 70 Transit Nurseries are operating in the State at present. It is contemplated during Seventh Plan period to increase the number of Transit Nurseries with a view to providing one such unit in each block. Such nurseries will be established newly in 40 blocks each year so that by the end of Seventh Plan period 200 such nurseries will be opened. Each nursery will be manned by a grafter and one permanent labourer.

11-70. The plant protection unit is also operating under this scheme. Since the plant protection measure taken for horticultural plantation is of typical nature, this unit will be provided with additional staff with necessary training and experience for the purpose during the Seventh Plan. Besides, a plant protection van will be purchased for making this unit more effective.

### **Production of Quality Planting Materials**

11-71 The main objective of the Scheme is to produce grafts and gooties and other planting materials in different departmental progeny orchards. These planting materials include all types of planting materials of different fruits. During the Seventh Plan it is proposed to raise 40 lakh seedlings and to prepare 10 lakh grafts and gooties. In the year 1985-86, 8 lakh seedlings will be raised and 2 lakh grafts and gooties will be produced. In addition to this, 10 new orchards will be established during the Seventh Plan and in the year 1985-86, the target is to establish two new Orchards. Besides, the developmental works will be taken up in the existing orchards by providing irrigation and fencing facilities. These orchards will also be provided with Store-cum-Office buildings, staff quarters, a pick-up van (or Mini truck), etc. in a phased manner.

### **Coconut Extension and Development**

11-72 Under this Scheme, quality seed coconuts are collected from elite coconut palms identified earlier. Seedlings are raised in different coconut nurseries of the State. There are 22 such nurseries in different parts of the State. The seedlings produced in these nurseries are used for all coconut plantation programmes. During the Seventh Plan, it is proposed to collect 37.5 lakhs seed nuts for raising seedlings and distribution to the cultivators. Besides, 5 new Coconut Nurseries will also be established to cope with the seedlings production programme of the plan. During the year 1985-86 it is proposed to collect 7.5 lakhs seed coconuts for raising seedlings and establish one additional new coconut nursery.

### **Potato & Vegetable Seed Production**

11-73 This scheme was brought under the control of the Directorate of Horticulture from the year 1983-84. The main objective of the scheme is to bring more area under Potato & Vegetable cultivation in the State. In order to bring more area under potato, Breeder Seed is procured from outside the State. This seed is further multiplied as foundation seed and ultimately it is supplied to cultivators as certified seed. To store the seeds four Govt. Cold Storages with a capacity of 4250 M. T. are operating under the scheme.

11-74 For expansion of areas under other miscellaneous vegetables crops, certified seeds of different vegetables are supplied to cultivators through kitchen garden sale centres established in different parts of the State. At present 13 kitchen garden sale centres are operating in the State for the purpose. In these sale centres, certified vegetable seeds, fertilisers and pesticides are sold to cultivators in packets. For development of Mushroom cultivation three Mushroom spawn production centres are operating in the State at present. In these centres Mushroom spawn are sold to cultivators in bottles. During the Seventh Plan period, it is proposed to bring 60,000 Hects under Potato cultivation and 1,50,000 Hects. under other vegetables. Besides, it is also proposed to open 10 new Mushroom spawn production centres and 20 new kitchen Garden sale centres. During 1985-86, the target is to take up Potato cultivation in 4,000 Hects. and other vegetables in 10,000 Hects. Four new Kitchen Garden sale centres and two Mushroom spawn production centres will also be established during the year.

### **Fruit Technology**

11-75. Under the Scheme 13 Community Canning Centres have been established in different places covering all the districts of the State in order to impart training on preservation of fruits and vegetables to the public mostly to house wives with whom these community learning centres have become quite popular. There are also two fruit processing units operating under the scheme. During the Seventh Plan period, it is proposed to open 20 new Community Canning Centres in urban areas for imparting training to the people on fruit and vegetable preservation. The target for 1985-86 is to establish four centres in urban areas of the State. Fruit processing units operating in the State will be modernised by installing new machineries in order to increase their production capacity.



### **School of Horticulture**

11.76. In consideration of the requirement of technical persons at field level, it is necessary to train inservice personnel like Gardeners, Grafters, Overseers and also to give pre-service training to newly recruited field staff on different aspects of new techniques in Horticulture. Therefore, a School of Horticulture was established during the Sixth Five-Year Plan. This School will continue to operate during Seventh Plan Period. Since there is no Hostel Building for students or residential quarters for the teaching staff it is proposed to construct buildings for the purpose during Seventh Plan Period. During 1985-86, construction of Hostel Building will be taken up.

### **State Botanical Garden**

11.77. There is only one Botanical Garden in the State at Barang in Cuttack district and a plant herbarium is being maintained. Since this attracts a large number of visitors, it is proposed to take up infrastructural works such as construction of new roads, buildings and electrification etc., during the Seventh Plan Period.

### **Centrally Sponsored Schemes**

#### **Production of T X D Hybrid Coconut Seedlings**

11.78. This scheme operates as Centrally Sponsored Scheme and envisages to produce and distribute T X D Hybrid Coconut Seedlings with a view to bringing more area under high yielding palms. During the Seventh Plan, it is proposed to produce 2 lakhs seedlings for distribution to cultivators. During the year 1985-86, the target is to produce and distribute 0.80 lakh T X D Hybrid Coconut Seedlings for the purpose.

#### **Package Programme for Development of Coconut**

11.79. This scheme is operating from Sixth Plan as a Centrally Sponsored Scheme. The purpose of the scheme is to conduct demonstrations in growers' plantations for increasing yield of nuts from their existing coconut palms. Under this Programme, coconut growers adopt proper manurial practices and plant protection measures through well organised demonstrations in selected cultivators' fields. The demonstration is conducted in plots of one fourth of one hectare having 30 to 40 bearing palms and subsidy is given for three years. The subsidy is given partly in form of inputs and partly in form of cash to meet the charges of irrigation, labourers etc. During the Seventh Plan, the demonstrations will be conducted in 120 plots.

#### **Regional Coconut Nursery**

11.80. In order to meet the increasing demand of Coconut Seedlings by the Coconut Growers, a Regional Coconut Nursery was established in the Sixth Plan Period. This scheme is sponsored by the Coconut Development Board of India with 50% financial assistance. During Seventh Plan, 10 lakhs Seednuts will be collected from selected old palms for raising seedlings. The target for 1985-86 is to raise 2 lakhs seedlings in this Nursery. Besides, minor works like fencing and irrigation will be taken up during the year

#### **Coconut Plantation on Canal Embankment**

11.81. Under the scheme, 3 lakh Coconut Seedlings were planted on Canal Embankments in the State by availing 50% financial assistance from the Coconut Development Board. These plantations are maintained for subsequent four years. The plantation of 3 lakh seedlings already taken up during the Sixth Five Year-Plan, will be maintained during the Seventh Plan. It is proposed to handover 20 such palms to each poor family in rural areas after maintenance period is over.

### **Orissa Maritime and Chilka Area Development Corporation, Ltd.**

11-82. The Orissa Maritime and Chilka Area Development Corporation was established in August, 1978 with the objectives of bringing about integrated development of Maritime and Chilka Areas of the State. Gradually, its activities have been diversified in various directions. Presently, the Corporation is implementing schemes/projects in the field of horticulture fishery, salt industry and others like diesel outlet, coconut industries complex etc.

11-83. During the Seventh Plan period, the Corporation contemplates to maximise horticulture schemes, namely coconut and cashew plantation in and around Chilka island, lemon grass plantation in Utharkud of Puri district, Joboja plantation at Bajrakote in Puri district etc. An outlay of Rs. 30.00 lakhs is therefore, proposed for the Seventh Plan for investment in the share capital of the Corporation, of which Rs. 4.41 lakhs is indicated for the year 1985-86.

#### **Market Intelligence**

11-84. This is a continuing scheme which was originally sponsored by Government of India. Market behaviour and intelligence are essential for formulating procurement and distribution policy of the State. This is also considered as a lifeline for monitoring the various economic forces in operation which influences the price trend and market behavior of various essential commodities. Intelligence and data gathered through this organisation helps to disseminate the price trend, and availability of commodities, particularly essential commodities to the public. It also helps to safeguard the interest of producers and ensure them proper return to their produces. This is purely a public welfare organisation. Due to inadequate funds, it has not been possible to maintain full coverage by the organisation in the State and accordingly it is proposed to bring as many number of markets as possible under the coverage and vigilance of this organisation during the Seventh Plan period. Existing field staff and supervising officers are considered inadequate to collect the required data and information for effective implementation of the scheme. Hence, it is proposed to create some more posts during the Seventh Plan period to streamline the activities of the organisation and do necessary research work. To maintain effective supervision on the working of the field staff purchase of one vehicle for the organisation is considered essential. There is also a proposal to provide them with a 'mini computer' for maintaining a data bank and research of market trend and behaviour. Keeping this expansion programme in view, the total outlay during the Seventh Plan period has been estimated at Rs. 34 lakhs. In order to ensure desired coverage by the scheme and equip them with the minimum requirements like providing a vehicle and a mini computer, the expenditure required in the first year of the Seventh Plan 1985-86 would be Rs. 10 lakhs.

#### **Agricultural Marketing**

11-85. During Sixth-Five Year Plan, the schemes implemented under Agricultural Marketing and Quality Control include Regulation of Markets, Grading and Standardisation, Market Research, Survey and Extension, Training and Reorganisation of the Marketing set-up. As against the approved outlay of Rs. 65.00 lakhs for these schemes the likely expenditure in the Sixth Plan is Rs. 85.47 lakhs.

11-86. Out of 76 markets in the State, so far 40 markets have been regulated, 28 markets are likely to be developed by the end of Sixth Five-Year Plan. Central Assistance to the extent of 20 per cent of the development cost of the Market yards/ Sub-yards is made available to those markets having requisite land and those who manage the panchayat hats. So far Central Assistance to the tune of Rs. 125.90 lakhs has been released to the 28 markets. During the Seventh Five-Year Plan, it is proposed to regulate the remaining 36 markets in the State. Funds are to be provided for the remaining markets for purchase of requisite extent of land, so that they can avail the Central Assistance. A sum of Rs. 485.00 lakhs is, therefore, proposed to be given to these markets as subsidy during the Seventh Five-Year Plan. The rest of the schemes are staff schemes and will continue during the Seventh Five-Year Plan.

11-87. It has been decided to set up a separate Directorate of Marketing and the Statutory Agricultural Marketing Board in the State to enforce effective regulation of markets and undertake the Market Development Programmes. At the headquarters, there will be one post of Director of Agriculture Marketing in the rank of Additional Registrar of Co-operative Societies, one post of Joint Director of Marketing, two posts of Assistant Director of Marketing to look after planning, monitoring, accounts and auditing and one Engineering Cell with one Executive Engineer, two Sub-Assistant Engineers and one Draftsman. There will be three Zonal Offices headed by three Deputy Directors, 13 Regional Marketing Officers posted to 13 districts, 57 Assistant Marketing Officers posted to each subdivision, besides ministerial and other non-gazetted staff. There shall be thirteen engineering subdivisions one in each of the 13 districts to be manned by 13 Assistant Engineers, 13 Sub-Assistant Engineers and 13 Draftsmen besides clerical assistance. An outlay of Rs. 140.00 lakhs has been proposed for taking up such re-organisation of marketing set-up during the Seventh Five-Year Plan.

#### **Storage and Warehousing**

11-88. The Orissa State Warehousing Corporation has been providing storage facilities for storing agricultural produce and inputs in the State. It has storage capacity of 1.00 lakh M. T. (both owned and hired) and it has a programme to create additional storage capacity of 50,000 M. Ts. during the Seventh Five-Year Plan. The share capital is to be contributed to Orissa State Warehousing Corporation on 50: 50 basis both by the State Government and the Central Warehousing Corporation. The total requirement of funds for taking up the storage project during Seventh Five-Year Plan will be of the order of Rs. 120.00 lakhs and the State Government share would therefore be Rs. 60.00 lakhs which has been proposed in the Seventh Five-Year Plan.

#### **Investment in Agricultural Financial Institutions**

11-89. The State Government are making provision every year for purchase of debentures of Orissa State Co-operative Land Development Bank with a view to increasing the credit base of the Bank to enable them to give loans to the agriculturists for land shaping, land development, horticulture plantation, minor irrigation including dugwells and purchase of agricultural implements for boosting up agricultural production. Co-operative Banks provide Short and Medium term credit to the agriculturists. Funds for short and medium terms are availed by the Co-operative Banks by way of refinancing from NABARD. For long term investment, however, finance is to be made available to Apex Land Development Bank through floatation of debentures in which a portion of subscription is to be met by the State Government.

11-90. The State Government support during Sixth Plan period was fixed at Rs. 500 lakhs. Out of this Rs. 236.61 lakhs was spent from 1980-81 to 1982-83. During 1983-84 the expenditure was Rs. 39.39 lakhs against the budget provision of Rs. 80 lakhs. During 1984-85, Rs. 80 lakhs has been provided to meet the support of the State Government. The requirement of funds in the Seventh Plan to meet the State Government's support towards investment in debentures floated by Orissa State Co-operative Land Development Bank will be Rs. 800.00 lakhs and for the year 1985-86, the requirement will be Rs. 100.00 lakhs.

## CHAPTER 12

### SOIL AND WATER CONSERVATION

12.1. In Orissa, out of 13 districts as many as nine districts have hilly terrain. Hence major areas of the State are subjected to some kind of erosion or other. Some of the acute problems in the State are shifting cultivation in the hilly areas, sheet and gully erosion in the sloping up-lands, wind erosion and shifting sand dunes in the coastal belt, salinity in the soils occurring along the sea coast mainly due to inundation of the sea, stream bank erosion both in the erosional planes and deltas. All these vitally affect the land and ultimately the agriculture production of the State. In order to tackle the problems of erosion more effectively on area saturation basis the watershed management has been adopted and it is proposed to intensify this measure during the Seventh Plan period.

12.2. During the Sixth Plan period, works like plantation, soil conservation engineering structures and other anti-erosional measures have been executed within the limited plan allocation. Although the soil conservation organisation has been implementing various schemes for the last three decades and carried out some important works it only touches the fringe of the problem and there is lot more to be done in various parts. Recurrence of flood, drought and other natural calamities leading to ecological imbalances have caused serious problems for the State's economy. It is, therefore, necessary to undertake comprehensive soil conservation measures in an intensive manner to fight these maladies. Considering the nature and the magnitude of the problems it is proposed to implement suitable schemes during the Seventh Plan period at an estimated cost of Rs. 15.37 crores under the State sector. Similarly under the central sector plan, it is proposed to implement the schemes at an estimated cost of Rs. 41.90 crores with full central assistance and Rs. 0.50 crore, under centrally sponsored schemes with 50 per cent Central assistance.

12.3. The various schemes proposed to be implemented during the Seventh Plan period aims primarily at checking of soil and fertility erosion, storing and recycling run-off through various structures to provide protective irrigation during initial periods, and to help thereby stabilising agriculture production. All these schemes proposed to be implemented during Seventh Plan period are labour intensive in nature and will provide work to the rural labourers throughout the year. This apart, the plantation of cashew, coffee, sisal and Simarouba glauca etc. hold prospect of development of agro-based industries besides providing protection against erosion hazards. In formulation of the soil conservation schemes for the Seventh Plan, emphasis has been given on execution of soil conservation works in small watersheds in tribal and backward areas.

12.4. Comprehensive soil conservation measures will be taken up in different areas of the State. Emphasis will be given on plantation both for fuel wood and economic species like Cashew, Sisal, Simoruba Glauca, etc. Also various soil conservation engineering structures will be taken up to store and recycle the run-off for erosion control as well as protective irrigation. Every structural work like water harvesting structure, gully control works gives benefit and protection in certain area. Therefore, in terms of hectares it is calculated that during the Seventh Plan period, 1,73,000 hectares of new area will be treated, about 45,000 hectares of various plantations and about 7,500 nos. of soil conservation structures will be maintained. This apart, soil and land capability survey for various purposes will be taken up over

8 lakh hectares. Prophylactic plant protection measures will be taken up over about 10,000 hectares of cashew plantations each year. The target for different items for the Seventh Plan as well as for the year 1985-86 is given in the Table below—

Table 12.1

Programme	Unit	Seventh Plan (1985-90)			Annual Plan (1985-86)		
		State Plan	Central Plan	C. S. Plan	State Plan	Central Plan	C. S. Plan
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Establishment of Nursery ..	Ha.	112	..	..	112	..	..
Contour bunding ..	Ha.	7000	14650	..	1000	3090	..
Misc. Plantation ..	Ha.	1750	19044	..	350	3487	..
Gully Control Structures ..	Nos.	100	4915	..	20	764	..
Water Harvesting Structures (S R. Dam).	Nos.	350	2516	..	64	454	..
Farm Pond ..	Nos.	150	1018	..	30	203	..
Coffee Plantation ..	Ha.	150	..	..	100	..	..
Cashew Plantation ..	Ha.	6875	5400	8993	1150	2300	1591
Stmorouba Plantation ..	Ha.	2890	..	..	711	..	..
Sisal Plantation ..	Ha.	1190	..	..	200	..	..
Stream Erosion Control ..	Kms.	201	495	..	60	14	..
Vegetative Propagation ..	Ha.	..	..	5090	..	..	690

#### Soil Conservation Headquarters and District Organisation

12.5. This is a staff scheme. Most of the staff of the Directorate of Soil Conservation and District Organisation are borne under the scheme. This scheme effects planning, execution, supervision and monitoring of the Soil Conservation Schemes in the State. It is proposed to continue the scheme during the Seventh Plan period at a cost of Rs. 340.00 lakhs with strengthening of the infrastructure both at headquarters and at district level to cope with increased work-load. During 1985-86 it has been proposed to continue the Scheme at an estimated cost of Rs. 56.03 lakhs.

#### Soil Survey Organisation

12.6. Soil and land use survey is the pre-requisite to assess the problem and to formulate different soil conservation schemes depending upon the erosion problem. The soil survey organisation in the Soil Conservation Directorate undertakes soil and land use survey in addition to pre and post-irrigation soil survey for the existing irrigation and proposed irrigation projects and to prepare watershed management plans in the State. It has been proposed to continue the scheme during the Seventh Plan period with strengthening at an estimated cost of Rs. 185.00 lakhs. The proposed outlay for the scheme during 1985-86 is Rs. 30.00 lakhs.

#### Watershed Management Programme

12.7. Execution of soil conservation works on area saturation basis in the priority watershed has since long been recognised. The policy in the Center as well as in the State has been now, to take up all development work on watershed basis. This concept of watershed as an unit for all development works

has to be implemented in all the districts of the State. It is therefore, proposed to intensify the project planning and execution in keeping with the above decision. Comprehensive soil conservation measures like cashew plantation, miscellaneous plantation, contour bunding, terracing, stream bank erosion control, water harvesting structures, gully control works and farm pond etc. have been proposed to be undertaken in selected watersheds. It is proposed to implement this scheme at a cost of Rs. 306.00 lakhs during Seventh Plan period and for 1985-86 a provision of 45.00 lakhs has been proposed.

#### **Utilisation of waste land for plantation of Coffee, Sisal *Simruha glauca*—**

12.8. There are large chunks of government waste lands in the State which could be profitably utilised for plantation of economic and commercial crops like coffee, sisal, simoruba-glauca in compact areas suitable for the respective plantations.

12.9. *Coffee*—Coffee Board has opined that areas in high altitudes of Koraput, Phulbani, Kalahandi and Ganjam districts are quite suitable for coffee plantation. Such plantation taken up in these districts earlier has shown promising results. Coffee plantation has to have shade plants as component part and narrow terracing for planting. This plantation, therefore is considered very useful for soil conservation and it further provides work all the year round. It will be however taken up in a limited scale in appropriate hilly areas. It has been proposed to spend Rs. 25.00 lakhs for coffee plantation in the Seventh Plan. During 1985-86, the outlay proposed is Rs. 5.00 lakhs.

12.10. *Sisal*—Sisal is a xerophytic plant which come up in marginal lands and needs no irrigation for its maintenance. These plants are planted across the slope in double rows. The plantation provides a good coverage on land unsuitable for annual cultivation and effectively check soil erosion. Also the fibres obtained from this is converted to rope for various uses. This will help to cut down our sisal fibre import by increasing internal production. It is, therefore, proposed to take up sisal plantation in Government waste land in selected suitable areas in Balangir, Sambalpur, Sundargarh, Kalahandi, Phulbani, Koraput, Keonjhar and Mayurbhanj districts. It is proposed to implement the scheme at a cost of Rs. 194.00 lakhs and during 1985-86, a sum of Rs. 32.00 lakhs has been proposed for the purpose.

12.11. *Simaruba plantation*—Simoruba glauca is an edible oil yielding plant which comes up very well in degraded waste land and requires no irrigation. This plantation is not commonly browsed by animals and it provides a good canopy for land coverage. The plant can also be used as fibre wood. Considering its economics some trial plantations have been taken up by this Department which have come up very well in different areas in the State. It has been proposed to take up Simoruba plantation to protect degraded lands at an estimated cost of Rs. 52.00 lakhs during Seventh Plan period and Rs. 8.00 lakhs during 1985-86.

#### **Stream Bank Erosion and Creek Control**

12.12. Feeder streams in the catchments and meandering streams in delta areas pose a problem and eat away valuable agricultural lands every year. The creeks in delta area bring in the problem of salinity due to inundation of agricultural land with brackish water. It is proposed to treat streams and creeks by different soil conservation measures both vegetative and mechanical at an estimated cost of Rs. 34.00 lakhs during the Seventh Plan period and a sum of Rs. 6.00 lakhs has been proposed for the purpose during 1985-86.

#### **Catchment protection in Major and Medium Irrigation Projects**

12.13. Number of medium and minor irrigation projects have been constructed in the State to provide irrigation. Catchment protection work will be initiated in eroded catchment of such projects. Adoption of comprehensive soil conservation programme will stabilise the catchment with conserving soil and moisture, prevent siltation of reservoirs and prolong the life of these costly projects. Contour

bunding, terracing, various plantations in eroded lands, gully control work, construction of small water impounding structures will be taken up for this purpose. A sum of Rs. 183.00 lakhs is proposed under the scheme during Seventh Plan and during 1985-86, it is proposed to spend an amount of Rs. 28.00 lakhs for the purpose.

#### **Cashew Plantation on Farmer's Land**

12.14. In Orissa cashew grows well both in coastal region as well as in interior areas. It is proposed to extend cashew plantation to farmer's land during the Seventh Plan period particularly in lands which does not support an economic annual crop. Such areas can be profitably be used for plantation crops as cashew which will have multiple benefits. The programme will be taken up on private land on a large scale by giving input assistance to the farmers in shape of seedlings, fertilisers and pesticides. A sum of Rs. 66.00 lakhs is proposed to be utilised during the Seventh Plan period and a sum of Rs. 10.00 lakhs is proposed to be spent during 1985-86.

#### **Establishment of Cashew Development Corporation**

12.15. Cashewnut is a paying crop. It earns foreign exchange besides improving the economic conditions of the farmers. Realising the importance of cashew in preventing erosion and its commercial feasibility, the State Government has established a Cashew Development Corporation in the State. For extensive cashew plantation programme through the Corporation, an investment of Rs. 30.00 lakhs has been proposed during the Seventh Plan period and Rs. 6.00 lakhs during 1985-86.

#### **Coffee Development Agency/Corporation—**

12.16. The National Commission on Agriculture has envisaged a target production of 2.00 lakhs tonnes of coffee by 2000 A. D. to meet the demand both of domestic and export. At present, India produces coffee to a tune of about 85,000 tonnes. To bridge this wide gap, it is necessary to take up expansion of area under coffee in traditional as well as in non-traditional areas suitable for the crop. In non-traditional areas like Orissa, coffee is being grown in suitable selected locations in the hilly tracts of Koraput, Kalahandi, Phulbani and Ganjam districts where tribal population is predominant. The tribals are poor and mostly follow shifting cultivation on the hill slope earning very little from such pernicious nature of land husbandry. It is, therefore, necessary to utilise the natural resources like land and soil through such agricultural programme which will create scope for socio-economic development of the tribals. Establishment of coffee estate in such areas will not only lead the tribals for sustained substantial earning but also to wean them away from shifting cultivation to settled agriculture. It is proposed to establish a Coffee Development Agency/Corporation in the State during the Seventh Plan period for which a provision of Rs. 25.00 lakhs has been suggested and a sum of Rs. 5.00 lakhs is proposed during 1985-86.

#### **Establishment of Nurseries for Plantation**

12.17. Plantation is an important tool of soil conservation. Large scale plantation of various species have been envisaged under different schemes. But timely plantation will be possible provided a large stock of healthy and selected seedlings are available in the nursery. Plantation being a time bound programme raising of seedlings in the nursery is a must for any successful plantation programme. From the past experience it is seen that unless some permanent nurseries are established in various parts of the State it becomes very difficult to execute such programme. Plantation is also an important item under 20-point programme. It is proposed to establish atleast 56 small nurseries in the State. Out of the above for 36 nurseries initial investment will not be necessary since they will be located inside the Demonstration Centres which are already protected. For 20 new nurseries @ 5 acres each location of Government lands, reclamation and development of the area, provision of fencing and water resources have to be carried out. It is estimated that for the first category a sum of Rs. 5,000 and for the new 20 nurseries @ Rs. 25,000 each will be required for the first year which means for the first year

a sum of Rs. 7 lakhs and in subsequent years a recurring expenditure of Rs. 3 lakhs will be required. Thus for this programme during the Seventh Plan period, it is proposed to spend an amount of Rs. 22 lakhs of which Rs. 7 lakhs will be required during 1985-86.

#### **Centrally Sponsored Schemes Subsidised Plantation of Cashewnuts**

12-18. In Orissa cashew comes up well both in coastal regions as well as in interior areas. To extend the area under cashew plantation on waste land and degraded land and for maintenance work during second year subsidy as incentive is provided by Government of India to extent of 50 per cent. It is proposed to continue the scheme during the Seventh Plan at an estimated cost of Rs. 20.00 lakhs and during 1985-86, a sum of Rs. 3.00 lakhs has been provided.

#### **Package Programme for Cashew Plantation in non-forest areas**

12-19. Under the scheme existing cashew plantation projects are improved by undertaking side grafting work. Also demonstration plots are laid out in cultivator's plantations to demonstrate package of practices so as to increase the yield of nuts. The progeny orchards established in the State are given proper cultural practices to get planting materials. It has been proposed to continue this scheme during the Seventh Plan period with an investment of Rs. 20.00 lakhs and during 1985-86 Rs. 3.00 lakhs has been provided.

#### **Elite Coconut seed Farm**

12-20. The objective of the scheme is to produce quality coconut seed nut by natural cross pollination (D × T) for production of hybrid seednuts. For production of such seednuts a plantation has been established at Biswanahakani in Cuttack district over an area of 50 hectares. It has been proposed to continue the scheme during the Seventh Plan period at an estimated cost of Rs. 15.00 lakhs and during 1985-86 Rs. 2.09 lakhs has been provided for the purpose.

#### **I. D. A. Assisted Cashew Plantation in Small Holders Field**

12-21. For expansion of cashew area in the State, it has been programmed to take up cashew plantations on large scale in private holdings. This programme needs extension and co-ordination with the farmers and commercial/institutional banks. To take up this work a nucleus staff have been proposed. Under the scheme, it is proposed to take up the programme of cashew plantation in the farmers land at an estimated cost of Rs. 70.00 lakhs during the Seventh Plan period and a sum of Rs. 12.00 lakhs has been provided during 1985-86.

#### **Central Plan Schemes Soil Conservation in Inter-State River Valley Projects**

12-22. *Soil Conservation in Hirakud catchments* - Machkund/Sileru catchment and Rengali/Mandira catchment are on-going schemes for the inter-state river valley projects. Priority watersheds have been demarcated and comprehensive soil conservation measures are being executed on area saturation basis for prevention of siltation of the reservoir of these projects. It is proposed to continue the schemes during the Seventh Plan period at an estimated cost of Rs. 600.00 lakhs and during 1985-86, a sum of Rs. 105.00 lakhs has been provided.

#### **Scheme for plant protection measures in cashew plantation**

12-23. The aim and object of the scheme is to protect the cashew plantation from disease and pest attack by adopting pro-phyllactic plant protection measures with a view to improving the growth of the plantation as well as to increase the per hectare yield and size of the cashew nuts. The scheme, at an estimated cost of Rs. 75.00 lakhs will be continued during the Seventh Plan and a sum of Rs. 12.00 lakhs has been provided during 1985-86.



### **Soil Conservation Programme in three inter-State River Valley Projects**

12.24. Soil erosion is taking place at an accelerated rate in the catchment of river valley projects. Comprehensive soil conservation measures will be initiated in three major river valley projects, namely, Kolab, Indravati and Subarnarekha with 100 per cent central assistance to protect multipurpose project from rapid siltation and to prolong the life of the reservoir. The programme is proposed to be implemented with an investment of Rs. 225.00 lakhs during Seventh Plan period and a sum of Rs. 48.00 lakhs during 1985-86.

### **Strengthening of Soil Survey Organisation**

12.25. For preparation of mini watershed plans in all the blocks, delineation and codification of priority watershed in river valley catchments, categorization of fallow land for development, survey of saline inundated area and hydrological soil grouping, existing soil survey organisation needs to be strengthened. For this, it is proposed to avail assistance from the centre to the tune of Rs. 25.00 lakhs during the Seventh Plan and a sum of Rs. 5.00 lakhs during 1985-86.

### **Control of Shifting Cultivation**

12.26. The pilot project for control of shifting cultivation was implemented during the Sixth Plan as Central Sector Scheme. Same could not be continued for want of funds. Problem of soil erosion due to shifting cultivation is serious in the hilly areas of Koraput, Phulbani, Ganjam, Keonjhar and Kalahandi districts due to shifting cultivation. Since the scheme had already created impact during its execution, the scheme is proposed to be continued during the Seventh Plan with full central assistance with investment of Rs. 100.00 lakhs so as to wean away the tribal from such improper land use and to persuade them to take to settle agriculture. A sum of Rs. 18.00 lakhs has been proposed during 1985-86.

### **Integrated Watershed Management in the catchments of flood prone rivers**

12.27. Frequent occurrence of flood is a common feature in the state shattering the economy of the State. Huge loss of human life and animal and damages to other properties occur due to floods. For repair and restoration work and to provide relief heavy expenses are incurred. This also results in regional imbalances in respect of developmental activities. It is, therefore, proposed to take up comprehensive soil and water conservation programme in the free catchments of flood prone rivers like Brahmani, Baitarani, Vansadhara and the Mahanadi for moderating the flood. An allocation of Rs. 3,000.00 lakhs during the Seventh Plan is proposed with 100 per cent Central assistance and a sum of Rs. 500.00 lakhs has been proposed during 1985-86.

### **Reclamation of coastal swamps, saline and sandy areas**

12.28. Salinity is a major Cause for low production in Coastal area besides shifting sand dunes due to wind erosion. During high tide valuable fertile land are flooded with saline water. To prevent saline water inundation, creek control structures will be constructed besides other techniques for amelioration of saline land, plantation of cashew, casurina, etc. would be done to stabilise sand dunes. The scheme is proposed to be implemented as central sector scheme with 100 per cent assistance from the Centre. To tackle the problem a sum of Rs. 100.00 lakhs is proposed to be utilised during Seventh Plan period and a sum of Rs. 20.50 lakhs during 1985-86.

### **Development and stabilisation of ravine areas**

12.29. Large extent of ravine area is lying idle in the State which is subjected to severe erosion. Reclamation of such ravine area besides preventing soil erosion will make such land useful for crop production. Such land can also be distributed to landless for regular cultivation. A sum of Rs. 65.00 lakhs is proposed to be utilised for the purpose in the the Seventh Plan and a sum of Rs. 12.00 lakhs during the 1985-86.

## CHAPTER 13

## ANIMAL HUSBANDRY AND DAIRY DEVELOPMENT

13.1. The Seventh Plan outlay for the Animal Husbandry and Dairy Development sector has been proposed at Rs. 33.60 crores which includes the external assistance of Rs. 3.60 crores. The total Sixth Plan expenditure is Rs. 11.74 crores against the approved outlay of Rs. 10.00 crores. Therefore, the Seventh Plan proposal is nearly three times of the Sixth Plan expenditure. The outlay for the year 1985-86 has, however, been restricted to Rs. 400.00 lakhs.

13.2. The proposal has been formulated keeping in view the basic objectives and guidelines set forth in the Approach paper and instructions of the Planning Commission. The emphasis is on poverty alleviation, growth, self-reliance and productive employment. The strategies indicated by the Planning Commission in drafting the Seventh Plan for this sector briefly are (i) low cost livestock production for sustaining and improving the income of small/marginal farmers, (ii) intensification of cross-breeding to increase milk production while taking adequate care for preservation of local breeds in their own tracts, (iii) stepping of R & D efforts to upgrade and produce adequate number of draught animals, (iv) provision of a package programme including the entire range of services on a cluster basis with supply of good quality healthy animals, arrangement for their proper health and veterinary care, marketing and credit facilities and easy availability of inputs for permanently raising the income of I. R. D. P. beneficiaries, (v) extensive training facilities for landless agricultural labourers, (vi) fodder development, (vii) Organisation of Dairy and Poultry Co-operatives and (viii) development of a national milk grid through the implementation of Operation Flood II Programme.

13.3. Besides the above, certain important guidelines such as (i) production of pre-mixed cattle/poultry feed and utilisation of agricultural wastes as feed substitute, (ii) improvement in the management of breeding farms of cattle/buffalo/sheep/poultry as well as fodder seed farms, (iii) availability of low-cost animal health cover including provision for adequate surveillance, disease control, prophylactic infrastructure, production of quality vaccines and rinder-pest control which were indicated in the summary record of discussions held in the National Workshop on Animal Husbandry organised by the Ministry of Agriculture in July, 1984 at New Delhi have also been given due consideration in drawing up the Seventh Plan.

13.4. The draft plan has been prepared within the above frame work. Priority has been given to ongoing programmes as well as special schemes relating to 20 Point Programme. The main thrust of the draft plan is on extension of animal health care facilities and stepping up milk and egg production through genetic improvement of livestock, dairy development and beneficiary oriented programmes. Milk production has been proposed to be raised from 3.34 lakhs M. T. to 6.50 lakhs M. T. and eggs from 37.4 crores to 72 crores. Twenty-two per cent of the total Seventh Plan outlay has been proposed to be invested in the Tribal Sub-Plan areas. Similarly, for the benefit of the Scheduled Caste population, 14% of the Plan outlay will flow to the Special Component Plan.

#### Direction and Administration

13.5. *Reorganisation of Veterinary Directorate.* The Veterinary Department was re-organised during the Sixth Plan period to some extent. But the effort needs to be continued during the Seventh Plan for effective implementation of the Animal Husbandry Programmes. To supervise and monitor programme implementation in the field, the Director, Animal Husbandry, Dairy and Veterinary Services is assisted by three officers, viz. Director (Technical) Additional Director and Joint Director. As the size in the Seventh Plan of the programmes is proposed to be increased substantially and several new schemes designed specially for improving the economic status of the weaker sections have been included in the plan, it is felt essential to augment the supervisory strength by creation of two new posts of Joint Directors at the rate of one Joint Director for each Revenue Divisional Range. Besides, presently in the Directorate of Animal Husbandry, there is no post of a technical expert for monitoring implementation of poultry schemes. The Draft Seventh Plan envisages implementation of various poultry and duckery

schemes in addition to expansion of existing poultry programmes. Hence it is absolutely necessary to create a post of Deputy Director (Poultry) in the Directorate. The Sixth Plan schemes of "Establishment of Co-operative Cell" and "Expansion of Veterinary Information Bureau" have been integrated with this proposal. The cost of such strengthening of the Directorate has been estimated at Rs. 13.00 lakhs. A sum of Rs. 2.00 lakhs has been proposed for expenditure during 1985-86 on this account.

13.6. *Reorganisation of Veterinary Department*—The Reorganisation of the Department which consisted of posting of Chief District Veterinary Officers and Subdivisional Veterinary Officers during the Sixth Plan did not enable us to provide for the required staff support as per the prescribed yardstick, furniture, equipments, vehicles and office accommodation etc. due to paucity of funds. Hence the desired result was not achieved. It has, therefore, been proposed to provide staff and equipments to the field administrative units for their fullfledged functioning. Besides, it is also necessary to provide publicity equipments at the district level for facility of extension work which is essential for motivation and education of farmers as well as transfer of modern technologies to the rural masses. The total Seventh Plan outlay for this has been estimated at Rs. 23.65 lakhs. For the year 1985-86, the provision is Rs. 6.30 lakhs.

#### Veterinary Services and Animal Health

13.7. *Veterinary Hospitals and Dispensaries*—A well organised animal health service and protection of livestock against disease is the *sine qua non* of any livestock development programme. According to the yardstick recommended by the Working Group set up by the Planning Commission one Veterinarian is required for every 10,000 heads of cattle in areas of intensive cattle development and 20,000 heads in other areas. Orissa has a bovine population of 143 lakhs. Accordingly, the optimum requirement of our State has been calculated at 800 Veterinary dispensaries against which the achievement will be 513 by the end of the Sixth Plan. Keeping in view the limited resources, it has been proposed to open 10 new dispensaries during the Seventh Plan.

13.8. As per present allocation of funds, a sum of Rs. 1,300 towards equipments and Rs. 600 towards medicines is provided for each Veterinary dispensary annually. This works out to only 13 paise per head of cattle per annum. It is, therefore, needless to point out that the provision is utterly inadequate to ensure minimum animal health care. For the Seventh Plan, it has been proposed to enhance the annual allocation for each dispensary to Rs. 8,000 towards medicines and Rs. 3,300 towards equipments to provide better health care.

13.9. Most of the existing Veterinary Dispensaries do not have their own buildings. Out of 513 dispensaries, buildings are available for only 287 dispensaries and out of these, 287 buildings of more than 100 dispensaries are in dilapidated condition requiring reconstruction. Staff quarters are also wanting in most of the places. The minimum cost of a dispensary building and attached staff quarters will be around Rs. 3.50 lakhs. Out of 326 dispensaries now going without buildings, it is proposed to provide buildings to 70 dispensaries during the Seventh Plan.

13.10. Normally one Veterinary Assistant Surgeon is attached to a Dispensary. During his absence there is none to attend to cases coming for treatment. It is, therefore, necessary to provide one Veterinary Technician to each dispensary. For the Seventh Plan, the proposal is to provide Veterinary Technicians to 79 dispensaries in the district and subdivisional headquarters.

13.11. The district headquarters hospitals are lacking in Specialists and sophisticated diagnostic equipments. For providing specialised treatment, it is proposed to attach a polyclinic with a diagnostic laboratory and five Specialists in Medicine, Gynaecology, Surgery, Parasitology and Bacteriology with

the necessary staff component. The Polyclinic will be given a well-equipped van with a built-in laboratory for mobility. Requirement of funds for each district will be as follows:-

(i) Salary of 5 Specialists, 5 attendants, one assistant, one driver, one cleaner, one laboratory assistant and one laboratory attendant.	Rs. 1.75 lakhs
(ii) Laboratory equipments	Rs. 1.50 lakhs
(iii) Vehicle	Rs. 1.55 lakhs
(iv) Furniture	Rs. 0.10 lakh
(v) Medicine	Rs. 0.15 lakh
(vi) Misc. Contingencies	Rs. 0.20 lakh
<b>Total</b>	<b>Rs. 4.25 lakhs</b>

Each Polyclinic will require a building for accommodation of the Specialists, Laboratory and Indoor Ward costing Rs. 3.00 lakhs. It is proposed to set up three such polyclinics in three Revenue Divisional headquarters hospitals during the Seventh Plan.

13.12. The total Plan outlay for (a) opening of new dispensaries (b) provision of medicine and equipments, (c) construction of buildings (d) creation of posts of Veterinary Technicians and (e) Polyclinic has been proposed at Rs. 571.60 lakhs. During the year 1985-86 it has been proposed to open 2 new dispensaries, provide buildings to 10 dispensaries and open one polyclinic at Cuttack at an estimated outlay of Rs. 96.28 lakhs.

13.13. The ongoing sixth Plan Schemes "Opening of Veterinary Dispensaries", "Strengthening of Existing Hospitals and Dispensaries and "Establishment of Polyclinic and Strengthening of State Headquarters Hospital, Cuttack" have been amalgamated under this scheme for the Seventh Plan.

13.14. *Livestock Aid Centres*—Livestock-Aid Centres are essential for extending animal health care to rural areas. According to the existing policy decision of the State Government each Gram Panchayat should be provided with one Livestock-Aid Centre. By the end of the Sixth Plan, 2,806 Gram Panchayats will be covered with the Livestock-Aid Centres out of the total number of 4,895 Gram Panchayats in the State. The draft Plan envisages opening of 260 new Livestock-Aid Centres to cover about 60 per cent of the Gram Panchayats. These Centres, besides providing health cover would take care of breeding and extension activities.

13.15. The current annual provision for supply of medicines and equipments to each Livestock-Aid Centre is Rs. 1,200 and Rs. 500 respectively. As this amount is inadequate, it is proposed to enhance the annual provision to Rs. 1,500 for medicines. Thus for 2,806 Livestock-Aid Centres a sum of Rs. 56.12 lakhs will be required towards medicines and equipments every year. Assuming that a sum of Rs. 37.00 lakhs will be available from Non-Plan, the balance amount of Rs. 19.12 lakhs has been proposed for allocation under the Plan annually.

13.16. Out of 2,806 Livestock-Aid Centres, departmental buildings are available for 176 Centres at present. It is proposed to provide buildings and staff quarters at least for 140 Livestock-Aid Centres during the Seventh Plan at the rate of Rs. 1.00 lakh per centre.

13.17. It is proposed to provide 750 village Stockmen as part of strengthening the veterinary paramedical structure during the Seventh Plan at the rate of 150 each year. Such workers will be responsible for one or a group of villages or one Milk Producers' Co-operative Society or one Gram Panchayat area having 3,000 cattle and buffalo population to provide first-aid to such animals, carry out prophylactic vaccinations and give A. I. coverage, besides assisting the milk Producers Co-operative

**Societies** in providing inputs like supply of feed, distribution of fodder seeds and arranging marketing of livestock products etc. The unit cost of establishment of one Veterinary Village Stockman is Rs. 8,000 as per the following break-up :

Unit-Cost :—

(i) Salary of Village Stockman (240--260)	..	Rs. 5,500
(ii) House rent	..	Rs. 240
(iii) Medicine	..	Rs. 1,000
(iv) Equipment	..	Rs. 500
(v) Furniture	..	Rs. 500
(vi) Office Expenses	..	Rs. 260
		Rs. 8,000

The Village stockman will work within the jurisdiction of Veterinary Dispensaries and Livestock Aid Centres alongwith the milk routes where A. I. facilities are available. Total Seventh Plan requirement under this scheme will be Rs. 883.80 lakhs and for 1985-86, Rs. 66.92 lakhs. During 1985-86, it has been proposed to open 26 Livestock-Aid Centres, construct buildings for 10 Livestock-Aid Centres and appoint 50 village Stockmen. The ongoing schemes of Sixth Plan, "Opening of Livestock Aid Centres" and "Strengthening of Existing Livestock-Aid Centres" have been grouped together under this scheme of the draft Seventh Plan.

#### **Strengthening of Orissa Biological Products Institute**

13-18. The Orissa Biological Products Institute is the only Institute in the State for production of different vaccines to protect the livestock against various diseases. To improve efficiency and quality in the production of vaccines it is proposed to provide freeze driers, a distilled water plant, automatic filling machines, flow bottles, washing machines, etc. for this institution. Provision for construction of the following additional buildings as suggested by the Biological Products Division, I. V. R. I. has also been made to ensure the minimum essential infrastructure for the production of quality vaccines.

(i) Alteration of the existing laboratory with provision of room and glass panel for air-flow (dark room).	Rs.	2.00 lakhs
(ii) Construction of additional incubation room and cold storage	..	Rs. 4.00 lakhs
(iii) Construction of sheds for large and small animals for potency testing	Rs.	1.00 lakh
(iv) Construction of enumerators' shed	..	Rs. 0.50 lakh
(vi) Construction of a tube-well for continuous water-supply	..	Rs. 2.50 lakhs
		Rs. 10.00 lakhs

The total outlay for the Seventh Plan has been proposed at Rs. 35.00 lakhs. For the Annual Plan of 1985-86 provision has been made for Rs. 1.00 lakh for equipments and Rs. 2.00 lakhs for building.

### Control of Animal Disease

13.19. The following four centrally sponsored schemes have been grouped under this head. Out of them two are ongoing schemes and two are new schemes.

13.20. *Control of F. M. D.*—This is an ongoing scheme which envisages regular protection of cross-bred and high-yielding milch cows against Foot-and-Mouth disease. Fifty per cent of the expenditure is shared equally by the State Government and Government of India and the balance fifty per cent is paid by the farmers. During the Sixth Plan period 2.73 lakhs of cross-bred cattle were protected against the disease. The annual requirement is Rs. 70.00 lakhs to cover 50.00 lakhs cross-bred cattle available in the State. Against this the Seventh Plan outlay has been proposed at Rs. 40.00 lakhs and for 1985-86 at Rs. 8.00 lakhs.

13.21. *Rinderpest Surveillance, Containment and Vaccination Programme*—Rinderpest is a dreaded disease in cattle and buffaloes and regular vaccination is a must for its control. This scheme is in operation since 1972. The Surveillance involves active search for rinderpest cases, wide publicity, proper disposal of carcasses and prompt treatment of clinical cases. A sum of Rs. 2.00 lakhs has been provided for the Seventh Plan for this scheme and Rs. 0.40 lakhs for the annual plan of 1985-86.

13.22. *Systematic Control of Livestock Disease of National Importance*—Tuberculosis and brucella in cattle and buffaloes, salmonellosis in fowls and rabies in dogs not only pose serious threats to livestock production programme but also to public health as these diseases are transmissible from animals and birds to man. For controlling these diseases it is proposed to establish one unit each for T. B./Brucella, Pullorum/Pleuro-Pneumonia, Rabies and Swine fever. The Seventh Plan outlay has been proposed at Rs. 9.15 lakhs and for the annual plan of 1984-86 at Rs. 2.65 lakhs.

13.23. *Animal Disease Surveillance*—It is proposed to establish one epidemiological unit for collection of epidemiological data on infectious diseases of livestock right from the village level and their dissemination throughout the country by the Animal Disease Surveillance Cell. The proposed outlay for the Seventh Plan is Rs. 1.25 lakhs. For the year 1985-86 the proposed expenditure is Rs. 0.25 lakh.

### Veterinary Research, Education and Training

13.24. *Strengthening of Livestock Research Station*—There is a Livestock Research Station located in the State Livestock Breeding Farm, Chiplima continuing under Non-Plan. The institution has a diagnostic laboratory for investigation of complicated diseases. This station is manned by a Parasitologist, a Bacteriologist and a Pathologist. These officers have to visit different Government Farms and institutions periodically for collection of materials and investigation of complicated diseases. It is necessary to make them mobile by providing a vehicle so that they can visit different places in a team with the laboratory to undertake investigation of diseases on the spot. This will also facilitate a wider coverage. The provision for the Seventh Plan on this account is Rs. 4.40 lakhs meant for purchase of a van, laboratory equipments and meeting recurring expenditure on salary of one driver and one cleaner including contingencies for purchase of lubricants for the vehicle. The requirement for 1985-86 is Rs. 1.05 lakhs towards purchase of the van and equipments.

13.25. *Grant to O.U.A.T.*—At present there are 80 seats in Orissa Veterinary College for B. V. Sc. Course, for which a sum of Rs. 6.00 lakhs is given to O. U. A. T. as annual grant from the plan budget. This amount is found to be inadequate and there is constant pressure from the University to enhance the plan allocation to Rs. 8.00 lakhs. Hence, provision of Rs. 40.00 lakhs has been proposed under the Seventh Plan on this account. For the year 1985-86 a sum of Rs. 8.00 lakhs has been proposed as grant to O.U.A.T.

13.26. *Deputation of Officers for Post-Graduate Training*—It is proposed to depute five officers every year to I. V. R. I. for National Diploma Training Course. Besides, it is also proposed to depute five officers for M. V. Sc. training, two officers for Dairy Diploma, two officers for fodder production and one officer for statistical training. A sum of Rs. 0.50 lakh has been proposed during the Seventh Plan to meet the training cost. During 1985-86 a sum of Rs. 0.10 lakh is proposed for this purpose.

13.27. *Training of Livestock Inspectors and Village Stockmen*—There are at present two training centres for Livestock Inspectors at Bhanjanagar and Balangir, during the Seventh Plan, it is proposed to continue these two centres to train 100 candidates every year with a view to achieving the proposed target of 260 new Livestock Aid Centres and also filling up retirement vacancies. On the model of 'bare foot doctors' scheme during the Seventh Plan, it has been proposed to introduce the village stockman system and appoint 750 village stockmen for rendering door step service in health care and A. I. facilities, etc. To equip them properly for the job, it is necessary to impart suitable training to them. They will be given training for a period of 4 months in two batches of 75 each every year in the existing Livestock Inspectors' Training Centres. The Seventh Plan outlay for this training has been estimated at Rs. 20.50 lakhs. During the year 1985-86 a sum of Rs. 4.10 lakhs has been proposed for expenditure.

13.28. *Training in Frozen Semen Technology*—There are at present two training centres at Cuttack and Bhawanipatna to impart training to Veterinary Assistant Surgeons and Livestock Inspectors in Frozen Technology. During the Seventh Plan, it is proposed to train 700 officers in these two training centres in order to enhance their competence and achieve the target of covering 600 centres with Frozen Semen Technology. The period of training would be one month for each batch of 30-33 candidates. Provision has been made for construction of buildings for the training centre at Cuttack, appointment of staff and contingencies for the two centres. The proposed outlay for the Seventh Plan is Rs. 17.00 lakhs. A sum of Rs. 3.40 lakhs is proposed for expenditure during 1985-86 for these two centres towards staff and contingencies.

13.29. *Training of Farmers in Livestock Production*—Building up of awareness of the farmers is crucial to the development animal husbandry sector in the State. It is accordingly proposed to train 2,500 farmers during the Seventh Plan period @ 500 per annum in the management of high-yielding animals. The training programme will be organised in the Departmental Farms and Farms of Utikal Gomangal Samiti. The period of training will be 15 days. The expenditure for training of a farmer will be Rs. 200.00. Preference will be given to the identified group of beneficiaries who have taken animal husbandry scheme under anti-poverty programmes. The Seventh Plan outlay is Rs. 0.50 lakh on this account. A sum of Rs. 0.10 lakh is proposed for expenditure during 1985-86.

#### **Investigation and Statistics**

13.30. *Livestock Census*—The 14th quinquennial livestock and farm equipment census will be conducted in 1987-88, i. e., during the Seventh Plan period. For this purpose, a sum of Rs. 13.00 lakhs has been proposed for the Seventh Plan. During 1985-86 a sum of Rs. 2.001 lakhs has been proposed for payment of arrear printing charges of Government Press for the last census.

13.31. *Sample Survey for Estimation of Milk, Egg & Meat*—This is a Centrally sponsored scheme operating since 1983-84 and proposed to be continued during the Seventh Plan. The scheme envisages estimation of districtwise production of Major livestock products like milk, egg and meat and conduct of studies on the cost of production of milk and egg in selected pockets. The Seventh Plan outlay for this scheme has been estimated at Rs. 13.75 lakhs. A sum of Rs. 2.75 lakhs has been proposed for the annual Plan 1985-86.

### Cattle Development

13.32 *Strengthening of State Cattle Breeding Farms*—The State Cattle breeding farms have been playing a pivotal role in the production of pedigree bulls of high genetic merit required for the planned cross breeding programme. There are eleven such farms with a foundation stock of 1,554 Jersey and cross bred cows. Every year 150 exotic and cross-bred bulls and 400 heifers are produced in these farms. The existing farms do not, however, possess adequate infrastructure required for scientific breeding. For financial constraint renovation and repair of the sheds for the cattle, replacement of foundation stock and better feeding and management have not become possible. It is, therefore, proposed to re-organise four of the existing farms at Chipilima, Kuarmunda, Balangir and Cuttack through augmentation of the herd strength, renovation of sheds and improved fodder production, etc. Provision has also been made for maintaining a Jersey herd at Chipilima, a cross bred cattle herd at Kuarmunda, a Hariyana herd at Balangir and a Murrah buffalo herd at Cuttack for production of high quality bulls as per the approved breeding policy of the State.

13.33. Besides the above, it is also proposed to take up heifer rearing in these farms for production of high quality milch animals for supply to IRD/ERRP beneficiaries under the anti-poverty programme in accordance with one of the important guidelines laid down by the Planning Commission. The Seventh Plan outlay under this Scheme has been estimated at Rs. 40.00 lakhs and for the Annual Plan of 1985-86, the proposed expenditure is Rs. 8.00 lakhs.

13.34. *Artificial Insemination Programme through Frozen Semen Technique*—Artificial Insemination has been accepted as the main tool of cattle development through genetic improvement. There are 1,281 A. I. centres in the State. During the Sixth Plan period, 17.50 lakh cross-bred cows were inseminated resulting in production of about 2.30 lakh cross-bred heifers which contributed substantially to the milk production in the State. The milk production by the end of the Sixth Plan has been estimated at 3.34 lakh metric tonnes.

13.35. Artificial insemination with frozen semen technology has proved to be far superior to the conventional liquid semen system. Increasing emphasis was, therefore, laid on extension of frozen semen technology during the Sixth Plan and 550 A. I. Centres have already been covered under this technique. The Frozen Semen Bull Station and Bank at Cuttack was established during the Fifth Plan. During the Sixth Plan, one more bull station was established at Bhawanipatna in Kalahandi district under the Central Sector Scheme for cross-breeding of cattle and buffaloes through Frozen Semen Technique, covering 40 lakh cows and buffaloes in the districts of Kalahandi, Koraput, Phulbani and Balangir. Three semen banks have also been opened one each in the districts of Koraput, Phulbani and Balangir. This scheme has not been able to operate in a full-fledged manner due to non-arrival of imported equipments like liquid nitrogen plants and laboratory instruments. Construction of buildings is also not yet over. Besides, construction of staff quarters and provision of irrigation facilities for fodder cultivation at the bull station could not be taken up for lack of funds. This Central Sector Scheme will continue during the Seventh Plan.

13.36. It is proposed to extend frozen semen technique to 550 more A. I. Centres during the Seventh Plan. Provision has also been made for construction of staff quarters and sheds for bulls, development of irrigation facilities, purchase of A. I. equipments including cryocans and liquid nitrogen tankers as well as liquid nitrogen. The physical target for the Seventh Plan has been fixed at 25.00 lakh inseminations to produce 2.5 lakh of cross-bred heifers so as to boost up milk production from 3.34 lakh metric tonnes to 4.25 metric tonnes. The total outlay for this scheme in the Plan period has been projected at Rs. 210.00 lakhs and for the annual plan of 1985-86 at Rs. 34.00 lakhs.

13.37. The ongoing Sixth Plan schemes of "Cross-breeding of Cattle and Improvement of Buffaloes using Frozen Semen Technique", "Expansion of Frozen Semen Bank", "Strengthening of A. I. and E. S. D. F., Jeypore" and "Integrated Dairy Development" have all been clubbed together for implementation during the Seventh Plan.



13.38. *Indo-Swiss Project*—The Swiss-aided Cattle Development Project for Ganjam, Sundargarh and Sambalpur districts with a project period of 10 years has since been accepted by the Swiss Development Co-operation. Project details for the first two years of the programme have now been prepared for implementation in Ganjam district to start with pending final clearance of Swiss authorities. The project cost has been estimated at Rs. 409.40 lakhs covering a period of 10 years. For implementation of this project, a provision of Rs. 230.00 lakhs has been proposed under the Seventh Plan and Rs. 18.00 lakhs for the annual plan of 1985-86.

13.39. *Crossbreeding of Cattle and Buffaloes through Frozen Semen Technology with German Assistance*—The Federal Republic of Germany have conveyed their willingness for providing assistance to the implementation of a programme of cross-breeding of cattle and buffaloes using frozen semen technique in the districts of Balangir and Mayurbhanj. The assistance will be non-recurring in nature, such as supply of equipments, breeding bulls, frozen semen doses, etc. for establishment of a frozen semen bull station and semen bank with A. I. units. The State Government will have to meet the recurring operational cost of the scheme and provide land and buildings. Although the size of the financial assistance to be received from the F. R. G. has not been indicated, a tentative provision of Rs. 50.00 lakhs has been proposed for the Seventh Plan and Rs. 10.00 lakhs for the annual Plan of 1985-86.

13.40. *Intensive Natural Breeding*—Although artificial insemination has been accepted as the main instrument of Cattle development through cross-breeding, it is not possible to extend this facility to every nook and corner of the State all at once. This gap is covered by natural breeding as far as practicable through maintenance of bull centres with private hosts. The programme of natural breeding has been entrusted to Utkal Goshal Samiti and the Samiti has been rendering Yeoman's Service in this regard. The Samiti has been able to establish 450 bull centres by the end of the Sixth Plan with 1.32 lakhs of services done resulting in 61,000 graded progenies. For the Seventh Plan, it is proposed to establish 125 new centres at the rate of 25 per annum. The Seventh Plan expenditure on this account has been estimated at Rs. 9.00 lakhs. For the year 1985-86 a sum of Rs. 1.80 lakhs has been proposed for expenditure.

13.41. *Development of Goshalas for Cattle Development*—This is a centrally sponsored scheme which will be taken up in the Seventh Plan for the first time. There are 17 Goshalas in the State with a breedable population of 1,800 animals. With a view to getting good quality milch animals for the beneficiary-oriented anti-poverty schemes, it is proposed to strengthen at least 5 existing well-managed Goshalas at the rate of one Gosala every year by providing financial assistance for purchase of foundation stock and fodder cultivation. All round development of the Goshalas is not possible without establishment of State Gosala Federation. Central assistance will not be available unless Goshalas are affiliated to the State Federation. Steps have already been initiated for establishment of the Federation during the Sixth Plan period. The Federation will need financial assistance in shape of building and managerial subsidy. The Seventh Plan outlay for this scheme has been proposed at Rs. 15.00 lakhs and for the Annual Plan, 1985-86 at Rs. 3.00 lakhs.

### **Poultry Development**

13.42. *Strengthening of State Poultry/Duck Farms*—Poultry farming is highly remunerative because of low capital involvement, quick returns and well distributed turn-over throughout the year. Amongst farm animals, poultry is one of the quickest and most efficient converters of plant products into food of high biological value. For encouraging poultry farming the State Government have set up two broiler farms with parent stock of 500 each at Bhubaneswar and Sundargarh for supply of chicks to the farmers and beneficiaries of I. R. D. and H. R. R. P. Schemes. Besides, there is a State Poultry Farm at Angul producing layer chicks which are also required by the beneficiaries. These three farms are not able to

meet the increasing demand of Chicks. It has, therefore, been proposed to strengthen these three farms during the Seventh Plan by increasing the stock strength. Besides, establishment of two new broiler farms, one at Koraput and another at Angul with 100 birds each has also been contemplated.

13-43. There is a state duck-breeding farm at Cuttack where exotic strength of Khaki Campbell breed is maintained in order to make available ducklings and drakelets for the beneficiaries under anti-poverty programmes. For increasing production in this farm certain additional facilities like buildings for rearing of ducks and drakes, water sources and incubation are necessary. It has been proposed to provide these facilities during Seventh Plan. The Seventh Plan outlay for this scheme is estimated at Rs. 88.00 lakhs and for the annual plan of 85-86 at Rs. 13.60 lakhs. The ongoing 6th Plan schemes "Establishment of Broiler Farm," "Strengthening of Poultry Farm, Angul" and "Establishment of Duck Breeding Farm" have been grouped together under this scheme for the Seventh Plan.

13-44. *Development of Backyard Poultry and Duck Farming*—There are 10.66 million poultry birds in the State which need not only protection against diseases but also upgradation through genetic improvement. Since Fourth Five-Year Plan, improvement of the indigenous poultry population has been neglected and greater attention given to establishment of deep litter poultry units with improved stock. It is proposed to revive backyard poultry and duckery in a big way supplying 20 cross-breed chicks/ducks and superior variety cocks to beneficiaries under the anti-poverty programmes. For the Seventh Plan the estimated outlay is Rs. 12.50 lakhs and for the annual plan of 1985-86, Rs. 2.50 lakhs.

13-45. *Strengthening of Poultry Federation*—The major constraint in the development of poultry is lack of marketing facilities and imbalance between egg and feed prices. As a result poultry farming under anti-poverty programmes has not been very successful. In order to promote and provide dependable marketing facilities to the poultry farmers, the existing State Poultry Federation is proposed to be strengthened suitably under the Seventh Plan with financial assistance towards managerial, equipment and house rent subsidy and construction of a cold-storage to store eggs and meat for marketing.

13-46. *Financial Assistance to Poultry Co-operatives*—Poultry Producers' Co-operative Societies set up with financial assistance from Government are engaged in poultry farming and egg production. Most of the Societies have become moribund due to want of financial viability as well as linkages with marketing centres. Now that poultry farming has been taken up in the Seventh Plan as an important beneficiary-oriented programme for poverty alleviation and providing gainful employment to the rural poor, the need for revitalising the Societies, particularly around urban growth centres has become imperative. During the Seventh Plan, it is proposed to organise 20 Societies having 50 members each around growth centres in every district. Financial assistance to these Societies will be given in shape of managerial, house rent and equipment subsidy to enable them to function properly. The Seventh Plan outlay has been proposed at Rs. 2.00 lakhs and for the Annual Plan of 1985-86 the estimated expenditure is Rs. 0.40 lakhs.

#### **Other Live stock Development**

13-47. *Special Live stock Development Programme*—This is a centrally sponsored scheme being implemented since the Fifth Five-Year Plan in the districts of Cuttack, Puri, Dhenkanal, Keonjhar, Sambalpur, Koraput and Balangir. This programme envisages assistance to small/marginal farmers and agricultural labourers for supplementing their income by increasing livestock production through cross-bred female calf-rearing and establishment of poultry sheep and pig-units. Experience shows that calf-rearing and sheep units have been doing very well with high Percentage of loan recovery. The pig units have also thrived well in tribal pockets and poultry and duck units in and around towns. During the Seventh Plan, this programme will continue in the aforesaid areas of operation.

13-48. The Calf-rearing programme is now operating only in four districts of Cuttack, Puri, Dhenkanal and Sambalpur. During the Seventh Plan, it is proposed to extend the calf-rearing programme to the remaining nine districts also as crossbred female calves are available in adequate numbers.

Graded buffalo calf-rearing is proposed to be newly introduced. Extension of poultry, sheep and pig units will continue on a modest scale. The following target has been proposed provisionally under the Special Livestock Production Programme for the Seventh Plan.

Table 13.1

		Unit cost	Subsidy component	Annual target	Area of operation
		Rs.	Rs.	Rs.	
(i) Crossbreed Calf Rearing	..	2,800	1,486	2,400	Units all the 13 districts.
(ii) Buffalo calf rearing	..	4,000	2,000	300	Units all the 13 districts.
(iii) Poultry Units (100 layers)	..	6,000	3,000	150	Ditto around urban growth centres.
(iv) Sheep Units	..	4,000	1,267	300	Ditto Balangir, Kalahandi and Sambalpur.
(v) Pig Units	..	3,800	1,834	180	Ditto Keonjhar, Koraput and Mayurbhanj.

The total Seventh Plan outlay has been proposed at Rs. 300 lakhs. For the year 1985-86, a sum of Rs. 60.00 lakhs is proposed for implementation of the scheme.

13.49. *Establishment of Small Animal Development Corporation*—Meat industry has great economic potentialities but so far it has received very little attention. The quality of meat produced is far below the requirements and suitable meat breeds of livestock have not been developed. The hygienic conditions in most of the Slaughter houses are appalling and animal by-products of substantial value are wasted. For exploitation of these potentialities, the need for establishment of a commercial organisation in the public sector is keenly felt. This corporation will be able to boost up planned breeding and rearing of small animals like goats, sheep and pigs for production of processed quality meat for internal consumption as well as export. It is accordingly proposed to establish a Small Animal Development Corporation during the Seventh Plan at an estimated outlay of Rs. 150 lakhs. For the year 1985-86, a sum of Rs. 1.00 lakh has been proposed for technoeconomic feasibility study and preparation of project report.

#### Fodder and Feed Development

13.50. *Expansion of State Fodder Seed Production Farms*—Development of fodder resources has been accorded high priority in the guidelines of the Planning Commission as quantitative and qualitative insufficiency of feeds and fodder in the country is one of the main impediments in the way of improvements of livestock production. All the improvement brought about by breeding can be set at naught if the improved breeds do not get adequate feed. It has, therefore, been proposed to strengthen the existing State Fodder Seed Production Farm at Chiplima, Panchamahaland Salapada for intensive fodder cultivation and to create facilities for storage of fodder seeds for distribution among farmers during the Seventh Plan at an estimated outlay of Rs. 14.25 lakhs. During the year 1985-86, a sum of Rs. 3.25 lakhs has been proposed for expenditure.

13-51. *Development of Fodder Resources*—During the Sixth Plan, some progress has been achieved in increasing fodder production through distribution of fodder minikits. This programme is gaining popularity and is proposed to be expanded during the Seventh Plan with a target of 3,125 acres of farmers' land in their backyards to be brought under fodder cultivation at Rs. 800 per acre benefitting 3,500 farmers. The estimated Seventh Plan outlay is Rs. 25.00 lakhs. A sum of Rs. 5.00 lakhs has been provided for expenditure in the Annual Plan of 1985-86 to cover 625 acres with fodder.

13-52. *Utilisation of Agro-wastes including paddy straw as cattle fodder*—Simple methods are now available for enrichment of paddy straw and other agrobases which are the principal sources of energy for the livestock. It is proposed to take up demonstration of the process of enriching the straw in 100 centres along the milk routes to educate the farmers during the Seventh Plan at an estimated outlay of Rs. 1.00 lakh. The annual plan outlay for the year 1985-86 for this scheme is Rs. 0.20 lakh.

13-53. *Development of Compound Feed and strengthening of Feed Analytical Laboratory*—The Feed Analytical Laboratories at Bhubaneswar and Chiplima have been set up for quality control of compound feed produced by various agencies. Since manufacture of livestock feed has been on the increase in the private sector it is felt necessary to strengthen both the Analytical Laboratories with provision of equipments and chemicals for handling growing number of feed samples received for analysis. A sum of Rs. 1.25 lakhs has been proposed for Seventh Plan outlay on this account and a sum of Rs. 0.25 lakh has been proposed for expenditure during 1985-86.

#### Dairy Development

13-54. *Financial Assistance to Milk Producers Co-operatives and District Milk Unions towards subsidy and establishment of Chilling plants*—With the growing number of dairy units coming up under anti-poverty programmes milk production is expected to go up appreciably during the Seventh Plan and unless appropriate marketing facilities are created for economic disposal of the surplus milk. The dairy schemes will prove to be counter-productive. It has, therefore, been proposed to strengthen the District Milk Unions and Milk Producers Co-operatives by providing them with financial assistance towards managerial and equipments subsidy. Ten Milk Producers Co-operatives will be organised and revitalised in each district for this purpose during the Seventh Plan. Besides, establishment of 18 Chilling Plants has been envisaged through the Milk Unions for preservation of milk during the Plan period. Total Seventh Plan outlay on this account will be Rs. 35.75 lakhs and for the year 1985-86, a sum of Rs. 2.75 lakhs has been proposed for expenditure.

13-55. *Dairy Extension*—Successful dairy management presupposes intimate acquaintance with modern scientific practices in rearing and maintenance of dairy animals, proper health care, feeding, housing, timely heat detection and correct milking to prevent mastitis etc. Dairy units are being mostly set up by the poor people under poverty alleviation programmes. Most of them are ignorant rustic people and need close contact with Extension Officers for learning scientific dairy management practices. It is also very important to teach the farmers in silage making for conservation of fodder in view of acute scarcity of fodder for most part of the year. It is therefore, proposed to appoint 100 Dairy Extension Officers in selected blocks for extension work during Seventh Plan period. In order to enable the Dairy Extension Officers to function effectively each district is to be provided with an audio-visual set fitted in a vehicle and kept in charge of Assistance District Dairy Officer attached to the Chief District Veterinary Officer. The Seventh Plan outlay has been estimated at Rs. 33.75 lakhs and for 1985-86 at Rs. 1.75 lakhs.

13-56. *Dairy Development in Phulbani, Balangir and Koraput districts with Danish Assistance*—Cattle development is expected to receive a great impetus in the four districts of Kalahandi, Phulbani, Koraput and Balangir as A. I. Programme with Frozen Semen Technology is operative in these districts under the Central Sector Scheme. This will result in substantial milk production which calls for creation of

adequate milk processing facilities. In Kailahandi district, National Co-operative Development Corporation has been setting up a Chilling Plant and implementing other dairy development programmes in the Co-operative sector. In the remaining three districts, there is no agency at present to finance and implement these ancillary dairy development programmes. It is proposed to avail of the offer of Danish assistance in this regard in respect of these three districts during the Seventh Plan period. Although the size of assistance has not been spelt out by the Danish authorities, a tentative provision of Rs. 50.00 lakhs has been proposed as Seventh Plan outlay and Rs. 5.00 lakhs for the annual plan of 1985-86.

13-57. *Pilot Programme for Integrated Dairy Development around selected growth centres*—The urban growth centres are potential markets for milk to exploit around which a pilot programme for dairy development could be designed. For the Seventh Plan, 32 such places have been selected for intensively covering a population of 2,000 breedable cows in each location. The programme includes provision of door step A. I facilities and health cover and development of back-yard fodder cultivation by the farmers. A provision of Rs. 25 lakhs has been made to meet the requirement of the plan outlay under this scheme. For the Annual Plan of 1985-86, a sum of Rs. 5 lakhs has been proposed for expenditure on this account.

13-58. *Special project for Dairy Development in one of the Operation Flood-II Districts*—Operation Flood-II programme is now being implemented in the districts of Cuttack, Puri, Dhenkanal and Keonjhar through OMFED. As OMFED does not have adequate resources to take up comprehensive A. H. development programmes in this districts, it has been decided to supplement its activities out of State Plan resources in a phase-I manner. For the Seventh Plan Cuttack district has been selected for a comprehensive A. H. and Dairy Development Programme. It envisages opening of optimum number of veterinary dispensaries and Livestock Aid Centres with adequate provision of medicines and A. I. Centres with Frozen Semen Technology for providing health and breeding cover. In addition, fodder cultivation would be stepped up. Marketing infrastructure will be strengthened by organisation and revitalisation of Co-operative Societies. The programme will be implemented in collaboration with OMFED. At a total outlay of Rs. 400 lakhs, out of which a sum of Rs. 200 lakhs will be met out of the plan outlay and the rest will be met by the Milk Federation. The Annual Plan expenditure for 1985-86 on this score has been estimated at Rs. 5.20 lakhs.

13-59. *Grant to OMFED*—It is proposed to provide an annual grant of Rs. 5 lakhs to OMFED to strengthen their financial base. The total Seventh Plan outlay will be Rs. 25 lakhs.

#### **Tribal Sub-Plan and Scheduled Caste Component Plan**

13-60 Out of the total State Plan Outlay of Rs. 33,60 lakhs, a sum of Rs. 717 lakhs will flow to the Tribal Sub-Plan. Similarly, against the tentative outlay of Rs. 400 lakhs for 1985-86, the flow for Tribal Sub-Plan will be Rs. 97.80 lakhs. The flow of funds for Special Component Plan for Scheduled Castes will be Rs. 468.15 lakhs. For the Annual Plan of 1985-86 the flow for Special Component Plan will be Rs. 58.94 lakhs.

## CHAPTER 14

## FISHERIES

14.1. Orissa]abounds in marine, fresh water and brackishwater fisheries resources which can contribute substantially towards improving the socio-economic condition of the people of the State. During Sixth Plan an investment of Rs. 10 crores was made on Fisheries Sector of the State which has helped in for setting up of 11 Fish Farmers' Development Agencies for promoting loan-linked beneficiary oriented fresh water fish culture programme, introduction of two Brackishwater Fish Farmers Development Agencies in the coastal districts, setting up of 8 modern fish seed hatcheries to meet the fish seed requirement of the farmers covered under different programmes besides developing marine infrastructure like jetties at Chudamani, Pathari and Sabelia, approach road to a number of marine fishing villages, initiation of fishing harbour at Astarang, deepening of Palur Canal for facilitating entry of Prawn juveniles and mullet fry into Chilka Lake and for supporting Fishermen Welfare Schemes like Saving-cum-relief Fund, Fishermen Accident Insurance Scheme and for continuing subsidy schemes for the economic upliftment of the fishermen. This had also provided for achieving development of about 16,000 hectares of fresh water ponds, 300 ha. of brackishwater area, 32.79 crores of quality carp seed production, 2.16 lakh tonnes of inland and 2.26 lakhs tonnes of marine fish production during the five years of Sixth Plan.

14.2. Considering the available potential there is still greater scope for development. The annual marine fish production of 47,065 (1983-84) works out to only 98 tonnes per kilometre of the coast line of 480 Kms. of the State. This is much less than the national average production of 284.2 tonnes per kilometre. In fact, an interim appraisal of marine fish production made by National Workshop on Fisheries held in June 1984 revealed that Orissa's marine fish production of 46,000 tonnes is barely comparable to Goa's 41,637 tonnes which has a much smaller coast line. The same Workshop analysis reveals that in total inland fish production, Orissa ranks behind West Bengal, Tamil Nadu, Andhra Pradesh and other States, who are not traditionally fish culture States like Orissa.

14.3. The above indicates that a lot of efforts and resource should be deployed for development of fisheries in the State. The Seventh Five-Year Plan therefore proposes an outlay of Rs. 30 crores. The Plan has been prepared in keeping with the recommendations of National Commission on Agriculture 1976 and the Standing Committee of Central Board of Fisheries held on the 18th September 1984. The outlay of Rs. 30 crores is mostly for completion of incomplete projects of Sixth Five-Year Plan spilling over to Seventh Plan, the investment on new Schemes being of the order of only Rs. 20.00 lakhs. The investment will cover an expenditure of Rs. 7.09 crores in Tribal Sub-plan area and Rs. 11.45 crores on the Scheduled Caste component Plan which is 23.64% and 38.16% respectively of the total outlay. The investment in tribal Sub-Plan and Scheduled Caste component plan during Sixth plan were Rs. 2.24 crores and Rs. 0.31 crores respectively which was 22.45% and 3.1% of the total investment. Although the total outlay envisaged during the Seventh plan is Rs. 30 crores, the actual burden on the State's plan resources will be Rs. 18.66 crores, the rest Rs. 11.34 crores being Government of India's share under Centrally Sponsored Schemes and flow of funds under internationally aided projects.

14.4. In terms of physical targets, during the Seventh Five-Year Plan, it is proposed to raise the production of induced bred spawn to 50.00 crores from the present level of 28.00 crores per annum to achieve production of fries/fingerlings of 16.40 crores from the level of 11.80 crores by the terminal year of Sixth Plan. This will help us to raise fish production of 1.00 lakh M. T. from inland sector by the terminal year of the Seventh Plan from the level of 54,000 M. T. by the end of 1984-85 and to raise marine fish production to 1.00 lakh M. T. by the end of Seventh Plan period from the level of 54,000 M. T. by the end of Sixth Plan. The Seventh Plan also envisages production of 8.00 crores post-larvae of prawn to meet the prawn seed requirement of about 4,000 hectares to be developed by the end of the plan period.

**Direction and Administration**

14.5. The increased outlay during the Seventh Plan would call upon strengthening of the existing organisational set up in the Department of Fisheries at the Directorate, Zonal and District levels to provide adequate supervision and co-ordination in order to cope with the execution and monitoring of the enlarged programmes envisaged in the plan. The plan proposes to strengthen the Engineering Cell of the Directorate to handle works programme so as to complete them within the time schedule. This is in keeping with the guidelines of the Planning Commission in its Approach Paper which require the effective steps to be taken to complete the projects within the given time frame. Only one post that has been proposed for creation during the Seventh Plan is that of the Joint Director of Fisheries to head the planning cell of the Directorate. The posts to be created at the Zonal level include five Assistant Directors of Fisheries, one Executive Engineer, one Assistant Engineer, two Junior Engineers and other supporting staff for supervision and execution of the Schemes. At the district level one post of Assistant Director of Fisheries for Puri Marine district and 13 Junior Engineers, one for each district has been suggested. The outlay also includes purchase of three Jeeps, a staff car at the Directorate, one Jeep at the Zonal, three jeeps and two pickups at the district level all on replacement basis, besides acquiring a photocopier and setting up of a mini PBX at the Directorate. The break-up of the outlay on Direction and Administration are as follows :—

Table 14.1

Scheme component (1)	Outlay Rs. in lakhs (2)	Posts to be created (3)	Other expenditure items (4)
1. Administration at Headquarters	18.50	1 J. D. F. 1 S. E. (Civil) & supporting staff	3 Jeeps 1 Staff car 1 Photocopier 1 Mini PBX
2. Administration at Zonal level	34.30	1 Ex. Engineer 5 A. D. Fs. 1 A. E. 2 J. Es. and supporting staff	1 Jeep
3. Administration at District level	22.50	1 A. D. F. 13 J. Es. & supporting staff	3 Jeeps 2 Pickups

14.6. In the annual plan for 1985-86 a provision of Rs. 18.31 lakhs has been kept as per break-up given below :—

Table 14.2

Scheme component (1)	Outlay Rs. in lakhs (2)	Post to be created (3)	Other expenditure items (4)
Administration at Headquarters	5.20	1 J. D. F. 1 S.E. and supporting staff	2 Jeeps 1 Photocopier 1 Mini PBX
Administration at Zonal level	8.55	1 Ex. Engineer 2 A. D. Fs. 1 A. E. 1 J. E. and supporting staff	1 Jeep
Administration at District level	4.56	1 A. D. F. 5 J. E. and supporting staff	1 Jeep 1 Pickup

**Extension**

14.7. One of the observations of National Commission on Agriculture was that the absence of adequate work in fisheries extension has been one of the principal reasons for the slow pace of Inland Fisheries Development. The Commission's recommendation in this connection is that there is need for building up of a communication agency in the form of extension cells in the directorate and district levels. During Sixth Five-Year Plan, as new fishing and aquaculture technology came up to be implemented for economic upliftment of the common man the attention to fishery extension was the immediate imperative. This necessitated the posting of at least one Fishery Extension Officer per block. But with the resources available it was possible to provide only 193 Fishery Extension Officers as against 314 Blocks in the State. The number of schemes, nearly all of them now beneficiary oriented, as well as the number of beneficiaries that are coming forward now to accept the schemes, has grown in the Sixth Plan itself. This with the expanded Seventh Plan programmes to be implemented, would naturally call for strengthening of the fishery extension machinery both at block and district levels. With this end in view, it is proposed to post 45 more Fishery Extension Officers in the blocks thus raising the strength of block level Fishery Extension Officers to 238. Since it is practically becoming impossible for the district level Assistant Directors of Fisheries to closely monitor the work of the Extension Officers in the field in addition to their growing work-load of co-ordination with the various departmental officers and the financing institution, it is felt necessary to provide a Subdivisional Extension Officer in the rank of Superintendent of Fisheries in 30 potential Subdivisions and 9 district headquarters. In 10 subdivisions of lesser fisheries potentialities, it is proposed to provide Deputy Superintendent of Fisheries as Subdivisional Extension Officers. To help collect, compile, process and analyse various field informations and statistics generated as a result of fisheries extension, it is also proposed to post 17 Statistical Investigators, one in each district and zonal fisheries office. Besides the salary, the expenditure on Fisheries Extension will be on purchase of 100 sampling nets, 200 field kit boxes to be used by the Fisheries Extension Officers in discharging their duties effectively. Purchase of 30 Motor Cycles has also been envisaged in the Plan for the facility of touring of the Subdivisional Extension Officers. The proposed outlay on Fisheries extension also includes expenditure for holding exhibitions in the field and for seminars, exhibition of films, printing of pamphlets and other photographic and publicity equipments. The break-up of the outlay is as below:—

**Table 14.3**

Scheme component	Outlay Rs. in lakhs	Posts to be created	Other expenditure item
Fisheries Extension	181.00	39 S. Fs. 10 D. S. Fs. 45 F. E. Os. 17 Statistical Investigators	100 Sample nets 200 Field Kit boxes 30 Motor Cycles Beacon lights
Publicity & Fair	19.00	Nil	Exhibitions, Seminars, Exhibition of films and other equipments.

14.8. The outlay for the year 1985-86 under Fisheries Extension is Rs. 11.54 lakhs which includes Rs. 3.46 lakhs for publicity and fair.



### Fish Farms

14.9. One of the basic inputs for development of fish culture is quality fish seed which is frequently in short supply. The Sixth Plan saw rapid increase in the area under fish culture. The Fish Farmers Development Agencies set up in 11 out of 13 districts of the State added about 16,000 ha. of fresh water ponds for scientific fish culture with bank finance. Although 70 ha. of modern hatcheries set up by Orissa Fish Seed Development Corporation, under Inland Fisheries Project would easily meet the fish seed requirement of the ponds developed under Fish Farmers Development Agencies, there is quite a sizeable number of fish farmers, Grama Panchayats, private and public institutions having ponds as well as a large number of reservoirs needing fish seed annually for normal fish culture. Their seed requirement is met by the Department from 95 fish farms located in different parts of the State. As the fish seed indent of these farmers grew, it became necessary on the part of the Department to renovate and modernise the existing farms to increase their capacity utilisation. Thus, during Sixth Five-Year Plan, 23 farms were partially renovated. The efforts at renovation and modernisation of fish farms are proposed to be stepped up during Seventh Plan to meet the extra fingerling demands. In fact one of the areas of major thrusts identified by Central Board of Fisheries during Seventh Plan is fish seed production. It has, therefore, been proposed to keep an outlay of Rs. 45.00 lakhs which will be utilised for renovation of 25 farms located in different parts of the State with an area of 104.12 ha. The expenditure on the proposed Fish Farms will be along the following heads:—

Table 14.4

Scheme component	Outlay Rs. in lakhs	Remarks
Renovation of farms	25.00	25 fish farms
Fencing	10.00	4 fish farms
Electrification and construction of mini hatcheries.	10.00	10 fish farms

The annual plan outlay for 1985-86 on fish farms is Rs. 10.00 lakhs to be spent on renovation of eight farms, electrification and mini hatchery construction in two farms.

### Hatcheries

14.10. One major feature of the Sixth Five-Year Plan in the Fishery Sector has been the construction of 70 ha. of modern fish seed hatcheries under Inland Fisheries Project with World Bank Assistance through Orissa Fish Seed Development Corporation. As per funding pattern 30% of hatchery construction cost is to be provided by the State Government towards equity share to the Corporation. Besides, the entire cost of construction of approach road to the hatcheries is to be borne by the State Government. The hatchery construction is expected to be completed during first two years of the Seventh Five-Year Plan for which a provision of Rs. 41.00 lakhs has been kept in the Plan including Rs. 30.00 lakhs for approach road construction. This will be in addition to Rs. 31.00 lakhs of equity share and Rs. 5.48 lakhs towards approach road construction. The provision for 1985-86 is Rs. 19.00 lakhs, Rs. 9.00 lakhs for share capital and Rs. 10.00 lakhs towards approach road construction.

**Research**

14.11. The expansion of the industry both capture and culture for increased production necessitates continued efforts in research and investigation, finding out areas of commercially exploitable fish stocks, their distribution and densities and to make an assessment for eventually utilising such areas for economic use involves series of investigations and survey of fisheries resources. The industry has to be continually fed with informations on availability of economic fishery resources. As of now, the survey of fisheries resources has covered the Orissa coast up to a depth of 50 fathom and therefore there is still a need for continuing the survey during the Seventh Plan. Besides, investigation on new culture and fishing technologies suiting to the geo-topographical condition of the State is to be done independently or as part of co-ordinated research activity. With this end in view a sum of Rs. 75.00 lakhs has been provided in the Plan on the following head :—

**Table 14.5**

Component	Outlay (Rs. in lakhs)	Salary Cost (Rs. in lakhs)	Other items of expenditure
Research and Investigation ..	54.64	Nil	Replacement of 4 marine engines, one 120 H. P., one 60 H.P. and two 75 H. P., repair and operational cost of 6 boats. Chemical and laboratory equipment for 13 district laboratories.
All-India Coordination Research Project.	7.22	4.09	Purchase of chemical and equipments.
Pilot Survey of Inland Fish Catch.	13.14	12.34	Office Expenses
	75.00	16.43	

14.12. The provision for the annual Plan 1985-86 is Rs. 11.41 lakhs which includes: Research & Investigation Rs. 7.30 lakhs, Co-ordinated Research Projects Rs. 1.70 lakhs and Pilot Survey on Inland Fish Catch Rs. 2.41 lakhs.

**Education and Training**

14.13. This is an ongoing scheme for imparting training to inservice Departmental Fisheries Extension Officers at Fisheries Training Institute Balugaon and for Superintendents of Fisheries and Asst. Directors of Fisheries, Deputy Directors of Fisheries at Training Institutes outside the State at Agra, Hyderabad, Barrackpore and Bombay. The scheme is to continue during the Seventh Plan period for which an amount of Rs. 95.00 lakhs has been provided which includes besides salary of teaching and other supporting staff of the Fisheries Training Institute, provision for completion of training barrack at Paradeep and Balugaon, purchase of a jeep and a trainee bus, educational film and furniture. Provision of

Rs. 50.00 lakhs has been kept towards establishment of a Fisheries College under the Department. This could be done by utilising the existing infrastructure at Balugaon and strengthening and upgrading the Fisheries Training Institute. The break-up is as follows :—

Table 14.6

Component (1)	Outlay (Rs. in lakhs) (2)	Salary Cost (Rs. in lakhs) (3)	Other items of expenditure (4)
Education and Training.	45.00	1 A. D. F. 1 Registrar 1 Driver 1 Cook and supporting staff.	1 bus 1 jeep 4.38 Purchase of educational film, completion of compound wall and training barrack, Equipment, furniture. Stipend.
Grant to OUAT	50.00	Teaching Staff salary	28.00 Building construction 10.00 Books and Equipment 7.00 Contg. 5.00

In the 1985-86 Annual Plan, a provision of Rs. 13.05 lakhs has been kept, out of which Rs. 8.05 lakhs is for Fisheries Training Institute, Balugaon towards stipend and equipment, furniture, works and office expense and Rs. 5.00 lakhs has been earmarked towards establishment of the college.

#### Inland Fisheries

14.14. The Inland Fisheries embraces a number of programmes of the Department which are directly associated with the promotion of Inland fisheries both capture and culture in the State. One of the recommendations of National Commission on Agriculture was to develop inland fisheries "as a priority industry because of high demand and market value for fresh and brackish water fish which could be raised and distributed as low cost protein food". The National Workshop on Fisheries in its June 1984 meeting with obvious intent to lay emphasis on Inland Fisheries development has suggested that a well-planned programme of Inland fish production in the country during Seventh Five-Year Plan will have to be drawn up. With this end in view, an outlay of Rs. 1,000 lakhs has been provided under Inland Fisheries during Seventh Five-Year Plan to support such important programme as well serve as backbone to Inland Fisheries development of the State. These among others, include provision for equipment, feed and fertilisers for raising the production of quality spawn from the present level of 25 crores to 50 crores in the terminal year of Seventh Plan for which Rs. 39.55 lakhs has been provided. This is in conformity with the NCA recommendation that considering the quality of fish seed produced through induced breeding by giving injections of pituitary hormones or suitable substitutes, the State should considerably intensify the programmes. Similarly, in the sector of Reservoir Fisheries Development, Rs. 10.68 lakhs has been provided in the Plan. Reservoir Fisheries Development has not, in fact, been adequately attended to during the past Five-Year Plans. Now that a sizeable reservoir based capture fishery oriented industry has developed and a large population of mostly fishermen, coming under small, marginal and agricultural labourers groups are seeking assistance under I. R. D. and E. R. R. P., the State has an urgent need to develop the reservoirs. Even the National Workshop on Fisheries has recommended to identify the minor, medium and major reservoirs in the State with a view to raising per hectare production and taking up planned programmes to develop each category of reservoir. The Plan contemplates to develop 30 reservoirs for the purpose.

14.15. Another activity included under Inland Fisheries Project is the grant to FFDA's. The role of FFDA in the development of Inland Fisheries is well known. In Orissa already 9000 ha. have been developed in four years. Eleven districts are now covered by FFDA's. The National Workshop on Fisheries recommends that State Government may consider setting up FFDA in all districts which are not covered under Centrally sponsored FFDA Programme. The outlay of Rs. 565 lakhs set apart for FFDA includes subsidy support to already existing FFDA's besides creation of two more FFDA's in the districts of Sundargarh and Keonjhar.

14.16. Similarly, on the Brackish water fisheries development Rs. 139 lakhs has been provided to support the existing two BFDA's including the cost of two more BFDA's proposed to be created during the Seventh Plan. Under Area Approach Development Programme Rs. 168.00 lakhs has been kept for construction of 672 ha. of brackish water ponds to be given on lease to farmers on 15 years lease. Two Prawn hatcheries are to be constructed during the plan period at a cost of Rs. 40.00 lakhs. The Plan also includes Rs. 8.00 lakhs for dredging of Palur Canal on Chilka lake for which Rs. 14.00 lakhs has already been utilised during the Sixth Plan. This is in line with NCA recommendation to restore fall in production from capture fishery of brackish water particularly in Chilka and Pulicat lake as a result of silting of connection with sea and to maintain the level of agricultural and fisheries production in the entire area, an integrated plan should be developed by co-ordinated action on the part of Irrigation, Agriculture and Fisheries Departments.

14.17 The itemwise allocation of funds is as follows

Table 14.7

Scheme component (1)	Outlay (Rs. in lakhs) (2)	Staff/Salary (3)	Other items (4)
<i>Inland Fisheries</i>			
1. Production of quality spawn.	39.55	—	Equipment, feed and fertilizers 50 crores of spawn.
2. Development of Reservoir Fisheries.	10.68	12 DSFs. 12 Watchmen	30 reservoirs to be managed. Stocking expenses and equipment.
3. Farm offices and quarters.	25.00	..	30 farm buildings (offices, stores and staff quarters).
4. Fish Farmers Development Agencies.	565.00	Grant-in-aid for staff salary, 2 CFOs, 4 J. Es., 8 D. S. Es., 2 A. Es. and supporting staff.	Two more FFDA's to be aided to existing 11. Subsidy for renovation, inputs.
		331.64	Stipend for training 26.00
			Audio visual equipment 6.36
			16 vehicles (Jeeps) 16.00
			Office expenses 32.50
			Total .. 233.36

(1)	(2)	(3)	(4)
5. Brackish Water Fisheries Development Agencies.	139.00	2 C. E. Os., 2 J. Es. 6 D. S. Fs. and other supporting staff.	41.35 Two more agencies to be aided to the two existing 2 vehicles (Jeeps). 4 Motor Cycles 0.50 Subsidy 71.87 Office Expenses 23.28 <hr/> Total .. 97.65 <hr/>
6. Area Approach Development Programme.	168.00	..	Construction of brackish water ponds. 168.00
7. Development of Brackishwater farm, Inchudi.	2.77	..	Annual farm repairs, feeding and maintenance. 41.38
8. Prawn hatchery ..	40.00	..	Cost of construction of two hatcheries.
9. Development of Keshpur Fish Farm'	2.00	..	Farm remodelling and expansion
10. Renovation ..	8.00	..	Works

14.18. During 1985-86, a provision of of Rs. 128.72 lakhs has been kept under Inland Fisheries on the following account--

Table 14.8

Scheme	(Rs. in lakhs)
1. Production of Quality Spawn	8.20
2. Reservoirs ..	1.80
3. Construction of farm office quarters ..	11.60
4. F. F. D. A. ..	75.74
5. B. F. D. A. ..	17.20
6. Area Approach Development Programme ..	5.00
7. Inchudi ..	2.18
8. Prawn hatchery ..	5.00
9. Keshpur farm ..	1.00
10. Palur Canal ..	1.00
<b>Total ..</b>	<b>128.72</b>

### Fishing Harbours and Landing facilities

14.19. As has already been stated, against the average production of 2843 tonnes at the national level the State average production per kilometre length of coast line is a mere 98 tonnes. One of the reasons for low marine fish production in Orissa is the lack of adequate infrastructure. The importance of the development of fishing harbours, landing and berthing facilities in this connection does not require over emphasis. The National Workshop on Fisheries has pointed out that an internal study at the Ministry of Agriculture conducted to assess the availability of landing and berthing facilities compared to fleet of fishing vessels in different States has revealed that priority has to be given to the development facilities to cater to the traditional crafts and small mechanised vessels. Among others, the workshop suggests for at least 10 small landing Centres each by States of Andhra Pradesh, Orissa, West Bengal and Tamil Nadu to be forwarded during the current year. Taking into account the developing marine infrastructure, the scope for marine fish production in the State has been assessed at 4 lakh MT during the Seventh Plan. The infrastructure includes bilaterally aided fishing harbour projects at Astarang and intergrated fishing village development Project at Kasafal which have already been initiated during Sixth Plan. During the Seventh Plan Rs 375.00 lakhs has been provided for fishing harbour at Astarang and Rs 300.00 lakhs for traditional fisheries at Kasafal.

14.20. Under development of berthing and landing facilities a provision of Rs. 325.00 lakhs has been kept towards State share, equal amount coming from Government of India as Centrally sponsored schemes. The provision includes Rs. 250.00 lakhs for Gopalpur fishing harbour and Rs. 75.00 lakhs for construction of small jetties and platforms. The break-up is as below :-

Table 14.9

Component (1)	Outlay Rs. in lakhs (2)	Salary (3)	Other items of expenditure (4)
1. Bilateral projects with foreign assistance.	675	..	Astarang Harbour Rs. 375 lakhs Kasafal Rs. 300 .. Rs. 675 ..
2. Development of berthing & landing facilities.	325	..	Gopalpur Rs. 250 lakhs Jetties & Platforms. Rs. 75 .. Rs. 325 lakhs

During 1985-86 a sum of Rs. 45.00 lakhs has been proposed which includes Rs. 30.00 lakhs for bilateral projects and Rs. 15.00 lakhs for berthing and landing facilities.

### Processing, Preservation and Marketing

14.21. The fish production during the Seventh Plan will increase to 4 lakh MT necessitating expansion of the capacities of the ice plants both in the Government as well as the private sector. Ice plant projects are being established in the private sector, but it would be necessary to maintain the existing five Departmental ice plants to their optimum capacities and expand the cold storage facilities in them. The plan investment on this account will be Rs. 15.00 lakhs during the Seventh Plan. This includes Rs. 10.00 lakhs for repair and maintenance of five ice plants, Rs. 3.00 lakhs for expansion of cold storage in ice plant at Balugaon, Rs. 0.50 lakhs for cold storage at Bhawanipatna and Rs. 1.50 lakhs for expansion of ice plant at Chandipur. During 1985-86, a sum of Rs. 3.00 lakhs has been proposed for these schemes.

### Others

14.22. A number of schemes and programmes for direct and indirect assistance to the fishermen community and tribals who are economically very backward are included in the Seventh Plan. The suggested outlay of Rs. 454 lakhs provides for assistance to fishermen co-operatives (Rs. 100 lakhs) which includes share capital and subsidies for implementation of N. C. D. C. and NABARD schemes as well as staff support for the 424 inland and 124 marine fishermen co-operative societies in the State.

14.23. The Plan also covers Welfare programme for pisciculturists and fishermen at a cost of Rs. 354.00 lakhs, which are for direct and indirect benefit to individual fishermen and pisciculturists. Among direct benefits covered under the programme, are subsidy provision for fishermen against loan linked schemes for acquisition of indigenous boats and nets, beach landing crafts and motorisation of indigenous crafts. The idea is not only to help support the indigenous traditional fishing industry but also help the small fishermen to adopt modern mechanised fishing. It also includes construction/excavation of new tanks in Tribal sub-plan areas for the benefit of Tribal beneficiaries. The other direct benefit schemes include insurance of the lives of fishermen of about 10,000 persons during the Seventh Plan and fishermen saving-cum-relief scheme and for economic support to fishermen during lean fishing season. In addition it is proposed to grant of old age pension @ Rs. 40 per month per fishermen above the age of 60 who is not physically able to follow his traditional occupation. There is also a provision for setting up of drinking water facilities in fishing villages. All these welfare schemes are centrally sponsored and the financial commitment on the part of the State Government is one-sixth of the total investment envisaged.

14.24. Another important feature of Welfare scheme is the enforcement of Orissa Marine Fisheries Regulation Act, 1982 to protect the interest of small fishermen. The Plan provision under this includes purchase of four speed boats to patrol the coast line in the four Marine Districts and provide legal and Police support required for enforcement of the Act.

14.25. The break-up of outlay for these schemes is as follows :—

Table 14.10

Components	Out lay (Rs. in lakhs)	Staff cost	(Rs. in lakhs)	Other items of expenditure
(1)	(2)		(3)	(4)
1 Assistance to Co-operative.	100.00	37.71		Share capital and subsidies for implementation of NCDC, NABARD Schemes
		1 ARCS		Contingency
		13 SARCS		
		30 Inspectors	Co-operative	
		Society and	supporting	
		staff.		
				58.49
				3.80
				62.29

(1)	(2)	(3)	(4)
2. Welfare programme for pisciculturists and fishermen.	354.00	9.50 1 Law Officer 2 Legal Assistant 4 S. I Police 8 Constables 1 Superintendent Fisheries.	4 Speed boats 10.00 Operational cost of boats 9.50 3 Jeeps 3.00 Construction of tanks for tribal/S. C. 100.00  Old age pension @ 40 P. M 4.00 Drinking water facilities in Fishing villages. 1.33 Subsidy for country boats and nets, beach landing crafts and motorised country boats. 211.92 Fishermen Insurance to cover 1000 Fishermen saving-cum-relief. 2.25

14.26. Towards the annual Plan 1985-86 a provision of Rs. 21.40 lakhs has been kept on the following account :--

Table 14.11

Component	Out lay lakhs	Rs. in	Staff cost	Other items of expenditure
(1)	(2)	(3)	(3)	(4)
1. Assistance to Co-operatives.		8.55	6.85	Share capital 1.00 Office expenses 0.70 <hr/> 1.70
2. Welfare Schemes for pisciculturists and fishermen.		12.85	4.85	Insurance for fishermen 0.50 Saving-cum-Relief Fund 0.90 Construction of tanks for Tribals. 2.10 Subsidy for country boats and nets, beach landing crafts and motorised boats. 4.50 <hr/> 8.00



### Tribal Sub-plan

14-27 For development of fisheries in Tribal areas Rs. 709.41 lakhs is quantified for the Seventh Plan which is 43.11 per cent of the divisible outlay of Rs. 1645.37 lakhs and 23.64 per cent of the total outlay of Rs. 3000.00 lakhs. An amount of Rs. 98.59 lakhs is quantified for 1985-86 which is 54.26 per cent of divisible outlay of Rs. 181.69 lakhs and 35.21 per cent of the total outlay of Rs. 280.00 lakhs. The main objective of the programme is to make the tribal people aware of and involve them in the modern methods of pisciculture and to earn their livelihood through self-employment. Fishery extension Officers have been posted in blocks of the tribal districts for technical survey of tanks, preparation of feasible schemes, pursue bank loans for beneficiary and render technical support for development of culture and capture fisheries. Departmental fish farms in tribal districts will be called to increase productivity. Publicity Programme will continue to attract the tribals for pisciculture. 13 crores of quality spawn will be raised per annum through public sector for supply in tribal districts. Stocking of some reservoirs will continue to be leased out to Co-operative Societies. Subsidy will be given to tribal pisciculturist under F.F.D.A. 16,000 beneficiaries will be benefitted through subsidy and 16,000 fish farmers will be trained in pisciculture during Seventh Plan. 3,200 beneficiaries will be benefitted through subsidy and 3,200 fish farmers will be trained in pisciculture in 1985-86. 75 Co-operative Societies will be organised during Seventh Plan and 15 during 1985-86. Tanks will be constructed in tribal areas and will be leased out to 142 tribal beneficiaries during Seventh Plan. The target for 1985-86 is kept at 30.

### Scheduled Caste Component Plan

14-28 Fishermen community in Orissa comprises Dhibara, Keuta and Kaibarta who have been included in the list of Scheduled Castes. They maintain their livelihood by fishing in rivers and seas with traditional gears and crafts. In many of the plan schemes, the scheduled caste persons derive benefits. Funds for the Special Component Plan for Scheduled Castes during Seventh Plan is quantified at Rs. 1145.00 lakhs which constitute 53.35 per cent of the divisible outlay of Rs. 2187.00 lakhs and 38.16 per cent of the total outlay of Rs. 3000.00 lakh. An amount of Rs. 47.90 lakhs have been quantified for 1985-86 which is 32.58 per cent of the divisible outlay of 147.14 lakhs and 17.10 per cent of the total outlay of Rs. 230.00 lakhs. Subsidy will be given to Schedule Caste persons for acquiring country crafts and mechanised boats. Drinking water facilities will be provided in the villages comprising Scheduled Caste fishermen. Old age pension will also be provided to 1000 Scheduled Caste fishermen during Seventh Plan. It is estimated that 3200 beneficiaries will be benefitted during Seventh Plan and 250 in 1985-86. Payment of premium for insurance for Scheduled Caste fishermen will continue during Seventh Plan with Government of India assistance.

14-29 To provide relief for 3 months at Rs. 60 per month during the lean season, matching grant at Rs. 101 per month for 9 months will be provided for earn. It is proposed to cover 2500 Scheduled Caste fishermen during Seventh Plan and 1000 in 1985-86. Subsidy will also be given to the pisciculturist under Fish Farmers Development Agency. 1150 Scheduled Caste pisciculturists will be trained and given subsidy for pisciculture during Seventh Plan and 320 in 1985-86. Brackishwater tanks will be constructed with Government of India assistance under Area Approach Development Programme and will be leased out to 200 Scheduled Caste beneficiaries during Seventh Plan and 40 in 1985-86. It is proposed to provide share capital to five Scheduled Caste Fisherman Co-operative Societies during Seventh Plan and one society in 1985-86.

### Centrally Sponsored Schemes

14-30 Under the Centrally Sponsored Schemes provision of 719.75 lakhs has been kept during the Seventh Plan and Rs. 66.45 lakhs during 1985-86 for execution of the scheme like Fish Farmers Development Agency, Welfare Programme for pisciculturists and Fishermen, Area Approach Development programme, Fisheries Schemes with N. C. D. C. Assistance, landing and berthing facilities including construction of Gopalpur Fishing Harbour, A Fishing Harbour at Paradeep with 100 per cent central assistance is also contemplated during the Seventh Plan.

## Employment

14.31. The Seventh Plan will generate direct employment opportunities for about 90,000 persons mostly landless, small and marginal farmers, Schedule Castes and Schedule Tribes through full exploitation of 18,000 hectares of water area under Fish Farmers Development Agency and other programmes. In 1985-86 employment opportunities will be created for about 3700 persons. Construction will generate 33.91 lakhs mandays during Seventh Plan and 3.52 lakhs mandays during 1985-86.

### Orissa Maritime and Chilka Area Development Corporation Ltd

14.32. The Orissa Maritime and Chilka Area Development Corporation was established in August, 1978 with the objectives of bringing about integrated development of Maritime and Chilka Areas of the State. Gradually, its activities have been diversified in various directions. Presently, the Corporation is implementing schemes/projects in the field of horticulture, fishery, salt industry and others like diesel outlet, coconut industries complex etc.

14.33. Presently, the Corporation is implementing fishery schemes including chartering of deep sea fishing vessel. As per Government of India guidelines, the Corporation has to operate its own deep sea fishing vessels. Another fisheries scheme, namely Brakish water prawn culture has already been approved by the state Government for implementation with subsidy of Government of India. Keeping this in view, an outlay of Rs. 70.00 lakhs is proposed for investment in the share capital of the Corporation against fishery schemes of which Rs. 20.00 lakhs is proposed for the year 1985-86.

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## CHAPTER—15

## FORESTS

15.1. As per the guidelines set forth in the Approach paper to the Seventh Five-Year Plan, 1985—90 by the Planning Commission, highest priority should be given to restore the forest cover to 33 per cent of the geographical area of the country from the present level of 23 per cent. Measures should be intensified to restore forest cover to the full where it is at present degraded though the area is nominally shown as under forests. Reduced top-soil erosion, utilisation of marginal lands, reduced wind velocity and increase in the organic matter content and water-holding capacity of soils (thereby reducing run-off water) are some of the benefits that will result besides a significant improvement in the ecology and rural economy. Increasing forest cover would create additional rural employment opportunities and help to fulfil the essential needs of the rural community such as fuel, timber, fodder, fruits and other products traditionally obtained from forests, as also organic manure. The preservation of the country's flora and fauna should be stepped up as part of the forestry programme.

15.2. In tribal areas the tribal economy revolves around forests and forest produce. The forestry-based programmes have to be so designed as to be in consonance with the socio-economic fabric of tribal culture and ethos, and to strengthen the linkages between tribal development and the tribal and/or forested lands with which they so closely identify themselves.

15.3. Existing fragile eco-system will have to be maintained, and research in preserving our extraordinarily-diverse and rich heritage of forests will be undertaken. Among the aims of such research would be how to increase the productivity of forest areas, reducing costs and generally improving the rural economy.

15.4. Forestry development to meet industrial raw material requirements should also be undertaken with appropriate policies for licensing, royalty payment and regeneration costs, so that such industries do not operate, as hitherto, at the cost of permanent damage to the ecology of large areas with neither compensation nor reparation.

15.5. Grazing land should also be developed with priority given to identification, development and conservation of such lands and R. & D. directed towards evaluation of good quality grass and trees species based on region-wise suitability, so that destructive grazing and encroachment on various lands is minimised. Systematic development and spread of cultivation of medicinal plants which play significant role in the Indian system of medicine should also be planned.

#### Strategy for Seventh Plan for Forestry in Orissa

15.6. As against the national average of 23% of the geographical area being under forests cover, the corresponding figure for Orissa is estimated as 38%. However, this figure includes large tracts of highly degraded forests due to over-exploitation, with about half of the forest area containing good forest growth. The rapid denudation of the once extensive forest in Orissa, due both to over population, rural poverty and illicit rolling for commercial purposes has created serious ecological imbalances which has further intensified the effects of such natural disasters as floods, droughts and cyclones that have hit Orissa with increasing frequency. Furthermore, the on-going deforestation has in itself spelt disaster for the forest dwellers/tribals that constitute about one fourth of Orissa's population. The efforts to contain this deforestation and its ecological and socio-economic effects have so far proved inadequate.

15.7. Against this background and in accordance with the general guidelines laid down by the Government of India for Forestry in its Approach Paper, the thrust of the Seventh Plan in Orissa will be as below :—

- (i) re-orient the forest policy and practice in Orissa to involve the rural population in the efforts to promote, protect and manage an intensified afforestation programme, geared to the ecological requirements and needs of the rural population primarily through various *Social Forestry* activities.

- (ii) to further *develop and consolidate* the reserved forest ;
- (iii) to upgrad and intensify the capacity of the Forest Department in the fields of *management planning, evaluation, monitoring and research* in order to ensure a scientifically founded and socio economically equitable implementation of forestry programmes ,
- (iv) to expand and improve the forest *education and training* programme of the Forest Department in line with the above .

#### Seventh Plan Outlay

15-8: As against the agreed outlay of Rs. 12.50 crores during the Sixth Plan, the actual expenditure is around Rs. 16.00 crores. Assuming an amount of Rs. 24.50 crores that may be available as plan additionality in case of externally aided Social Forestry (SIDA assisted) Project, a total provision of Rs. 74.50 crores has been proposed for the State Plan for the Forestry sector in the Seventh Plan. Over and above this the Central Plan (100% Central assistance) to the tune of Rs. 3.10 crores and Centrally Sponsored Schemes to the extent of Rs. 5.15 crores as per details in Statement GN-6 are proposed herein. Thus, the total size of Seventh Plan will be for about Rs. 82.75 crores.

15-9 As indicated by the Planning and Co-ordination Department, the Annual Plan ceiling for 1985-86 has been kept within Rs. 6.80 crores, which reflects the state share of the expenditure only ; but excludes the probable SIDA assistance of 49% of about Rs. 2.39 crores (to be drawn as advance for each quarter). Considering this additionality, the 1985-86 Plan outlay has been kept at the level of Rs. 9.19 crores.

#### Tribal Sub-Plan

15-10. The life of tribals is inextricably linked with forests. Next to agriculture, forest is the important source of their livelihood. The various forest operations provide employment to the tribal people living in and around forests. If properly managed, forests can engage labourers throughout the year in various operations. Out of Rs. 9.19 crores in the State Plan Rs. 2.30 crores (25%) has been earmarked in tribal sub-plan area during 1985-86.

#### Scheduled Caste Component Plan

15-11 Persons belonging to Scheduled Caste from the largest single group among the agriculture labourers. Naturally, in forest operations the labourers employed includes persons belonging to Scheduled Caste. It helps in ameliorating the economic conditions of the Schedulee Caste people. It is expected that about Rs. 1.47 crores (16%) of the outlay of Rs. 9.19 crores would benefit the Scheduled Caste People.

#### People Oriented Forestry Schemes

##### Social Forestry (SIDA assisted)

15-12. A Social Forestry Project with Swedish assistance (SIDA) is being implemented in 9 out of 13 districts of the State at a total outlay of Rs. 23.00 crores for the period 1983-84 to 1987-88. This has been agreed to by Government of India and Government of Sweden as per an agreement between two Governments. The Swedish contribution to the Government of India will be 70% of the project cost out of which 70% will be available to the State as plan additionality. Thus, the state will get 49% from the Centre and remaining 51% will be the State share. The Swedish contribution will be available to the State as quarterly advances on preferring claims before commencement of each quarter.

15-13. The first two years of this project are covered in the 6th Plan, and the subsequent three years, in the Seventh Plan. In the first two years, the expected expenditure is of the order of Rs. 1.80 crores as against the projected expenditure of Rs. 5.10 crores as per the project Document. Thus, an amount of Rs. 3.26 crores will spill over to the Seventh Plan for expenditure over and above the sum of Rs. 17.93 crores projected for expenditure as per the appraised project

document during the first three years of the Seventh Plan. Thus, as per the appraised project the total expenditure in the first three years of the Seventh Plan will be in the order of Rs. 21.19 crores. The Phase-I of the project will be over by 1987-88, after which Phase-II of the project is likely to commence as seen from the externally aided projects of other State, such as Gujrat, U. P., West Bengal etc.

15.14. Phase-II of the project which will commence from 1988-89 will have only its first two years during the Seventh plan period. The State Government are very keen that the project should spread over all the 13 districts of the State instead of 9 at present,. During the Phase-II (last two years of the 7th Plan) a number of new schemes have been included in this project. In addition to the 5 plantation schemes over and above the nurseries, which are continuation schemes from the 6th Plan, these new schemes will be strip plantations (road, canal and rail side), Recreation forestry, Environmental Planting around industry. Barren and podu hill planting, Dedicated Adapahi Scheme (Tassar rearing) and Activating Goachers and Fodder reserves, These new schemes have been included basing on the recommendations of the sub-group of the Social Forestry Project for Seventh Plan, constituted by the ministry of Agriculture, Government of India. These new schemes will be due for implementation from the fourth year of the Seventh Plan period. In addition to these plantation components, supporting activities such as protection, Research, Publicity, Training, Monitoring and Evaluation etc., as included in the project document for the Phase-I will also continue in the Seventh Plan. Considering the continuation of the existing schemes, inclusion of some new schemes, the likely price escalation and increase in wage rate, and spread over of the project to 13 districts, the expected actual outlay for the first two years of the Seventh plan would be Rs. 28.94 crores. Thus, the total Seventh Plan outlay will be of the order of Rs. 50.00 crores with which the physical target of about 1.05 lakh ha. of plantations and 900 lakh of seedling distribution is proposed. Out of this outlay of Rs 50.00 crores, the Swedish contribution that will be available to the State Government through Government of India as plan additionality will be of the order of Rs. 24.50 crores, Out of the total physical target indicated above, about 54,000 ha. will be achieved in the first three years of the Seventh Plan period i. e. between 1985-86 to 1987-88 along with distribution of 4.97 crores seedling as per the project document, already approved by the State Government and agreed to between the Government of India and Government of Sweden.

15.15. In the Annual Plan, 1985-86, a provision of Rs. 4.87 crores has been kept out of which Rs. 2.48 crores (51%) is the likely to be the State share and Rs. 2.39 crores (49%) will be SIDA assistance. During the first year of the Seventh Plan, a target of 12,320 ha. of plantations and 120 lakh seedlings distribution has been proposed for all the 9 districts covered by the project. The financial outlay includes maintenance cost of previous two years' plantations.

#### **Rural Fuelwood Plantation**

15.16. The Fuelwood Study Committee of India's Planning Commission (1982) had shown that the share in rural household per capita energy consumption from non-commercial source is about 80% bulk of which is Fuelwood. They recommend after studying the matter in detail, that it is necessary to raise fuelwood plantations @ 15 lakh hectares annually and to distribute 800 million seedlings per year to public for meeting the fuelwood demand of the country by the end of this century. The State's annual requirement of fuelwood, estimated on the basis of projections made by the National Commission on Agriculture, is 70 lakh cu. metres. But the production from recorded sources has come down to well below i. e. 6 lakhs cu. metres. This reveals a very wide gap between demand and production. Assuming per hectare per annum production of 15 tonnes of wood from plantations of fast growing fuelwood species and per capita annual requirement of 5 quintals of fuelwood, an average village with 100 families (5 members) will need 16 hectares of plantation of fast growing species of plant population of 2,000 per hectare. As per the above assumption, for the State's 260 lakhs population roughly 8.60 lakh hectares of plantations will be needed to meet fuelwood requirement.

15.17. The scheme of Rural Fuel wood Plantation, which receives 50% Central assistance, is under implementation in a few selected districts of the country and in our State this is being implemented now in 5 districts. It is expected that during the Seventh plan, this scheme may extend to another 2-3 districts. This is a continuation scheme of the Sixth Plan Period and considering the demand for fuelwood in the rural countryside, a provision of Rs. 3.50 crores is kept as State share of 50% for the Seventh Plan with which it is proposed to plant up 17,647 hectares. For the first year of the Seventh plan i. e. 1985-86, a provision of Rs. 80 lakhs has been kept as State share with which it is proposed to raise 3,764 hectares of plantation. Since this scheme qualifies for equivalent Central assistance, the amount likely to be received during the Seventh plan period is Rs. 3.50 crores from the Government of India and corresponding provision for the year 1985-86 will be about Rs. 80 lakhs.

#### Minor forest produce (M. F. P.)

15.18 Both planning Commission and Government of India attach great importance to the development of minor forest produce. M. F. P. and trees giving fruits on which the tribals can also earn some money by collection are necessary to be planted as a part of any afforestation programme. Development of M. F. P. will include plantation of medicinal plants, oil seeds, products of economic importance and such other tree species which will promote Tassar and Lac rearing. In the State Sector, processing units of minor forest products can also be set up in view of the fact that a M. F. P. Corporation is now under contemplation in the State.

15.19 In the interest of social justice, it is desirable that poor landless families and tribals living in the vicinity of forests may be allowed some forest land and help to grow minor forest product trees such as Asan/Arjun for Tassar rearing and Lac host trees. It is therefore necessary to divide the allocation under this programme between M. F. P. plantations by the Forest Department including processing industries to be set up by them and growing trees for leaf formation for tassar, lac and fodder by the landless/tribal families who will be allotted right on trees, but no rights on the land.

15.20 A provision of Rs. 1.50 crores has been kept under this scheme for the Seventh plan period out of which about Rs. 50 lakhs may be kept for individual beneficiary oriented scheme as mentioned above. The provision for the annual plan 1985-86 is kept at Rs. 20.00 lakhs out of which Rs. 5.00 lakhs is earmarked for individual beneficiary oriented scheme. The physical target for the entire Seventh plan period is 8,823 hectares out of which in the first year i.e. 1985-86 about 1,176 hectares will be achieved.

#### Farm Forestry ( in non-SIDA Project Area )

15.21. Farm Forestry is one of the important components of the SIDA assisted Social Forestry Project which is under implementation in nine districts. From 1988-89 i.e. the fourth year of the Seventh Five-Year Plan, this component will be extended to the remaining four districts in the SIDA assisted Project. Therefore, a provision of Rs. 15.00 lakhs only is kept for the first three years of the Seventh Plan for implementation of this programme in the four non SIDA Project districts of Koraput, Kalahandi, Phulbani and Sundargarh with which about 60.00 lakh seedlings will be distributed. The provision under the annual plan 1985-86 is Rs. 2.00 lakhs with which 8.0 lakh seedlings will be distributed in these four districts.

#### W. F. P. Aided Programme

15.22. The State Government have already approved a scheme for Socio-economic Development through forestry activities with assistance from the World Food Programme of Rs. 2,800 lakhs to be given in shape of food materials as part of the wages payable to labourers. State Government is required to do the monitoring of the scheme besides meeting the handling charges for transport and storage of the food articles. The staff for monitoring the scheme as per the pattern in the approved programme would cost Rs. 120.00 crores in five years. Some extra provision is also needed to meet the handling cost of that part of the programme which will be directly implemented by Forest Department. Therefore, a provision of Rs. one crore is kept for the Seventh Plan period with an outlay of Rs. 20 lakhs for the annual Plan 1985-86.

### **Production/Commercial Forestry**

#### **Quick Growing Species**

15-23. The object of all forestry activities in the final analysis is to have optimum production of goods and services within the milieu of Socio-economic objectives. Plantation of Quick Growing Species is an important component of Production Forestry which can be defined as practice of growing wood and non-wood materials on commercial principles for use in industries. Since forestry in general, deals with long rotation crops, but there are certain industries which can be fed with raw materials grown on shorter rotations, the Scheme of Quick Growing Species has been designed to grow such raw materials to meet the needs of expanding industries of pulp, Paper and Matchwood etc. in their industrial catchments. This is a scheme which is continuing right from the Second Five Year Plan. It is also intended to continue the scheme during the Seventh Plan period at an outlay of Rs. 250 lakhs for raising plantations of quick growing species of pulp and matchwood over an area of 14,705 hectares. The provision for the annual plan 1985-86 is kept at Rs. 20.00 lakhs with which it is proposed to raise plantation over 1,176 hectares. The financial outlay indicated above includes maintenance cost of plantation raised during the last two years of the Sixth Plan period under this Scheme.

#### **Economic Plantation**

15-24. This is a part of production forestry programme continuing since the Second Five Year Plan. In order to meet the requirements of wood based industries such as Panel Products, Sports goods, Paking case, constructional timber for use in Civil & Defence establishments and Railways etc. economically valuable species like Teak, Gambhar, Sissoo, Bamboo etc. are being planted to enrich the low density and less productive forests in the State. The plantations are undertaken in accordance with the prescriptions of the Working Plan. Under this programme maintenance of the plantations raised during the last two years of the Sixth Plan period will also be done as in case of all other plantation schemes. Besides this, the forests where plantations have been started earlier, but not yet completed will have to be planted as spill over projects during the Seventh Plan period. A provision of Rs. 250.00 lakhs has been kept in Seventh Plan period under this scheme to achieve a target of 14,705 hectares. For the annual plan of 1985-86, a provision of Rs. 40 lakhs has been kept with the objective to achieve a target of 2,352 hectares.

#### **Reforestation of the Degraded Forests (In non-SIDA Project Districts)**

15-25. This scheme for reforestation of the degraded forests was introduced in the later part of the Fifth Plan period. Most of the 'B' Class reserve forests and Protected Forests from which the requirement of the people are generally met, are now considerably degraded and devoid of forest growth, due to over exercise of rights, annual fire, excessive pressure of grazing and illicit cutting and removal. A number of 'A' class Reserve Forests are also in degraded condition due to repeated coppicing and illicit cutting by the people. These forests require reforestation and rehabilitation through silvicultural operations, artificial regeneration stool thinning and proper protection.

15-26. Under the new approach to the development of forestry, it is desirable that people should be associated in this component as bulk of the forests where this component will be implemented are meant for meeting the peoples requirement. It is proposed that some of the landless poor families and tribals residing in the vicinity of such degraded forests are allowed each about 2 to 2.5 ha. of degraded forest land for raising forest plantations. Suitable forest species will be raised on this land by the family under direct supervision and guidance of the Forest Department. For raising of planting stock, the required materials such as polythene bags, seeds etc. will be supplied by the Department. The family will be responsible for manual labour involving in digging of pits, soil conservation measure, planting and protection etc. In lieu of the labour put in, each family will be paid a monthly fixed remuneration over a period of about 15 years (time required for harvesting of the plantation or rehabilitated tree crop). The family will also be given some timber, bamboos etc.

for constructing temporary hut close to the plantation area where, it may stay. At the end of the rotation period of 15 years, the family will be given 20 per cent share in the net profit derived from the sale of the materials making him a partner in the profit. In such a measure, it is hoped that it will help to stabilize the families and in the process ensure better protection of forests and also make available firewood and small timber which is in great demand. This will be a "Social Security Scheme" more or less on the pattern adopted in Gujarat and Rajasthan. This individual beneficiary-oriented scheme should be a part of there forestation component.

15.27. Since reforestation of degraded forests and rehabilitation of depleted wood lots constitute two important components of the social forestry project (SIDA assisted) under implementation in 9 districts, only a provision of Rs. 100 lakhs is kept under this item for non-SIDA project districts of Koraput, Kalahandi, Phulbani and Sundargarh for the first three years of the Seventh Plan period. About 30 per cent of this amount will be earmarked for the social security scheme as explained above. The physical target for the Seventh Plan Period under this scheme will be 9,400 ha. The provision for the annual plan 1985-86 under reforestation is kept at Rs. 15 lakhs with a physical target of 1,400 ha. Out of this annual Plan, about 30 per cent should be earmarked for social security plantation.

#### **Orissa Forest Corporation/Similpal Forest Development Corporation (SFDC)**

15.28. The S. F. D. C. is financially not in a sound footing after Government have banned felling of trees in the Tiger reserve. The additional areas in Keonjhar and Mayurbhanj districts are being transferred to this Corporation for working. The Central Government have already approved a scheme for collection of oil seeds of forest origin to be implemented by the SFDC at a total cost of Rs. 185 lakhs of which the central subsidy and loan is of the order of Rs. 100 lakhs and State Government's share of contribution will be Rs. 85 lakhs.

15.29. There is proposal to establish a separate Corporation for collection, processing and marketing of Minor Forest Produce, which is under active consideration of the State Government. If this materialises, the State Government will have to make an initial contribution to the share capital of this new proposed Corporation besides contributing to the share capital of the existing Orissa Forest Corporation Ltd. A provision of Rs. 200 lakhs is kept for the purpose for the Seventh Plan and Rs. 20 lakhs for the year 1985-86.

#### **Coastal Shelter Belt**

15.30. A scheme of Afforestation in Coastal Shelter Belt was continuing from the Fourth Plan Period till the Sixth Plan period and thereafter this work is being handled under the scheme Rural fuel-wood plantation. The European Economic Community are interested in funding the Coastal Shelter Belt Programme in Orissa. This scheme is likely to be appraised and finalised during the Seventh Plan period for which a provision of Rs. 50 lakhs has been kept as the State share, as the funding pattern to the state will be only 70 per cent of the bilateral assistance that will be available to the Government of India from the European Economic Community. A provision of Rs. 5 lakhs is kept for 1985-86.

#### **Inventory, Planning and Resource Management**

##### **Planning, Monitoring, Evaluation and Statistics Cell**

15.31. In the Forestry Sector a matching of demand and production both for the present and future has to be translated into an action programme of development in various spheres. A product approach is also to be introduced. In the absence of a proper data base and an organisation to collect and analyse the data, and present them in a form which can be directly used in planning, the present system of *ad hoc* planning will continue till a sufficiently broad base and strong project planning organisation is set up in the state.

15.32. Normally few projects or programmes work out exactly as planned. It is necessary to monitor all plan programmes and take up concurrent and final evaluation study wherever and whenever needed. Monitoring and evaluation although in many ways imply the two ends of a continuum of



information, they are often separate from one another conceptually and functionally. The purpose of monitoring and evaluation unit is to develop and deliver information, which increases the effectiveness of the management in its efforts to achieve the programme objectives. Since the major thrust of the Seventh Five Year Plan will be on plantations where million of trees will be planted and distributed (for plantation) through individual efforts, it is imperative to properly monitor their total coverage survival, growth and other aspects.

15.33. A planning and evaluation cell has been established during the Sixth Plan with a Conservator of Forests in charge of plan formulation, Monitoring and Evaluation. No staff other than some clerical support are available to him to take up monitoring and evaluation studies as well as data compilation for plan formulations. In the meantime, an operation guide for monitoring and evaluation of Social Forestry in India is available from the Government of India which can be applied not only to social forestry programme, but also to similar plantation components in the Seventh Plan period. In order to operationalise this monitoring and evaluation guide book, the Planning and Evaluation Cell in the Office of the Chief Conservator of Forests, Orissa needs to be strengthened for which four forest divisions, one for each territorial circle with necessary field and office staff are suggested. A provision of Rs. 40 lakhs has been kept for the entire Seventh Plan period with an outlay of Rs. 4 lakhs for the year 1985-86.

#### **Forest Research**

15.34. For a long time research related to forestry had suffered for want of adequate financial support. At present, the State Research Organisation with only one Silviculturist and one Forest Geneticist are equipped with limited activities of field oriented research. The DANIDA are now supporting the Genetic Research Programme of the State by direct supply of vehicles and equipments for setting up of a State Forest Research Laboratory and Institute. They are also supplying seeds of various provenances from abroad to make trial plantation and establish seed stands within the State, particularly tropical pines and eucalyptus. A Seed Certification cell has already been established but is not functioning effectively due to want of adequate financial support. The DANIDA have agreed to supply sufficient seeds of different provenances of three species of tropical pines from abroad, with which there is a programme to have seed stands over 135 ha. They can ultimately produce about 350 kg. of seeds per year and this would be sufficient to raise extensive plantation of tropical pine in the State. Pine seeds at the moment cost over Rs. 2,000.00 per kg. and their availability is rather restricted.

15.35. Under the scheme of Forest Research, a number of demonstration farms can be established where Agro-Forestry and Silvopastoral systems can be demonstrated for the information of the general public to adopt such practice in drought-prone areas where fodder develop in conjunction with forestry will be a useful land use system.

15.36. In order to build up a strong research base in the State, it is proposed to have a full fledged State Forest Research Institute with a Conservator of Forests directly in charge of forestry research. This Research Institute will have branches of Silviculture, Genetics, Soil Chemistry, Pathology, Forest Botany and Forest Product utilisation. A provision of Rs. 75 lakhs is kept for the Seventh Plan period with an outlay of Rs. 12 lakhs for the year, 1985-86.

#### **Working Plan and Forest Resources Survey**

15.37. *Working Plan*—At present seven working Plans are under revision and 10 more working plans will be due for revision by 1990. The Government of India have issued definite guide lines for preparation/Revision of the working plans which will be over seen by a DIG (Forest) in the Ministry of Agriculture. In order to operationalise the guide lines issued by the Government of India in matters relating to working Plans, it is necessary to strengthen this organisation with necessary organisational support. There is a proposal for establishment of one Aerial Photo Interpretation which can be put under the Working Plan Circle to assist not only in Working Plan work; but also in Forest Resource survey. A provision of Rs. 20 lakhs has been kept for the Seventh Plan period with Rs. 4 lakhs for the annual plan 1985-86.

15-38. *Forest Resources Survey*: The Forest Resources Survey work in the State can be taken up with support from the Aerial Photo Interpretation Cell and in collaboration with the Forest Survey of India. Swedish support to the Forest Survey of India is expected during the Seventh Five Year-Plan. The State Government can expect support from SIDA through the Government of India to the Forest Survey Programme to be undertaken in the State. In order to implement the above scheme, a sum of Rs. 10 lakhs has been kept for the Seventh plan period out of which Rs. 2 lakhs has been earmarked for 1985-86.

#### **Forest Development and Consolidation**

15-39. The total forest area of the State is around 58,000 sq Km. out of which about 25,000 sq. Kms. have been declared as Reserve Forest, thereby bringing them under proper legal framework to enable the Forest Department to take up its scientific management and protection. Out of the remaining 33,000 sq. Kms., about 10,000 sq Kms. are in various stages of reservation. The Forest Development Consolidation activities embrace demarcation and survey, enquiry into rights, preparation of maps and usual other forest settlement proceedings which are not only time consuming but consume sufficient funds for the field works. This is a scheme continuing since the First Plan. The progress of work under consolidation and forest settlement has been considerably slow due to inadequate funds and organisational support. During the Seventh plan, it is proposed to achieve substantially higher targets. A provision of Rs. 50 lakhs has been kept, out of which the provision for the first year is Rs. 10 lakhs.

#### **Preservation of Nature and Wildlife**

##### **Nature Conservation**

15-40. Orissa is considered to be one of the richest State in the country so far as its faunal and floral resources are concerned. These are, however, being rapidly depleted with several species already endangered critically. This is primarily due to over exploitation of forest resources on account of population pressure and poverty. In addition to Nandankanan there are three Deer Parks maintained at Harisankar, Motijharan and Kapilas. This is a scheme in which the non-recurring expenditure is shared by the State and the Central Government on 50: 50 basis. During the Seventh Plan period, it is proposed to carry on with the spill over works of the Sixth Plan and complete the boundary walls and enclosures for animals, aviary for birds and other exotic animals. A sum of Rs. 35 lakhs is needed exclusively for payment of compensation owing to land acquisition. A total provision of Rs. 100 lakhs for the plan period and Rs. 20 lakhs for the first year of the Seventh Plan is kept under this scheme for development of Nandankanan and Deer Parks.

##### **Development of National Parks, Sanctuaries and Nature Reserves**

15-41. In this scheme, it is envisaged to maintain the existing sanctuaries in the State. It is also proposed to bring all the Sanctuaries under Scientific Management by preparing management plans for them. In this scheme 50% of the non-recurring expenditure will be met by Central assistance. Research projects on three different types of Crocodiles and on Sea Turtles are under-taken in the State. This research work is a continuation programme since the Fifth plan period under which Crocodile Research Centres are located at Tikerpara, Gahirmatha, Nandankanan and Ramtirtha. The Sea Turtle Research Project is at Gahirmatha. We have succeeded in captive breeding of Gharial and Salt-water Crocodiles and recently the breeding of Mugger at Ramtirtha has also been successful. A scheme for Sea Turtle Project is under consideration by the Government. The total cost of the scheme is Rs. 28 lakhs out of which about Rs. 10 lakhs has been provided up to 1984-85. The remaining amount will be provided in Seventh Plan. Recently four more Wild Life Divisions have been created for development of sanctuaries. These divisions have not yet been provided with additional staff due to paucity of funds for which the sanctuary development work including the protection efforts are not yet satisfactory. At least four more divisions have to be created with requisite staff during the Seventh Plan period to cover the management of about 22 sanctuaries already existing and proposed in the State. In order to accommodate the above schemes, a sum of Rs. 150 lakhs has been provided during the Seventh Plan, out of which Rs. 35 lakhs is earmarked for the first year.

### **Similipal Tiger Reserve**

15.42. This is a continuing scheme from the Fifth Plan. In the Fifth Plan this scheme was totally funded by the Centre, but during the Sixth Plan period, the pattern of funding was 50% Central assistance and 50% State share. As per the approved management plan of this Tiger Reserve, 9 villages have to be shifted outside the Project area on payment of compensation and meeting their rehabilitation cost outside by acquiring land, developing it and providing necessary facilities including irrigation, etc. A scheme with an estimated cost of Rs. 128.00 lakhs has been submitted to the Government of India. Till now an amount of Rs. 5.00 lakhs has been paid to the Collector, Mayurbhanj to disburse the compensation amount. A provision of Rs. 75 lakhs has been proposed as the State share of 50% during the Seventh Plan period for development of Similipal Tiger Reserve out of which Rs. 15 lakhs is earmarked for the first year. Central assistance to the extent of an equivalent amount will be available under the scheme.

### **Education, Extension & Publicity**

#### **Forest Education and Training**

15.43. Forestry education for both professional and sub-professional levels is the responsibility of the Centre and the State Governments. The Central Government is looking after the training of I. F. S. and State Forest Service Officers and the State Government is managing the forestry training of Forest Rangers, Foresters and Forest Guards. The Centre is also managing some of the colleges where Forest Rangers are deputed by the States, who do not possess their own Rangers College are trained. The need for training in forestry and forest management to develop management capabilities of the personnel responsible for the forest resources, has been pressed by the National Commission on Agriculture. Forestry today has reached a stage where it can neither support the ecological balance nor the economy of the country to the extent necessary and possible. The perceived role of forestry in the Indian context has also been changing. From being mainly production oriented, forestry has now become an important component of the rural development process. The production system of forestry has changed as well. Such rapid changes of this system will create new challenges, opportunities and problems for forest managers. An Indian Institute of Forest Management has been established in the country where forest officers from our State can be deputed to managerial training.

15.44. There is one Forest Rangers College at Angul and one Foresters, School at Jeypore. These were established during the Sixth Plan. These institutions are not fully equipped and they need infrastructural development such as increased hostel accommodation, staff quarters, class room and other teaching equipments etc. These deficiencies have to be made good during the Seventh Plan period. It is therefore proposed to provide for a sum of Rs. 75 lakhs under this scheme for the Seventh Plan period, out of which Rs. 10 lakhs will be needed for the first year.

#### **Extension ( In Non-SIDA Project Area ) and Publicity**

15.45. Rise in population is mainly responsible for depletion of forest growth. As such, it has affected the environment and has created ecological imbalance. A massive afforestation programme has been launched under the new 20-Point programme. All such programmes require active participation of the people. In order to motivate the people, a strong extension support at the village level is needed in the Forest Department. The extension officers will act as subject matter specialists as well as extension personnel. For the Seventh Plan, a provision has been kept for Rs. 15 lakhs under Forest Extension for maintaining Forest Extension Officers in the four non-SIDA Project districts for the first three years of the Seventh Plan only. In the next two years, these four districts are likely to come under the SIDA Project. The provision for 1985-86 for this purpose has been kept at Rs. 3.00 lakhs.

15.46. For the reasons indicated in the above paragraphs, forest publicity through popular literature, documentary films and audiovisual equipments are necessary besides organising exhibition and other cultural programmes. A provision of Rs. 10 lakhs has been kept for the Seventh Plan period out of which the outlay for the first year will be Rs. 2.00 lakhs.

## Organisation and Infrastructure Development

### Intensification of Forest Management

15.47. For the success of production and social forestry programmes and for proper resource management adequate personnel at professional and para-professional level are necessary for any sector charged with the responsibility of managing a renewable resource. Orissa which was once noted for its rich forest wealth has suffered immensely due to large scale illicit fellings and smuggling from forests. The number of forest officials at the professional and sub-professional level and ministerial staff in Orissa per unit of forest area are less as compared to other States in India. In appreciation of urgency and need for forest conservation, a policy decision has been taken during the Sixth Plan to provide one Jeep to each of the 54 A. C. Fs. in the 27 territorial Divisions and one Motor Cycle and one D. B. B. L. Gun to each of the 145 Range Officers of territorial Ranges for efficient protection of the forest wealth. Proper mobility will also improve their managerial capability. To relieve the Forest Rangers from office work it has also been decided to provide one Range Clerk to each territorial Range so that the maintenance of office records and statistical reports will improve.

15.48. In pursuance of the above decision, 9 Jeeps have been provided to 9 A. C. Fs. out of the total requirement of 54. Also 50 Forest Rangers have also been provided with Motor Cycles and D. B. B. L. Guns. The remaining 45 A. C. Fs. and 95 Forest Rangers are to be provided with Jeeps/Motor Cycles and Guns respectively. 14 Range Clerks are yet to be provided to the 14 Ranges. A provision of Rs. 265 lakhs has been kept in the Seventh Plan, out of which the provision for the first year will be Rs. 70 lakhs.

### Communication

15.49. As per recommendation of the National Commission on Agriculture, one Sq. Km. of forests should have a road length of 1 K. M. of forest road. For the 25,000 Sq. Kms. of Reserved Forests, the requirement of roads would be about 25,000 Sq. Kms. This is the minimum infrastructure development required for proper management of the forest resource and fuller utilisation of the forest produce annually harvested. So far only about 7,500 Kms. of forest roads have been constructed. A provision of Rs. 20 lakhs is kept in the Seventh Plan for constructing 80 Kms. of forest roads, out of which Rs. 3 lakhs has been kept for the first year, with which 12 Kms. will be taken up.

15.50. In this State, there are about 4,500 Forest Guards employed for protection of the forests. They are required to reside within the forest areas or at least in the vicinity of the forests where it is difficult to get accommodation. Non-provision of residential facility does really affect the efficiency of Forest Guards. So far, we have been able to provide accommodation for 1,500 persons and accommodation has to be provided for the remaining 3,000 Forest Guards in a phased manner. It is proposed to provide atleast 250 Forest Guard quarters during the Seventh Plan period. A provision of Rs. 80 lakhs is kept for the whole plan period with Rs. 20 lakhs in the first year.

## CHAPTER 16

### SPECIAL PROGRAMMES FOR RURAL DEVELOPMENT

#### (a) Integrated Rural Development Programme (IRDP)

16.1. The I. R. D. Programme was introduced in the State during the year 1978-79. By 1st October 1980, 141 Blocks were covered under the programme. With effect from 2nd October 1980, this has been extended to all the 314 Blocks of the State. The programme is funded by the Central and State Governments on matching basis. Allocation per Block for the Sixth Plan, period 1980-1985, has been fixed at Rs. 35.00 lakhs, i. e., Rs. 5.00 lakhs for the first year (1980-81), Rs. 6.00 lakhs for the second year (1981-82) and Rs. 8.00 lakhs for each of the three years following in 1982-83, 1983-84 and 1984-85. On this basis, the total requirement for 314 blocks is Rs. 10,990 lakhs and State Government share comes to Rs. 5,495 lakhs. However, the State Plan agreed outlay for Sixth Five-Year Plan under I. R. D. P. has been Rs. 4,500.00 lakhs only, against which the total annual allocation is of the order of Rs. 4,141.54 lakhs. The yearwise actual expenditure is Rs. 321.02 lakhs in 1980-81, Rs. 740.01 lakhs in 1981-82, Rs. 749.42 lakhs in 1982-83, Rs. 900.00 lakhs in 1983-84 and Rs. 1,430.99 lakhs in 1984-85.

16.2. For the Seventh Five-Year Plan, 1985-1990, an allocation of Rs. 7,122.00 lakhs has been proposed, out of which Rs. 1,300.00 lakhs has been fixed for the year 1985-86, with a view to covering 1,88,400 beneficiaries per year at the rate of 600 beneficiaries per Block per annum. The details of schemewise allocation for 1985-86 may be seen below :—

		(Rs. in lakhs)
I. Grants-in-aid-for I. R. D. P. Tribal Sub-Plan Area	--	446.00
Other areas (Normal Plan)	--	742.00
	<b>Total</b>	<b>1,188.00</b>
II. Monitoring Cell for I. R. D. P.	..	3.80
III. I. R. D. Cell	..	1.20
IV. Strengthening of Block Organisation for I. R. D. P.	..	107.00
	<b>Grand Total</b>	<b>1,300.00</b>
Flow to Special Component Plan for Scheduled Castes	..	166.62

16.3. For strengthening of Block organisation during 1985-86, it is proposed to provide on the State plan side a sum of Rs. 107.00 lakhs. This scheme is funded on 50:50 matching basis by the State and Centre. The total expenditure envisaged for this would therefore be Rs. 214 lakhs or slightly less. The proposed expenditure is envisaged for the pay of 314 Progress Assistants and 698 posts of V. L. Ws. which are existing and will continue in Seventh Plan. Besides, 1,256 more posts of V. L. Ws. will also be created before the beginning of 1985-86.

16.4. Out of the total outlay of Rs. 1,188.00 lakhs proposed above 10% of which is likely to be spent for infrastructure development. Hence, a sum of Rs. 118.80 lakhs has been shown as 'Capital Component'.

16.5. During the Sixth Plan (Till 1983-84), 7,08,312 beneficiaries have been assisted under the IRDP in Orissa. The coverage has been steadily rising over the years. From a modest coverage of 1,00,419 during 1980-81, the achievement rose to 2,17,073 beneficiaries during 1983-84. This achievement is much higher than the target of 1,88,400 at the rate of 600 beneficiaries per Block per year.

16.6. According to the guidelines of the Government of India, at least 30% of all IRDP beneficiaries should be from the Scheduled Castes and Tribes. So far, 143,964 Scheduled Caste and 162,825 Scheduled Tribe families have been assisted under the programme (from 1980-81 to 1983-84). They represent 43% of all beneficiaries. Lately, their proportion to the total number of beneficiaries has further improved, being 49% in 1983-84.

16.7. Funds to the tune of Rs. 168.53 crores have been mobilised for the programme. This amount includes a credit component of Rs. 101.45 crores.

16.8. The schemewise coverage of beneficiaries is given below :-

Statement showing year wise and sector wise coverage of beneficiaries under I. R. D. P.

Sector	1980-81	1981-82	1982-83	1983-84	Total
(1)	(2)	(3)	(4)	(5)	(6)
Agriculture	17,606	22,612	33,778	31,053	105,049
Minor Irrigation	28,115	46,408	69,886	48,061	192,470
Animal Husbandry	26,598	44,521	70,555	40,374	182,048
Fishery	3,209	5,070	5,652	4,254	18,185
Sericulture	8,109	1,370	174	76	8,629
Secondary Section	16,782	8,793	17,499	22,249	201,931
Tertiary Sector	16,782	10,593	55,009	71,006	
Total	100,419	138,367	252,453	217,073	708,312

(b) Assistance to small and marginal farmers (For Increasing Agricultural Production)

16.9. The Prime Minister's Massive Programme for assistance to Small and Marginal Farmers has been introduced in all the 314 Blocks of State during the year 1983-84. With a view to giving all possible assistance to the small and marginal farmers to increase agricultural production and income of such families in terms of per acre yield schemes have been formulated. Some of the important schemes are strengthening of minor irrigation and water management, fuel and fruit plantation, supply of the required agricultural inputs particularly, fertilisers and improved seeds of pulses and oilseeds in the form free distribution of minikits and land development, etc. The pattern of subsidy is the same as under I. K. D. Programme, i. e., 25 per cent to small farmers and 33 per cent to marginal farmers subject to a ceiling of Rs. 3,000 to non-tribal beneficiaries except those in D. P. A. P. area and Rs. 4,000 in D. P. A. P. areas. The tribal beneficiaries are entitled to a subsidy of 50 per cent subject to a ceiling of Rs. 5,000 of the capital cost.

16.10 The programme was introduced during the year 1983-84 with an approved allocation of Rs. 3 lakhs per block which is to be shared by the State and Central Governments on 50:50 matching basis with the target of covering 600 beneficiaries per block per year. Due to the constraint of State resources, the programme has been implemented during the year 1983-84 at the rate of Rs. 1.92 lakhs per block. During 1984-85, the programme has been drawn up at the rate of Rs. 4.00 lakhs per block. There is a target for coverage of 3,92,500 beneficiaries including 54,900 S. C. and 1,25,348 S. T. during the years 1983-85, against which 1,22,303 beneficiaries have been covered during 1983-84.

16.11 It is proposed to cover 9.42 lakh beneficiaries including 1.885 lakh S. C. 3.06 lakhs S. T. during the Seventh Plan period 1985-90 at the rate of 30,000 beneficiaries per block (both State and Central share) with a financial allocation of Rs. 3,925.00 lakhs from the State Plan.

16.12. During the year 1985-86, it is proposed to provide a sum of Rs. 785 lakhs in the State Plan with an aim for coverage of 94,200 beneficiaries including 18,500 S. C. and 30,600 S. T.

16.13. The details of outlay is indicated below :—

	7th Five-Year Plan (1985—90)	(Rs. in lakhs) Annual Plan for 1985-86
Normal	.. 1900.50	380.10
Sub-Plan	.. 1475.00	295.00
S. C. Component	.. 549.50	109.90
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Total	.. 3925.00	785.00
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**(c) Drought Prone Area Programme**

16.14. The Drought Prone Area Programme was in operation in 25 blocks i. e., 14 blocks in the district of Boudh-Khandamal and 11 blocks in the district of Kalahandi since 1970-71. This Programme has been extended to 14 more blocks in the districts of Sambalpur and Balangir during the year 1982-83. This is a multi-sectoral district plan aiming at promoting a more productive dryland agriculture on the basis of the soil water climatic resources, of the area through development and productive use of water resources, soil and moisture conservation including promotion of proper land use practices. Afforestation including farm forestry and live stock development including development of pasture and fodder resources. In order to achieve these objectives, different Programmes such as, minor Irrigation, agriculture, soil conservation, horticulture, animal husbandry and afforestation are being implemented in the identified areas.

16.15. The programme is funded by the Union and the State Government on matching basis. The State plan allocation for the Sixth Plan is Rs. 700 lakhs, against which the anticipated expenditure would be Rs. 712.50 lakhs inclusive of the likely expenditure of Rs. 222 lakhs for 1984-85. For the Seventh plan, the allocation proposed is Rs. 1463 lakhs at the rate of Rs. 7.50 lakhs per block per annum. For the year 1985-86, the State Plan allocation under this programme has been proposed at Rs. 293 lakhs. It is expected that equal matching assistance would be available from the Government of India. Out of the allocations proposed for the Seventh Plan and Annual Plan 1985-86, the flow of funds to the tribal sub-plan would be of the order of Rs. 445.00 lakhs and Rs. 89.00 lakhs respectively. The programmes are being executed through the District Rural Development Agencies of the respective districts. Annual action plans are being prepared by them.

**(d) Economic Rehabilitation of Rural Poor**

16.16. The Programme has been introduced in the State from the year 1980-81. The target for the Sixth Plan was to rehabilitate 5.00 lakh poorest families under different schemes relating to Agriculture, Animal Husbandry, Fisheries and Non-agricultural employment schemes including Development of Rural Industries and Handloom. Against the above target, 2,69,928 families were covered up to end of the year 1983-84 and 1,06,000 families are likely to be covered in 1984-85. The allocation for the Sixth Plan excluding I. R. D. was Rs. 8,500.00 lakhs against which the anticipated expenditure by the end of the Sixth Plan would be of the order of Rs. 4,706.42 lakhs only.

16.17. The Projection for the Seventh Plan is to rehabilitate another 4,50,000 poorest families for which a sum of Rs. 9,000.00 lakhs is required. The Sixth Plan outlay, expenditure Seventh Plan projection with Annual Plan for 1985-86 under different head of Development are indicated in the table below :—

Table 16.1

(Rs. in lakhs)

Head of Dev.	Sixth Plan outlay	Sixth Plan actuals			Seventh Plan Projection	Annual Plan for 1985-86
		1980-84	1984-85 (Anticipated)	Total		
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. FRRP -State Plan	2500.00	1184.71	500.00	1684.71	5000.00	1000.00
2. Special Component plan for S. C. met out of Special Central Assistance.	1300.00	770.44	260.00	1030.44	2600.00	520.00
3. Tribal Area Sub-Plan met out of Special Central Assistance.	3087.50	1216.33	300.00	1516.33	1150.00	430.00
4. M. A. D. A.	200.00	150.00	50.00	200.00	250.00	50.00
5. MICRO Project ..	12.50	12.50	..	12.50	..	..
6. N. R. E. P. for E. R. R. P.	1400.00	262.44	..	262.44	..	..
Total ..	8500.00	3596.42	1110.00	4706.42	9000.00	2000.00

16.18 The break-up of coverage of beneficiaries during the Seventh Plan period and for 1985-86 under different heads of development will be as follows :—

Table 16.2

('000 beneficiaries)

Head of Development	Target for Seventh Plan				Target for 1985-86			
	S. C.	S. T.	Others	Total	S. C.	S. T.	Others	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
(i) E. R. R. P. State Plan.	50	50	150	250	10	10	30	50
(ii) Special component plan for S. C. met out of Special Central Assistance.	130	..	..	130	26	..	..	26
(iii) Tribal Area Sub-Plan met out of Special Central Assistance.	..	57.5	..	57.5	..	21.5	..	21.5
(iv) MADA	..	12.5	..	12.5	..	2.5	..	2.5
Total ..	180	120	150	450	36	34	30	100



16.19. The proposal excludes the staff component. The existing staff under the State plan is proposed to be transferred to Non-Plan during the Seventh Plan.

16.20. The ERRP is intended to benefit the poorest families in the villages. Unlike in IRDP, a large number of beneficiaries covered under land-based and pisciculture schemes are extended benefits on a full subsidy basis. In the case of beneficiaries covered under Animal Husbandry and Artisan schemes, the subsidy is 75%. This programme is specially beneficial to the Scheduled Castes and Tribes since more than 2/3rd of the beneficiaries covered belong to these categories.

16.21. The schemewise coverage of beneficiaries is given below: —

Table 16.3

ERRP Schemewise coverage of beneficiaries from 1980-81 to 1983-84

Year	Land based Schemes	A. H. Schemes	Fishery	Non-agricultural Employment Schemes	All schemes
(1)	(2)	(3)	(4)	(5)	(6)
1980-81	13,650	15,926	1,334	6,146	37,056
1981-82	22,966	28,176	1,731	12,311	65,184
1982-83	12,327	25,772	7,282	20,284	65,665
1983-84	32,000	16,593	10,184	43,246	1,02,023
Total	80,943	86,467	20,531	81,987	2,69,928

(e) National Rural Employment Programme (NREP)

16.22. Rural poverty arises basically out of unemployment and under employment which limit the size of family income. Generation of employment, thus, is important for containment of rural poverty. The National Rural Employment Programme (NREP) seeks to increase the level of rural employment through provision of funds for execution of labour intensive works, and in the process create permanent assets.

16.23. The National Rural Employment Programme is being implemented during the Sixth Five-Year Plan as a Centrally Sponsored Scheme on 50:50 sharing basis between the Central and State Governments, with a view to enhancing the employment opportunities of the socially and economically vulnerable groups like agricultural labourers, marginal farmers, etc. specific programmes have been drawn up in each block. The Sixth plan outlay is of the order of Rs. 5,600.00 lakhs which includes Rs. 2,800.00 lakhs towards State Government share.

16.24. Allocation of funds between 1981-82 to 1983-84 has been of the following orders: —

1981-82	..	Rs. 14,70.60 lakhs
1982-83	..	Rs. 16,65.00 lakhs
1983-84	..	Rs. 12,89.22 lakhs

16.25. The current year's allocation for the programme is Rs. 2,000 lakhs. Expenditure under the programme has generated employment of the following order; 194.31 lakh mandays in 1981-82; 176.61 lakh mandays in 1982-83 and 132.26 lakh mandays in 1983-84 (provisional). The target for the current year is to generate 175 lakh mandays of employment. The tentative outlay proposed in the State's Annual plan for implementing the scheme during 1985-86 is Rs. 1,200.00 lakhs. Matching assistance of an equivalent amount is likely to be available from Government of India. With a total outlay of Rs. 2,400 lakhs, employment potential of 200.00 lakhs mandays will be generated during 1985-86. On this basis, the Seventh Five-Year Plan has been formulated and total requirement of funds has been calculated at Rs. 100.00 crores for generation of 833.22 lakh mandays of employment.

16.26. The flow of the outlays to sub-plan areas has been proportional to the tribal development blocks in the State and for the Special Component Plan, the same has been calculated at 16% of the total outlay proposed for the Seventh Plan.

## CHAPTER 17

## COMMUNITY DEVELOPMENT AND PANCHAYATS

**(A) Community Development****Strengthening of Block Administration**

17.1. Blocks have emerged as dominant functional arms of the Government for carrying out programmes for rural development. Important among the activities are, I. R. D. P., E. R. R. P., N. R. E. P., Prime Minister's massive programme for small and marginal farmers, Rehabilitation of Bonded Labourers, Management of Primary education, Maintenance of Irrigation Projects below 60 acres of Ayacut, Rural Roads, Rural drinking water-supply, Nutrition programme, Social Welfare, Relief measures, Public distribution of essential goods etc. For expeditious implementation and effective monitoring of the above beneficiary oriented schemes and employment generation programmes, the question of strengthening of Block administrations and decentralisation of powers has been engaging the attention of the Government and it has been decided that (i) all Block Development Officers will be O. A. S. Class II Officers, (ii) One Additional B. D. O. in each of these Blocks having more than 70,000 population in coastal districts and Blocks having population between 50,000 and 70,000 in non-coastal districts will be posted, and (iii) provision of 10 V. L. Ws. in each block. The total requirement will be 3,140. Out of this, 1,884 are existing and the balance 1,256 will be created under I. R. D. P.

17.2. For smooth execution of the above mentioned schemes additional staff have been provided under strengthening of Block Administration during the Sixth Plan period under State Plan. They are, Additional Junior Engineer-243, S. E. O./L. S. E. O.-50, Lady V. L. W.-100, Additional Senior Clerk-314 and Additional Block Development Officer-15. These staff are continuing till now and are proposed to be transferred to non-plan side during the Seventh Plan period. The work-load of the Block is increasing day by day. In order to cope up with the increasing developmental programmes provision of more staff in the Blocks have been considered necessary. Therefore the following posts need be created during the Seventh Plan period as there is justification for these Additional staff.

- (i) Additional B. D. Os.—15 Posts of Additional Block Development Officers have been created in the Gazetted rank during the Sixth Plan period. Although there is need for creation of 248 more posts of Additional Block Development Officers it is not possible to create these posts due to non-availability of funds under State Plan. Therefore, it is proposed to Create 233 Additional Block Development Officers during the Seventh Plan period.
- (ii) V. L. Ws.—At present there are 1,535 posts of V. L. Ws. existing in Blocks. Besides this, 349 posts of V. L. Ws. have been created under I. R. D. Programme and it is proposed to create 1,256 more posts of V. L. Ws. under the said programme. Thus, the total will be 3,140 at the rate of 10 V. L. Ws. per Block. It is proposed to post one V. L. W. in each Grama Panchayat during the Seventh Plan for watching execution of development scheme and other social activities including Feeding programme, E. R. R. P. and N. R. E. P. etc. There are 3,830 Grama Panchayats. So, 3,830 posts of V. L. Ws. will be required if one V. L. W. for each G. P. will be posted. Therefore, 690 posts of V. L. Ws. will be required for posting one V. L. W. in each G. P.
- (iii) Senior Clerks—At present two Senior Clerks are existing i. e., one for general work and the other for N. R. E. P. work. As the work load of the blocks has been increased considerably it is proposed to post two senior clerks per Block in addition to the existing posts. Out of which one senior clerk per Block will be created under N. R. E. P. Programme.
- (iv) Peons—It is proposed to post 248 Additional Block Development Officers in 248 selected Blocks in view of the increase of tempo of development work. To assist them, 248 posts of peons will be necessary.

- (v) *Junior Steno*—The Block Development Officer of a Block is saddled with multifarious works like panchayat administration and execution of development schemes. For this purpose, he had to enter into a lot of correspondence including submission of a number of reports and returns. In the field, he had also to tag many types of information and statistics. For speedy disposal of correspondence and other works a post of Junior Stenographer is felt necessary to help the Block Development Officer.
- (vi) *Assistant Record Keeper*—Preservation of records of the Block Office has been keenly felt in view of huge amount of funds being channelised for execution of development scheme including elections of Grama Panchayat and Panchayat Samiti. The post of an Assistant Record Keeper in the Block is absolutely necessary.
- (vii) *S. E. O. and L. S. E. O.*—At present there are 409 I. S. E. O./S. E. Os., in the Blocks. Government of India have suggested for two such posts for each Block i.e. one S. E. O. and one L. S. E. O., to concentrate and accelerate programmes under social welfare activities. Therefore 219 more posts are proposed to be created. All the above posts will be created in phases during the Seventh Plan period. During the year 1985-86 the proposal for creation will be restricted to 233 Additional Block Development Officers, 248 Peons and 314 Senior Clerks.

#### Strengthening of Internal Audit Organisation of C. D. & R. R. Department

17.3. In view of transfer of new schemes like N. R. E. P., E. R. R. P., I. R. D. P. Bonded Labour Rehabilitation, Dug Wells, Prime Ministers Massive Programme, etc. to the administrative control of C. D. & R. R. Department, the Annual Plan Budget has increased from Rs. 9.29 Crores to Rs. 42.95 this year. The total Budget provision for the current year both under plan and non-plan has come up to over Rs. 120 Crores which was of the Order of Rs. 32 Crores during 1982-83. Due to paucity of funds under Plan, Rs. 1.50 lakhs only has been provided for strengthening of Audit Organisation from E. R. R. P. scheme during 1984-85. It has, therefore, been felt necessary to strengthen the Internal Audit Organisation to mobilise the audit staff to the field to ensure proper accounting of the receipts and expenditure under respective schemes with maintenance of initial accounts, records and Registers, preparation and submission of expenditure returns and utilisation certificates. The auditors are required to visit each Block, Subdivisional Headquarter and District Offices including D. R. D. As. To cope with the increased workload there is justification appointing 60 more audit parties with 120 auditors. During the Seventh Plan period the following additional posts have been decided to be created in the Internal Audit Organisation with a total provision of Rs. 20.00 lakhs @ Rs. 4.00 lakhs per year.

1. Audit Officer at Zonal Level	..	1
2. Audit Superintendent	..	2
3. For 12 Audit Parties	.	24 Auditors
4. Posts of Peons	..	15
5. Typists (Senior)	.	1
		43

Accordingly the requirement of staff for 1985-86 has been recast limiting the cost to Rs. 4.00 lakhs only for Continuance of the 14 Auditors and 2 Peons and for creation of one Audit Officer and two Audit Superintendents, 24 Auditors, one Senior Typist and 15 Peons.

**Block Vehicles**

17.4. There are 314 Vehicles supplied to Blocks for implementation of different Programmes. Out of them, 146 vehicles have already completed their life span of 10 years and need to be replaced by new vehicles. Besides this, 122 vehicles supplied between 1974-75 to 1979-80 will complete their life span of 10 years by the end of 1989-90 requiring replacement by new ones. Thus a total number of 268 (146+122) new vehicles are required to be purchased during the Seventh Plan period in a phased manner. As the cost of the vehicle has gone up and it is expected to be high in subsequent years the cost of vehicles has been calculated at the rate of Rs. 1.00 lakh each. A sum of Rs. 268.00 lakhs will be required in the Seventh Plan with the following annual phasing :-

Year	No. of Vehicles	Amount (Rs. in lakhs)
1985-86	6	6.00
1986-87	94	94.00
1987-88	50	50.00
1988-89	50	50.00
1989-90	68	68.00
<b>Total</b>	<b>268</b>	<b>268.00</b>

17.5. During the Sixth Plan period the outlay proposed for the improvement of block buildings was only Rs. 10.00 lakhs, but actual allocation was limited to Rs. 7.00 lakhs. Out of this amount flow to Tribal Sub-plan ranged from 60% to 70%. As a result, the funds being very meagre, no attention could be paid other non-Tribal Blocks. The conditions of Block building including residential quarters have deteriorated beyond expectation within the time gap of 20 years or more. It is therefore suggested that the building assets of the Department must be improved phase-wise and plan outlay is provided during the Seventh Plan period. Further in many buildings electrical installation have either not been made and those having electrical installations need immediate replacement. That apart, sanitary arrangements are to be replaced and where no such sanitary provision exists such arrangements are to be made. ]

17.6. The strengthening of Block Administration have assumed much importance from Sixth Plan onwards and provisions for induction of personnel for better co-ordination and implementation of Block programmes have allalong been stressed. And necessarily, it is equally important that the existing Block office is provided with extension of two more rooms to accommodate the additional staff. It has been therefore proposed to add two rooms in each Block at a cost of Rs. 40,000 per room. For 314 Blocks, the total cost would be Rs. 251.20 lakhs.

17.7. In order to provide and replace electrical installation in 205 Block office building i. e. nearly 2/3rd of the total Block office buildings a sum of Rs. 10,000 for each Block office would cost of Rs. 20.50 lakhs. For electrical installation and replacement for residential quarters where each Block has nearly 10-15 quarters, a sum of Rs. 10,000 per Block is the minimum requirement for the purpose. For 205 Blocks the cost would be Rs. 20.50 lakhs. The Sanitary arrangement for Block staff quarters, specially for conversion of existing latrine is a felt need now-a-days. The cost of septic latrine is estimated at Rs. 3,000 per quarter for conversion for taking up ten quarters in each Block the cost would be Rs. 30,000. During the Seventh Plan period (1985-90) it is proposed to cover 220 Blocks for the purpose. Thus the cost would be Rs. 66.00 lakhs.

17.8. Due to submerssion of Barkote and Naikul Block by Rengali Dam Project in the district of Sambalpur, a sum of Rs. 48.00 lakhs would be required for construction of Block buildings at Jhumpura and Teleibani for which C. B. buildings has sent plan and estimates for administrative

approval. The Block Offices, etc., are being held in rented buildings temporarily. During 1984-85, Rs. 24.00 lakhs are being provided for the same. The balance Rs. 24.00 lakhs has been proposed to be met during the year 1985-86. This amount is only shown during 1985-86 plan outlay.

17.9. Thus, the total Seventh Plan outlay would be of the order of Rs. 382.20 lakhs, the year-wise breakup being as follows :—

1985-86	..	Rs.	24.00 lakhs
1986-87	.	Rs.	89.55 lakhs
1987-88	..	Rs.	89.55 lakhs
1988-89	..	Rs.	89.55 lakhs
1989-90	..	Rs.	89.55 lakhs
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Total	..	Rs.	382.20 lakhs
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#### (B) Panchayats/Ongoing schemes

17.10. The Gram Panchayats of the State have taken up several remunerative schemes to augment their resources to make them economically viable. Government have transferred public properties like topes, tanks for pisciculture and markets etc. The financial condition of the Gram Panchayats being poor, they should be encouraged by way of providing loans and grants to develop assets and to augment internal resources.

#### Panchayat Ghar

17.11. A Gram Panchayat building to hold the office of the Gram Panchayat and its meetings is a basic necessity. Out of 4,391 Gram Panchayats of the State, 1,422 Gram Panchayats do not have any office of their own. For construction of a Panchayat Ghar Rs. 1,500 from Gram Panchayat Department budget and Rs. 13,000 out of N. R. E. P. funds in shape of grant is being given to the Gram Panchayats which have no internal resources to meet the cost of construction completely. However, the G. Ps. are allowed to supplement such amount from Grama Fund as are necessary to have a bigger Plan. It is proposed to construct 270 Panchayat Ghars during the financial year 1985-86. An amount of 4.05 lakhs at the rate of Rs. 1,500 each will be required for the purpose. It is proposed to construct 1,422 G. P. Ghars from hence to provide a Panchayat Ghar to each of the G. P. within the Seventh Plan period (1985—90) if provisions are augmented suitably. It is further proposed to meet the rest amount @ Rs. 13,000 each from out of N. R. E. P. Grant for construction of G. P. Ghar during 1985-86 as per the previous years. During the Seventh Plan period it is proposed to provide a sum of Rs. 79.45 lakhs to meet the cost of construction of these Panchayat Ghars with the rate of Rs. 1,500 to Rs. 14,500.

#### Loans to Grama Panchayats

##### Development of Pisciculture

17.12. A large number of tanks have been transferred to the control and management of G. Ps. for pisciculture. A total number of 63,721 tanks have been transferred to the Gram Panchayats, of which 6,000 have been developed for pisciculture. An amount of Rs. 0.20 lakh is required in the minimum to renovate a tank. This amount is given in shape of loan to the G. P. It is proposed to provide for 1.00 lakh under the head which will enable to renovate only five tanks during 1985-86. During the Seventh Plan period, it is proposed to provide a sum of Rs. 13.00 lakhs for development of 65 tanks.

### **Construction of market sheds**

17-13. The control and management of 1,616 markets have been vested with the G. Ps. So far, loan has been given to 116 G. Ps. for construction of market sheds. A minimum expenditure of Rs. 0.20 lakh is necessary for construction of a market shed. It is proposed to grant loan for construction of two market sheds as such Rs. 0.40 lakh will be required during 1985-86. During the Seventh Plan period, it is proposed to provide a sum of Rs. 12.40 lakhs for construction of 62 market sheds.

### **Construction of staff quarters**

17-14. The total number of gazetted and non-gazetted staff working under the G. P. Department at District and Subdivisional levels comes to 1,285. Altogether 1,209 employees have not been provided with quarters. It is proposed to provide funds for construction of only two numbers of 'P' type quarters at a cost of Rs. 1.30 lakhs during the year 1985-86 @ Rs. 0.65 lakh each. During the Seventh Plan period it is proposed to provide funds of Rs. 23.70 lakhs for construction of 34 quarters @ Rs. 0.65 lakh to Rs. 0.70 lakh each.

### **Prize Competition Scheme**

17-15. The State Government have introduced a Scheme to give incentive to the Gram Panchayats. Awards of Prizes to 73 best Gram Panchayats at the State, District and Subdivisional levels are given. It is proposed to provide an amount of Rs. 0.58 lakhs for the purpose during 1985-86. During the Seventh Plan period it is proposed to provide a sum of Rs. 2.90 lakhs for award of prizes to 365 Gram Panchayats at the aforesaid rate.

### **Improvement and Maintenance of Gram Panchayats Orchards**

17-16. There are 16,673 orchards with the Gram Panchayats. So far 608 orchards have been rejuvenated with the funds available under advance Plan assistance during 1980-81. It is necessary to maintain these orchards. An amount of Rs. 0.15 lakh has been proposed under this charge for maintenance of 10 acres of orchards during the year 1985-86. During the Seventh Plan period, it is proposed to provide a sum of Rs. 3.55 lakhs for improvement and maintenance of 810 acres of orchards.

### **Replacement of Vehicle**

17-17. There are 15 vehicles at the disposal of Gram Panchayat Department of which 13 vehicles have been supplied to the 13 District Panchayat Officers and two vehicles retained at the State Headquarters. During 1982-83 only one vehicle has been replaced. It is proposed to replace two vehicles during 1985-86 @ Rs. 0.90 lakh each. Thus, a sum of Rs. 1.80 lakhs is proposed during 1985-86 for the purpose. During the Seventh Plan period it is proposed to provide a sum of Rs. 7.80 lakhs for replacement of 8 vehicles @ Rs. 0.90 lakh each during 1985-86 and @ Rs. 1.00 lakh each during 1986-87 to 1989-90.

### **New Schemes Audit Establishment**

17-18. Consequent upon reorganisation of the Gram Panchayats in the State, 574 G. Ps. have been newly constituted. The accounts of these G. Ps. have to be audited annually by the Department Auditors. As per yardstick fixed, 12 Auditors and one Audit Superintendent are required for conducting audit of the accounts of these G. Ps. It is proposed to appoint these staff and meet the establishment expenditure out of Plan allocation. The approximate annual expenditure is calculated to Rs. 1.41 lakhs. As appointment of staff will take sometime it is proposed to provide funds for a period of six months during 1985-86 for which a sum of Rs. 0.72 lakh is proposed for expenditure. During the Seventh Plan period it is proposed to provide an amount of Rs. 7.20 lakhs on this score.

17-19. To sum up, it is proposed to provide an amount of Rs. 10.00 lakhs for expenditure during 1985-86 and Rs. 150.00 lakhs during the Seventh Plan period.

**CHAPTER 18**  
**LAND REFORMS**

**Consolidation of Holdings**

18.1. The programme of Consolidation of Holdings aims at rationalisation and distribution of the land among the landowners for achieving sustained increase in agricultural production. The Scheme of Consolidation includes, preparation, correction and up-dating of land records, the consolidation of small and scattered holdings in a rational manner, provision of community facilities such as village path and roads, communal lands like burial ground etc., construction of structures for better management of irrigation water, common grazing land (Gochar) etc. Aimed to achieve these objectives, the programme of Consolidation of Holdings was started in Orissa in January, 1974 under the statutory provisions of "The Orissa Consolidation of Holdings and Prevention of Fragmentation of Land Act, 1972." The operation has been taken up in nine districts of the State namely Cuttack, Puri, Balasore, Sambalpur, Mayurbhanj, Keonjhar, Dhenkanal, Ganjam and Balangir.

**Review of the performance so far made**

18.2. Consolidation of holdings was taken up for the first time. In January, 1974, when a small beginning was made with an area of 1,48,843 hectares. In the year 1976-77 an area of 944,499 hectares and in 1977-78 additional area of 99,304 hectares were added to the programme, thus bringing the total area under the Programme to 3,43,646 hectares. Subsequently in the year 1978-79 and 1979-80 an area of 4,72,832 hectares and 2415 hectares respectively were added to the programme. Thus in all total coverage by 1979-80 comes to 8,18,893 hectares. Further, during the current Plan period, in 1981-82 an additional area of 39,000 hectares were brought under operation, bringing the total coverage to 8,57,893 hectares. Out of the total coverage, 180 villages with an area of about 36,000 hectares have since been denotified under Section 5 (1) of the Act due to various reasons leaving the balance area under consolidation operation to 8,21,000 hectares.

18.3. By the end of 1979-80 an area of about 46,000 hectares was completed from consolidation. In 1980-81, Consolidation has been completed in about 28,000 hectares. During 1981-82 Consolidation has been completed in another 75,000 hectares of land. In 1982-83 Consolidation has been completed in another 90,000 hectares and in 1983-84 Consolidation has been completed in 1,08,495 hectares. Thus the total completion till the end of 1983-84 comes to 3,47,495 hectares. During the current year Consolidation has been completed in another 11,602 hectares (till the end of August, 1984) as against the target schedule for completion of 1,54,300 hectares.

18.4. Due to heavy cyclone and flood in the years 1980 and 1982-83 in the State, the programme of consolidation work received a set back. The target schedule for completion of consolidation work could not be achieved due to various reasons such as, (i) heavy cyclone in June, 1982 accompanied by unprecedented flood in September, 1982 (ii) Deputation of officers and staff for flood and cyclone relief work for a period of 4 to 5 months (iii) non-co-operation of the land owners in consolidation work in certain areas and their resistance for implementation of the scheme and (iv) litigant public moving Higher Courts and obtaining stay orders to arrest implementation of the scheme in different villages.

18.5. Orissa Irrigation Project. Phase-I (IDA assisted) includes a programme for consolidation of holdings in 2,00,000 hectares in the major commands of Mahanadi Delta Stage-I, Stage-II, Hirakud and Balandi. This programme was scheduled to be completed by June, 1982. But due to several constraints in the implementation of the programme in the field, an area of 1,11,520 hectares was completed by June, 1982. However the operation was completed in respect of 2,03,642 hectares by the end of August, 1983, i. e. before the extended period of September, 1983.



18.6. The I. D. A. assisted Orissa Irrigation Project Phase-II provides for an area of 1,60,000 hectares in the major commands of Mahanadi Delta, Hirakud and Salandi out of on-going areas. This programme was taken up from October, 1983. According to the programme, it is to be completed within a period of four years beginning from 1983-84 to 1986-87 at the rate of 40,000 hectares per year. Accordingly in the year 1983-84 consolidation was completed in respect of 47,000 hectares. The programme for 1984-85 can be achieved without any deviation.

18.7. The scheme has been financed so far as per the details given below:--

Table 18.1

(Rs. in lakhs)

Year	Non-plan	State Plan	Command area Dev. (State Plan)	Central Plan assistance	Total
(1)	(2)	(3)	(4)	(5)	(6)
1974-75 to 1979-80	228.09	585.58	397.01	56.00	12,66.68
1980-81	48.83	280.36	195.54	..	5,24.73
1981-82	53.35	519.61	..	..	5,74.96
1982-83	52.39	500.00	..	..	5,62.39
	(Budget provision)				
1983-84	60.32	490.00	..	..	..
1984-85	60.32	490.00	..	..	5,62.39

#### Programme for Seventh Plan and Annual Plan, 1985-86

18.8. It has been decided to bring new areas of 8,41,000 hectares under the fold of consolidation during the year 1984-85. Thus, the operation will continue over the existing area of about 5,57,607 hectares in the year 1984-85 and in the subsequent years. During the current year i.e. 1984-85 target schedule for completion is 1,54,390 hectares. Efforts are being made to achieve the target for 1984-85 without any deviation. The target schedule for completion of Consolidation operation will be 1,30,000 hectares during 1985-86.

18.9. There will be 324 camps in field with 32 Consolidation Officer circles and 14 Deputy Director Ranges under the scheme both plan and non-plan during 1984-85. Due to rise in consumer's price index, in the recent years there has been sanction of several doses of A. D. A. in favour of Government employees from time to time. This has contributed to a great extent in the escalation of the cost of consolidation. On the basis of revised estimates funds to the tune of Rs. 520.00 lakhs would be required during the year 1985-86 to continue operation in the spill over areas. Funds of the above order is also necessary for timely completion of consolidation operation in the subsequent year 1986-87. Requirement of funds for the third and fourth year of the Seventh Plan period is Rs. 480.00 lakhs each and for the last year Rs. 400.00 lakhs. Thus, the total fund requirement works out to Rs. 2,400.00 lakhs during the Seventh Plan period.

18.10. It is an employment generating scheme. It has been estimated that 90 per cent of the total cost is on account of salaries and wages. Direct employment potential of the scheme is about 25.50 lakhs mandays during 1984-85 and subsequent years.

**Implementation of Ceiling Laws Distribution of Ceiling surplus lands—Programme during Seventh Plan and Annual Plan 1985-86**

18.11. Imposition of ceiling on agricultural land holdings and assignment of surplus land to the landless poor with priority to Scheduled Tribes and Scheduled Castes is an important aspect of comprehensive land reforms legislation adopted by the State of Orissa. This programme is being implemented from April 1975. By the end of 1983-84 which is the penultimate year of the Sixth Five-Year Plan, an aggregate area of 1,21,479 acres of surplus land have been distributed to 96,665 beneficiaries of whom 36,733 belong to Scheduled Tribe and 32,867 belong to Scheduled Caste. It has been programmed to distribute 9,000 acres of surplus land during 1984-85 which is the concluding year of Sixth Five-Year Plan.

18.12. Considering the surplus land to spill over to the Seventh Five Year Plan, mainly due to involvement in litigation in different courts, number of ceiling cases that would be carried over, new ceiling cases in instruction, unsurveyed area recently surveyed and new irrigation commands during the Seventh Five-Year Plan, it has been estimated that a total area of 36,000 acres surplus land would be distributed during the Seventh Five-Year Plan period with year-wise break up as indicated below:—

	Acres
1985-86	7,000
1986-87	7,000
1987-88	8,000
1988-89	7,000
1989-90	7,000
Total	36,000

18.13. The total outlay has been proposed according to the requirement. The total expenditure under the three units i. e., Establishment, compensation to ceiling surplus land allottees and Financial Assistance to ceiling surplus assignees has been restricted to Rs. 105.00 lakhs for 1985-86 as under :—

(i) Establishment	Rs. 50.00 lakhs
(ii) Compensation to ceiling surplus land owners.	Rs. 10.00 lakhs
(iii) Financial assistance to ceiling surplus assignees.	Rs. 45.00 lakhs
Total	Rs. 105.00 lakhs

18.14. The actual expenditure under the unit establishment during the year 1983-84 was Rs. 46.25 lakhs. Considering over-all escalation of cost, increase in emolument of employees and A. D. A. in particular, provision for monitoring cell at the Office of the Land Reforms Commissioner and at the District level, requirement of additional staff at the Headquarters office to cope with the additional load that the 20-Point Programme has thrown up, creation of new posts for the Court of the Land Reforms Commissioner, requirement of office and staff for separation of Nilzarat and establishment from the main Board of Revenue the estimated cost towards establishment has been squeezed to Rs. 50.00 lakhs for the year 1985-86 as against the reasonable requirement of Rs. 56.00 lakhs. The total requirement for the Seventh plan on this account would be Rs. 270.00 lakhs.

### Compensation

18.15. It has been proposed to spend Rs. 10.00 lakhs towards payment of composition to ceiling surplus land owners per annum. The total expenditure during the Seventh Plan on this account comes to Rs. 50 lakhs.

### Financial assistance to ceiling surplus land assignees

18.16. The requirement of the funds under the Centrally Sponsored Scheme for providing financial assistance to ceiling surplus land assignees has gone up due to upward revision of rate of assistance from Rs. 1,000/- per hectares to Rs. 2,500/- per hectare. Besides the new assignees who will be distributed with the land during Seventh Plan period, a large number of assignees of previous years have not been provided with such assistance mainly due to paucity of funds. Considering their requirements and the amount that will be required for the new assignees at the revised rate, it is estimated that a total sum of Rs. 285.00 lakhs would be required during the Seventh Five-Year Plan. The requirement for the first year i. e. 1985-86 has been limited to Rs. 45.00 lakhs within the resources available. During the remaining years of the Seventh Plan, the requirement is of the order of Rs. 6000 lakhs per annum.

18.17. The total requirement during the year 1985-86 would be Rs. 105.00 lakhs. The requirement for the remaining four years of the Seventh Plan period would be Rs. 500.00 lakhs. Therefore, a total outlay of Rs. 605.00 lakhs is proposed for the implementation of ceiling laws during the Seventh Plan period.

### Survey and Settlement operation during Seventh Five-Year Plan (1985—90)

18.18. Out of 51,909 villages of the State including 18,153 tribal villages, the land records in respect of 31,645 villages including 12,539 tribal villages were up dated by the end of 1979-80. In other words, at the beginning of the Sixth Plan the remaining 16,979 villages including 5,924 villages in tribal areas, were left for completion from the survey and settlement operation excluding 3,285 villages earmarked for consolidation operation. In the Draft Sixth Plan document a total amount of Rs. 3,401.00 lakhs under Plan was projected for completion of survey and settlement operation in the remaining 16,979 villages of the State including 5,924 villages in tribal areas of the State.

As the amount proposed under Plan was subsequently reduced from Rs. 3,401.00 lakhs to Rs. 500.00 lakhs, the target of completion of villages was accordingly reduced from 16,979 villages to 12,508 villages including 3,278 tribal villages leaving 4,471 villages spill over to the Seventh Five-Year Plan.

18.19. Out of 12,508 villages programme during the Sixth Five Year Plan, 1980—85, the survey and settlement operation was completed in respect of 8,311 villages including 3,752 tribal villages by the end of 1983-84 as detailed below:—

1980-81	995	Villages including	329	Tribal
1981-82	2,826	Ditto	1,811	Do.
1982-83	2,460	Ditto	538	Do.
1983-84	2,030	Ditto	1,074	Do.
8,311 including			3,752	tribal

18.20. During 1984-85, it has been programmed to complete survey and settlement operation in respect of 1200 villages. The total completion of villages during Sixth Five Year Plan period would be 9511 villages against the target of 12503 villages. The remaining 2,997 villages will spill over to Seventh Plan period. Thus 7468 villages (Earlier earmarked 4471 + Spillover 2997) are to be completed from

the survey and settlement operation during the Seventh Five-Year Plan period. Besides, the revisional survey and settlement operation of the following areas of the State has been programmed to be taken up during the Seventh Plan period:—

1. Paramboke villages Ganjam & Koraput districts (7332-438 Malakngiri villages)	6894 villages
2. Kalahandi district	3297 including 545 tribal villages
3. Boudh Subdivision of Phulbani district	1099 villages
4. Malkangiri Subdivision of Koraput district	438 old villages 213 D P. colonies
	11941 villages
<b>Total villages programmed for settlement operation during Seventh Plan period</b>	<b>19409 villages</b>

18.21 Hence, total number of 19409 villages including 8072 tribal villages are proposed for completion of survey and settlement operation during the Seventh Five-Year Plan with a total outlay of Rs. 6,478.00 lakhs. The yearwise target of villages proposed to be completed from survey and settlement operation and requirement of funds are indicated below.

Table 18.2

Year	Target of villages	Requirement of funds			Total
		Non-Plan	Plan	Special Central assistance for tribal area	
1985-86	2619 villages including 719 tribal villages	416.00	200.00	100.00	716.00
1986-87	2500 villages 1353 ..	416.00	1050.00	100.00	1566.00
1987-88	3500 villages 2000 ..	416.00	1050.00	100.00	1566.00
1988-89	5000 villages 2000 ..	416.00	900.00	100.00	1416.00
1989-90	5790 villages 2000 ..	416.00	698.00	100.00	1214.00
	<b>19,409 villages 8,072 (Tribal villages) ..</b>	<b>2080.00</b>	<b>3898.00</b>	<b>500.00</b>	<b>6478.00</b>

#### Cardex Project

18.22. A Cardex Project for Registration Offices with assistance of the World Bank under the Orissa Agriculture Development Project was initially introduced in Dhenkanal district and later extended to other Registration Offices in the State. The project is mainly intended for quick grant of encumbrance certificates of the agriculturist for getting financial assistance from different financing institutions.

18.23. The project consists of three components. The first is building accommodation for preservation of records as per the specifications given by the world Bank team, the second is writing of indices in specialised cards and payment of remuneration to the card writers and the third is procurement of Cardex Cabinets or Cardvayer Machines for housing the written cards. So far achievement under different components are as follows.

18.24. Record Rooms as per the specification of the World Bank Team for preservation of records have been constructed for 66 Registration Offices including the 14 District Headquarters Offices. Writing of indexes in the cards has been completed upto the year, 1980 in respect of all Registration

Offices in the State. So far as machinery and equipment is concerned, 24 Cardvoyer machines, 614 Cardex Cabinets with accessories and 37 steel almirahs have been purchased and supplied to 94 Registration Officers in the State.

18.25. There is no provision for the project in the year, 1984-85. To implement the project in all the Registration Offices now existing and proposed to be opened in future, a scheme has been included in the Seventh Five-Year Plan. The requirement of funds and other details are discussed below.

18.26. There are at present 140 Registration Offices in the State including the 11 opened in August-September, 1984. Besides, there is a proposal to open 23 new offices following the policy of having one Registration Office in each Tahasil headquarters making a total of 163 Offices. Record Rooms have been constructed only in 66 offices. Therefore, a further number of 97 Record Rooms are to be constructed during the Seventh Plan Period. The total cost for these 97 Record Rooms at the present estimate of Rs. 1.20 lakhs per Record Room comes to Rs. 116.40 lakhs.

18.27. Writing of Index in Cards has been completed upto the year 1980. Such writing has to be completed till the year 1989 to cover the Seventh Plan period. To write the indices cards for nine year, i. e. from 1981 to 1989, nine lakh cards have to be purchased at a cost of Rs. 3.00 lakhs and remuneration of Rs. 2.25 lakhs is required to be paid to the card writers. The total requirement under this unit comes to Rs. 5.25 lakhs.

18.28. As indicated in the foregoing paragraphs 94 offices have been provided with Cardex Cabinets/Cardveyers. Thus, the remaining 69 offices including the offices to be opened will require 345 Cabinets at an average of five Cabinets per office. The cost of 345 Cabinets at the current rate comes to Rs. 12.08 lakhs. Besides, a sum of Rs. 1.00 lakh will be needed for purchase of stationery under the unit 'Office Expenses'.

18.29. The total requirement for the Project during the Seventh Plan period would come to Rs. 127.65 lakhs inclusive of Rs. 25.00 lakhs for the year 1985-86. During the year 1985-86, it is proposed to construct 15 Record rooms at a cost of Rs. 18.00 lakhs, purchase cardex materials worth Rs. 5.75 lakhs and pay wages to the extent of Rs. 1.00 lakh besides a small provision of Rs. 0.25 lakhs for office expenses.

#### Urban Land Ceiling

18.30. This scheme envisages acquisition of ceiling surplus land in Urban areas according to provisions of the Urban Land (Ceiling & Regulation) Act, 1976. The Act has come into force since February 1976 and applied at present to Cuttack City Agglomeration only. Again the total plan outlay of Rs. 15.00 lakhs fixed for the scheme during Sixth Plan period a total expenditure of Rs. 8.17 lakhs has already been incurred during first four years of the plan period ending with 1983-84 and budget provision of Rs. 3.22 lakhs is available for 1984-85 under the Scheme.

18.31. It has been decided to acquire and take possession of 28 hectares of ceiling surplus land in Cuttack Agglomeration during the Sixth Plan period for allotment to needy people/institutions. Out of this, 26 hectares of land have been declared as "ceiling surplus" upto the end of 1983-84, and two hectares more are anticipated to be declared as ceiling surplus land during 1984-85. By the end of 1983-84, 11.72 hectares of "ceiling surplus" land have been taken possession of and out of that 4.50 hectares have been allotted to parties. It is anticipated that during 1984-85, 8.00 hectares more will be taken into possession and 4.50 hectares will be allotted to parties.

18.32. An outlay of Rs. 118.20 lakhs is proposed for the Seventh Plan (1985-90). With this it is proposed to declare 80 hectares of land as "ceiling surplus" and take possession of the same and allot 30 hectares out of that to 20 parties. For 1985-86, an allocation of Rs. 5.00 lakhs is proposed under this scheme. It is also proposed to declare 16 hectares of land as "ceiling surplus" take possession of 4 hectares of such land and allot 2 hectares out of that to 2 parties during that year.

## CHAPTER 19

### CO-OPERATION

19.1. During the Seventh Five Year Plan, the main emphasis being on stepping up food production productivity and creation of more job opportunities to the rural population in particular, the role of co-operatives would be most significant. Before defining the objectives and strategy for development of co-operative during Seventh Five-Year Plan, it would be appropriate to have a brief review about the performances during the Sixth Five-Year Plan.

19.2. The Plan outlay under Co-operation has increased from Rs. 0.17 crore during the first Five-Year Plan to Rs. 32.23 crores during the Sixth Five-Year Plan out of Rs. 32.23 crores provided for expenditure during Sixth Five-Year Plan, Rs. 7.13 crores has been earmarked for Tribal Sub-Plan. A sum of Rs. 23.86 crores has been spent during the first four years out of which Rs. 4.25 crores has been spent in Tribal Sub-Plan area. Rs. 2.89 crores has been provided for Tribal Sub-Plan areas during 1984-85. Under Special Component Plan Rs. 51.52 lakhs has been spent during the first four years of the Sixth Five-Year Plan and a sum of Rs. 23.15 lakhs has been provided during 1984-85.

19.3. Out of 36.72 lakhs Agricultural families in the State 27.47 lakhs families have been brought under Co-operative fold out of which small and marginal farmers account for 71 per cent. About 39 per cent of the families so far enrolled belong to Scheduled Castes and Scheduled Tribes. About 65-70 per cent of the total agricultural loans have been disbursed to the weaker sections. 222 LAMPS have been organised. Nearly 25 per cent of the total agricultural loans have been availed of by the S. C. and S. T. members. The Co-operatives have been able to handle fertilisers worth Rs. 5 crores and marketed agricultural produce worth Rs. 35 crores. Besides, all the Grama Panchayats have been covered by Co-operative outlets and the value of the consumer goods distributed through these outlets would be of the order of Rs. 48 crores by the end of the Sixth Five-Year Plan. The total turn-over would be of the order of Rs. 90 crores both in the urban and rural areas by the end of the Sixth Plan period. Two new Co-operative Sugar factories at Baramba and Nayagarh have been organised and financed with the assistance from the State Government as well as N. C. D. C. Under the dug-well programme 3.67 lakhs dug wells have already been financed out of which 2.12 lakh dug wells were completed creating an additional irrigation potential of 2.61 lakh acres and about 8,000 dug wells have been energized. The Crop (loan) Insurance Scheme introduced in the State from the year 1981 on pilot basis has now been extended to 160 Blocks. There is a proposal to cover all the blocks under the Crop Insurance Scheme by the end of the Sixth Plan period. Under the World Bank Storage Project is proposed to create an additional storage capacity of 1.67 lakh tonnes out of which a capacity of 1.16 lakh tonnes have already been created. Under the N. C. D. C. III Project, an additional storage capacity of 2.63 lakh tonnes would be created at an estimated cost of Rs. 20.62 crores and the project has started functioning since July, 1984.

#### Objectives of the Seventh Five Year Plan

19.4. The programmes in the Seventh Five-Year Plan will be directed towards achieving the following objectives, namely, to consolidate and strengthen the Co-operative movement in the State in general and the Co-operative Credit Structure in particular in order to respond effectively to the basic needs of the weaker sections. (ii) Strengthening the LAMPS to provide credit, Marketing and consumer services to the tribals more effectively, (iii) Increase in credit flow to the small and marginal farmers, agricultural labourers, rural artisans and S. C. and S. T. families covered by the anti-poverty programmes, (iv) Reduction of mounting overdues by stricter and effective supervision on credit organising vigorous recovery campaign, (v) Streamlining and strengthening the consumer movement both in rural and urban areas so as to play a vital role in the public distribution system, (vi) Organisation of more and more processing units; and (vii) Intensification of training and educational programmes so as to meet the growing needs of the Co-operative personnel in the rapidly expanding Co-operative movement and establishment of trained cadre personnel at appropriate levels in different sectors.

### Programmes

19.5. With a view to achieve the above objectives an outlay of Rs. 6,600.00 lakhs has been proposed for the Seventh Five-Year Plan, out of which Rs. 2,310.00 lakhs will be spent in the Tribal Sub-Plan areas and Rs. 660.00 lakhs under the Special Component Plan. Rs. 1055.00 lakhs are proposed for the Annual Plan 1985-86, out of which Rs. 369.25 lakhs and Rs. 105.50 lakhs are earmarked for the Tribal Sub-Plan areas and Special Component Plan respectively. The spill over requirement is of the order of Rs. 626.09 lakhs for the N. C. D. C. storage project III, construction of rural godowns (National grid), sugar factories and rural consumer schemes which are to be continued during the Seventh Plan Period. The assistance, which is likely to be received from the N. C. D. C. during the Seventh Plan period will be of the order of Rs. 2,367.00 lakhs i. e. Rs. 2,047.00 lakhs under marketing and Rs. 320.00 lakhs under consumer and other sectors.

### Direction and Administration

19.6. The scheme contains three components namely staff, buildings and other facilities like vehicles and telephones. The original outlay during the Sixth Plan under these 3 components was Rs. 200.00 lakhs and the likely expenditure would be of the order of Rs. 272.00 lakhs. During the Seventh Five-Year Plan it is proposed to provide Rs. 1,070.00 lakhs to take up reorganisation of the Department, like creation of two posts of Joint Registrar of Co-operative Societies to look after Housing and Processing Co-operatives, creation of 314 posts of Sub-Assistant Registrars for all the 314 Blocks and creation of 184 posts of Additional Co-operative Extension Officers to cover the remaining 184 Blocks for I. R. D. programme, creation of 57 posts of Inspector of Co-operative Societies to supervise the consumer scheme, creation of three Audit Divisions, two Audit Circles, ten Administrative Circles, creation of posts of 57 Sub-Assistant Registrar of Co-operative Societies and 285 Inspector of Co-operative Societies for Audit work, etc. A sum of Rs. 620.00 lakhs is proposed under the staff component for the Seventh Five-Year Plan.

19.7. Out of 13 Divisional Offices and 47 Circle offices and 16 audit circles all the Divisional Offices and 42 Circle Offices have been provided with vehicles. It is proposed to provide vehicles to the remaining five Administrative circles during 1984-85. Vehicles will be provided to 10 new circle offices, 16 audit offices and 3 Audit Divisions besides replacement of 19 old vehicles. Two more vehicles are proposed for the office of the Registrar of Co-operative Societies to be used by Joint Registrars in charge of different schemes. In all 50 vehicles are proposed to be provided during the Seventh Plan Period at the rate of 10 vehicles in a year. Besides, 15 more telephones will also be provided. The total cost involved both for purchase of vehicles and installation of telephones would be Rs. 50.00 lakhs.

19.8. This Department, even though it is one of the oldest Department, does not have necessary building infrastructure. During the Sixth Plan two composite office buildings at Sambalpur and Bhawanipanta have been completed and three more composite buildings at Baripada, Phulbani and Keonjhar and two circle office buildings at Kuchinda and Jagatsinhpur are to be completed during 1984-85. During Seventh Five-Year Plan, it is proposed to take up on priority basis, the construction of composite office buildings in the remaining 9 districts and also office buildings for circle office. At present there are no staff quarters for the Offices. It is, therefore, proposed to provide 312 staff quarters for the Deputy Registrar of Co-operative Societies/Assistant Registrar of Co-operative Societies/Audit Officer of Co-operative Societies and other sub-staff during the Seventh Five-Year Plan. Building programme will be taken up first in the Tribal areas on priority basis, as this would act as an incentive to the Officers concerned to go and work in the Tribal areas where private or Government buildings are not available for rent.

### Credit Co-operatives

19.9. The likely expenditure under Credit Co-operatives will be about Rs. 1,648.81 lakhs against the allocation of Rs. 1,900.00 lakhs during the Sixth Five-Year Plan. The expenditure in the Tribal Sub-Plan areas will be about Rs. 453.54 lakhs against the allocation of Rs. 635.00 lakhs. It is proposed to

provide Rs. 2,330.00 lakhs during the Seventh Five-Year Plan out of which Rs. 1,049.00 lakhs will be earmarked for Sub-Plan area. Under Special Component Plan Rs. 233.00 lakhs have been provided in the Seventh Five-Year Plan against a likely expenditure of Rs. 22.57 lakhs during the Sixth Five-Year Plan. In the Annual Plan 1985-86, Rs. 492.70 lakhs are proposed under Credit Co-operatives out of which Rs. 222.00 lakhs and Rs. 50.00 lakhs are earmarked for the Tribal Sub-Plan areas and Special Component Plan respectively.

19.10. Outlays of Rs. 1,500.00 lakhs under Long Term operation fund, Rs. 1,000.00 lakhs under Agricultural Credit Stabilisation Fund (Centrally Sponsored Scheme) Rs. 300.00 lakhs under non-overdue Cover and Rs. 300.00 lakhs under Crop (Loan) Insurance Scheme have been proposed in the Seventh Five-Year Plan. Further, new schemes such as Enrolment of Scheduled Caste and Scheduled Tribes and other Weaker Sections and incentives for timely repayment of loans by the small and marginal farmers have also been proposed to be implemented during the Seventh Five-Year Plan.

#### **Housing Co-operatives**

19.11. The Housing Sector will continue to be a priority sector during the Seventh Five-Year Plan as an important programme under 20-Point Programme. The Housing Co-operatives in the State will be strengthened to take up massive housing schemes as is being done by the Housing Co-operatives in the States like Maharashtra, Gujarat, Karnatak, etc. During the Sixth Five-Year Plan the anticipated expenditure would be of the order of Rs. 47.88 lakhs against the provision of Rs. 50.00 lakhs.

19.12. The Orissa State Housing Corporation has availed a loan of Rs. 3.00 crores from L. I. C. during the Sixth Five-Year Plan and has constructed 1,182 houses. The percentage of collection of L. I. C. loan is of the order of 87 per cent and likely to reach cent-per cent. The share of the State Government contribution towards share capital is quite low compared to the States like West Bengal, Tamil Nadu, Panjab and Bihar. The uneconomic Primary House Building Societies in the State have either been liquidated or amalgamated to form viable Societies at the Subdivisional level. At present there are 57 Primary House Building Co-operative Societies functioning at the 57 Subdivisional level and 6 Urban House Building Societies in important towns.

19.13. During the Seventh Five-Year Plan, it is programmed by Orissa State Housing Corporation to construct 1,000 houses availing loan assistance of Rs. 12.00 crores from L. I. C. It is, therefore, proposed to provide Rs. 160 lakhs as share capital to the Orissa State Housing Corporation. A sum of Rs. 9.24 lakhs will be paid as managerial subsidy to the Primary House Building Societies to take up new house building schemes during the Seventh Plan period. Out of Rs. 19.15 lakhs are proposed for expenditure during 1985-86, Rs. 1.00 lakh will be earmarked for the Tribal Sub-Plan areas.

#### **Labour Co-operatives**

19.14. At present more emphasis is being given on labour intensive schemes. It is proposed to restructure and re-orient the existing labour co-operatives into 57 viable societies at the rate of one in each subdivision during the Seventh Five-Year Plan. Outlays of Rs. 9.20 lakhs are proposed during Seventh Five-Year Plan and Rs. 1.84 lakhs during 1985-86 out of which Rs. 1.80 lakhs and Rs. 0.35 lakh are earmarked for Tribal Sub-Plan areas respectively. Besides Rs. 0.90 lakh during Seventh Five-Year Plan and Rs. 0.10 lakh during 1985-86 under Special Component Plan have been proposed.

#### **Marketing Co-operatives**

19.15. During the Seventh Five-Year Plan Rs. 179.70 lakhs has been proposed as against a likely expenditure of Rs. 103.66 lakhs during the Sixth Five-Year Plan. A sum of Rs. 23.18 lakhs is likely to be spent in Tribal Sub-Plan areas during the Sixth Five-Year Plan. An outlay of Rs. 53.91 lakhs is earmarked for Tribal Sub-Plan areas and Rs. 18.00 lakhs under Special Component Plan during the



**Seventh Five-Year Plan.** An amount of Rs 43.42 lakhs is proposed to be provided during 1985-86, out of which Rs. 13.00 lakhs is earmarked for the Tribal Sub-Plan areas and Rs. 4.35 lakhs for Special Component Plan.

#### **Co-operative Storage**

19.16. By the end of **Sixth Five-Year Plan** the total capacity of Cold Storage Units will be of the order of 25,250 M. T. During the **Seventh Five-Year Plan**, six more Units will be set up. Outlays of Rs. 50.00 lakhs during **Seventh Five Year Plan** and Rs. 8.00 lakhs for the year 1985-86 are proposed out of which Rs. 10.00 lakhs in the **Seventh Plan** and Rs. 2.50 lakhs during 1985-86 will be spent in the Tribal Sub-Plan areas respectively.

19.17. The godown space required for the State is estimated to be 6.45 M. T. against which storage capacity of 3.62 lakhs M. T. would be available by the end of the **Sixth Five Year Plan**. The N. C. D. C. storage Project III has already been cleared by the N. C. D. C., the work on which has already been started from July, 1984. Under this project, it is proposed to create an additional storage capacity of 2.63 lakhs M. T. with an estimated cost of Rs. 23.47 crores. Under the approved financial pattern the **State Government** are to contribute 20 per cent of the project cost i. e. Rs. 469.40 lakhs out of their own resources during the period 1984-85 to 1987-88. A sum of Rs. 48.00 lakhs has been provided during 1984-85. It is, therefore proposed to provide Rs. 421.40 lakhs during the **Seventh plan period**, out of which Rs. 105.35 lakhs are earmarked from the Tribal Sub-Plan areas. An outlay of Rs. 37.24 lakhs only have been provided during 1985-86 against the requirement of Rs. 138.00 lakhs during that year.

#### **Processing Co operatives**

19.18. Under the processing sector Rs. 350.00 lakhs is proposed during the **Seventh Plan period** as against the likely expenditure of Rs. 22.83 lakhs of this Rs. 140.00 lakhs is earmarked for the Tribal Sub-Plan areas. It is proposed to instal Oil Complex, Vanaspati Complex, Jute bailing plants, maize complex, cotton ginning and processing units and Dal Mills during the **Seventh Five Year Plan period**. Expenditure proposed for 1985-86 is Rs. 8.97 lakhs.

#### **Co-operative Sugar Factories**

19.19. By the end of **Sixth Five Year Plan** about Rs. 417.00 lakhs is likely to be spent under the head "Assistance to Co-operative Sugar Factories". Two new Sugar Factories have since been set up which need Rs. 420.00 lakhs as share capital to be contributed by the **State Government** against which Rs. 243.82 lakhs will be released by the end of **Sixth Five Year Plan** and the balance amount of Rs. 176.18 lakhs is to be provided in the **Seventh Five Year Plan**. The Aska Co-operative Sugar Industries has obtained the licence for expansion of its crushing capacity from 1,250 M. T. to 2,000 M. T. of sugarcane per day and it needs Rs. 70.00 lakhs. It is also proposed to establish one more Co-operative Sugar Factory for which Rs. 136.77 lakhs have been provided. The total requirement in the **Seventh Five Year Plan** will be of the order of Rs. 834.22 lakhs out of which requirement of 1985-86 will be about Rs. 316.18 lakhs. Only Rs. 136.77 lakhs have been provided during 1985-86.

#### **Consumer Co-operatives**

19.20. During **Seventh Five Year Plan** it is proposed to strengthen the consumer co-operatives in the State with Special emphasis on the rural consumer retail outlets for dealing with essential commodities. The retail outlets organised in all Grama Panchayats during the **Sixth Plan period** would be strengthened further. It is also proposed to set up one Super Bazar at the State Capital. An outlay of Rs. 799.83 lakhs is proposed in **Seventh Five Year Plan** against the likely expenditure of Rs. 334.48 lakhs during the **Sixth Five Year Plan**. Out of this, Rs. 320.00 lakhs is earmarked for the Tribal Sub Plan areas in the **Seventh Five Year Plan**. A sum of Rs. 96.99 lakhs is proposed for the Annual Plan 1985-86, out of

which Rs. 39.00 lakhs would be earmarked for Tribal Sub-Plan areas. Rs. 80.00 lakhs and Rs. 9.67 lakhs are earmarked under special component plan during the Seventh Five Year Plan and Annual Plan 1985-86 respectively.

#### Co-operative Education, Research and Training

19.21. It is proposed to upgrade the Co-operative education research and training facilities in the State during the Seventh Five-Year Plan period. Rs. 301.55 lakhs and Rs. 46.31 lakhs are proposed during the Seventh Plan period and the Annual Plan 1985-86 respectively for the on-going schemes. It is proposed to provide one publicity van to the Co-operative Union to carry on the publicity and propaganda work in the rural areas more effectively.

#### Other Co-operatives

19.22. It is proposed to organise 13 Women Co-operative Societies in the 13 districts as per the guidelines issued by the Government of India for the benefit of destitute and handicapped women, by providing facilities for tailoring, embroidery, knitting, etc. Necessary share capital and subsidy will be provided by the State Government on a tapering basis. It is also proposed to restructure and strengthen the Lift Irrigation Co-operatives, Engineering Co-operative, Press Co-operatives, etc. A sum of Rs. 20.86 lakhs is proposed during the Seventh Five-Year Plan and Rs. 1.76 lakhs during 1985-86.

#### Development of Scheduled Castes and Scheduled Tribes—

19.23. Out of 11.83 lakhs Scheduled Tribes Families in the State 6.21 lakhs families have so far been enrolled as members in the Co-operatives. As the tribal members are unable to pay the share capital contribution which is 5 per cent of the loan sanctioned 5.62 lakhs tribal families still remain uncovered. It is proposed to cover all the tribal families during the Seventh Five-Year Plan for which Rs. 2.25 crores is required. This is proposed to be met from the special Central assistance at the rate of Rs. 40 per tribal member. Funds will also be provided out of the special Central assistance to the concerned financial institution to subsidise the difference in interest between the usual bank rate and the proposed concessional rate of lending to the tribals so as to lessen their loan interest burden. There should be a proper tie up of LAMPS with T. D. C. C. in procurement and marketing of minor forest produce, surplus agricultural produce and distribution of consumer and other essential articles in the tribal areas.

19.24. During the Seventh Five-Year Plan, it is proposed to cover all the Scheduled Caste families in the under Co-operatives. Out of 7.80 lakhs Scheduled Caste families, 4.20 lakhs families have already been enrolled as members of the Co-operative Societies leaving a balance of 3.60 lakhs families. A total amount of Rs. 144.00 lakhs is needed towards share capital at the rate of Rs. 40 per member for cent per cent coverage. Only Rs. 40 lakhs have been provided in the State Plan for enrolment of Scheduled Caste and Scheduled Tribes and other weaker sections during the Seventh Five Year Plan. Hence, the additional requirement of funds will have to be provided out of the Special Central assistance. Only 10 per cent of the total loans advanced have been availed of by the S. C. members during the Sixth Five Year Plan and it is proposed to raise the percentage to 20 per cent during the Seventh Five Year Plan. Scheduled Caste members are hesitant to avail the Co-operative loans because of high rate of interest. It may therefore be necessary to advance loans to Scheduled Caste members at a concessional rate in which case the co-operative credit agencies are required to be subsidised.

## CHAPTER 20

## IRRIGATION AND FLOOD CONTROL

## A. Major and Medium Irrigation

20.1. Orissa, a State in the eastern region, has a vast utilisable potential to irrigate about 75% of its cultivated land. But the development so far has not been adequate in the last three and half decades. The net kharif irrigation potential of the State from surface and ground water sources is about 59.00 lakh hectares, but the net area for which irrigation potential was created through all sources by end of 1979-80 was only 12.90 lakh hectares. Thus, at the commencement of the Sixth Plan, the net irrigated area (12.90 lakh hectares) was only 19% of the cultivated or net sown area against the corresponding national average of about 25.7% in 1977-78.

20.2. Agriculture is the predominant source of livelihood of the people of the State. It is the main occupation of nearly 75% of the working force. It constitutes about two-third of the State income and provides employment at about three-fourth of the workers of the State. Alleviation of poverty of the people will not therefore be possible without a substantial rise in farm income. Irrigation holds the key to optimum farm income and so, creation additional irrigation potential has to be accelerated.

20.3. The bulk of utilisable potential of surface irrigation, is feasible through major and medium irrigation. An outline Master Plan of presently feasible major and medium irrigation projects has been prepared in 1981. According to this Master Plan, the net kharif utilisable potential feasible through major and medium irrigation is about 39.00 lakh hectares. The gross potential, is about 54.60 lakh hectares. The full development of major and medium irrigation would thus enable the State to irrigate about 59% of its currently net cultivated area of about 66.00 lakh hectares.

20.4. Before planned development in the country was initiated in 1951-52, there were only two irrigation projects in the State, namely, the Orissa Canal System and the Rushikulya System. The irrigation potential created through these sources and a few other small pre-plan schemes was only 1.48 lakh hectares. By the end of the Fifth Plan (1974-78) the total Plan investment on major and medium irrigation was Rs. 213.46 crores. The cumulative irrigation potential created was 6.90 lakh hectares kharif and 2.87 lakh hectares rabi i. e., an annual gross potential of 9.77 lakh hectares. During the two Annual Plan 1978-80 an investment of Rs. 70.00 crores was made on major and medium irrigation. The additional potential created during this period was 0.45 lakh hectare kharif, 0.56 lakh hectares rabi and 1.01 lakh hectare gross. Thus the total potential created by the end of the year 1979-80 was 7.35 lakh hectares kharif, 3.43 lakh hectares rabi and the annual gross potential was 10.78 lakh hectares. The net area irrigated through major and medium irrigation was thus only 11.18% of the cultivated area of about 66 lakh hectares, against the feasibility of 59%. The indirect fall out of this gross under development of potential has been repeated natural calamities of floods and droughts.

20.5. The Sixth Plan (1980-1985) outlay of major and medium irrigation was Rs. 360.00 crores. The anticipated expenditure according to preliminary figures is Rs. 328.77 crores. The final figures is likely to be Rs. 335.89 crores. At the commencement of the Sixth Plan, there were 39 on-going projects and three small extension modernisation projects. During the Sixth Plan, 16 new projects have been started. These include light major projects, namely, Subarnarekha, Ong Dam, Lower Indra, Kanupur, Samakoi, Ib. Lower Siktel and Bagh Integrated Project, State-I and seven medium projects, namely, Badanala, Kusei, Rukura, Deo, Baghalati, Sapua-Badjore and Upper Samakoi. In addition to these 15 projects preliminary work has also been started on the project "Additional Spillway of Hirakud" to provide surplus spillway capacity for the safety of Hirakud Dam, as per recommendations of a team of Experts constituted by Government of India under the Chairmanship of Shri K. C. Goyal in July,

1975. Out of the newly started 16 projects, the first phase of Subarnarekha comprising a time slice of four years (1982-83) and the medium project Badanala have since been covered under World Bank I. D. A. credit assistance.

20.6. During the Sixth Plan, till the end of the year 1983-84, 9 projects have been closed/completed. The major projects Mahanadi Delta which was started in the year 1956-57 was approved for an outlay of Rs. 69.50 crores. By the end of the year 1981-82, the entire amount was fully utilised but then to complete the work in all respects, an additional sum of about Rs. 7.00 crores was required. As this was not available the project was closed in the year 1981-82. In addition to this project, a major project, namely Salandi, six non World Bank Medium Projects, namely, Dahuka, Saipala, Kalo, Khalkei, Nesa Ramanadi and one World Bank Medium Project i. e. Dumerbahal have been completed. The three small extension/modernisation Projects have also been substantially completed during this period. In 1984-85, it is anticipated that nine more World Bank Medium irrigation Projects, namely Ramial, Remal, Daha, Pilasalki, Gohtra, Kuanria, Harbandh, Sarafgarh and Talsara will be completed. Besides, the Rengali Dam where the irrigation share is 24% of the cost of dam and appurtenant work, would by large be completed leaving some nominal finishing works. Thus, at the commencement of the Seventh Plan, there will be 36 on-going projects in place of 39 projects for the Sixth Plan.

20.7. The additional potential created during the years 1980-84 is 85.05 thousand hectares kharif, 34.65 thousand hectares rabi and 119.70 thousand hectares gross. The anticipated potential creation in 1984-85 is 13.01 thousand hectares kharif, 8.33 thousand hectares rabi and 21.34 thousand hectares gross. The total additional potential created in Sixth Plan will, therefore, be 98.06 thousand hectares kharif, 42.98 thousand hectares rabi and 141.04 thousand hectares gross. The cumulative potential creation through major and medium irrigation at the end of the Sixth Plan would be 833.85 thousand hectares kharif 382.27 thousand hectares rabi and 1220.12 thousand hectares gross. Thus, at the end of the Sixth Plan the net kharif potential created through major and medium irrigation would only be 12.63% of the cultivated area against the feasibility of 59%.

20.8. The gross potential anticipated to be created through major and medium irrigation by the end of the Sixth Plan would also be considerably lower than the corresponding All-India average. By the end of the year 1981-82, the gross potential created in the country through major and medium irrigation was 286.80 lakh hectares which is 49.04% of the feasible potential of 584.75 lakh hectares. The corresponding State figures by then were 11.40 lakh hectares against feasibility of 54.60 lakh hectares which works out to 20.87% by end of the Sixth Plan, the anticipated achievement is 12.20 lakh hectares which is only 20.87% of feasible potential. Thus, even by the end of the Sixth Plan, the State would continue to lag behind the All-India average of potential creation through major and medium irrigation.

20.9. In consonance with the approach to the Seventh Plan (1985-90), the objectives envisaged for the Seventh Plan are--

(i) Rapid expansion in potential creation as the primary supporting activity for the break through in production of rice in eastern region and alleviation of poverty so as to reduce the population below poverty line to less than 10% by 1994-95; (ii) Priority for completion of unfinished project capable of yielding benefit in Seventh Plan and benefiting poorer regions of low and uncertain rainfall; (iii) Adequate funding of externally aided projects; (iv) Modernisation/extension of old irrigation systems for higher utilisation of potential and drainage facility and (v) New starts in tribal, drought prone and backward area

20.10. The achievement of the objectives of the Seventh Plan would necessitate considerable investment on major and medium irrigation. Due to recurring natural calamities like flood, drought and cyclone, the economy of the State is not in a comfortable stage. It is, therefore, considered essential

to step the Seventh Plan outlay considerably over the outlay of Rs. 360.00 crores for the Sixth Plan. So the outlay for major and medium irrigation in Seventh Plan is proposed to be Rs. 860.00 crores. The proposed annual outlay are, Rs. 112.00 crores in 1985-86, Rs. 136.00 crores in 1986-87, Rs. 167.00 crores in 1987-88, Rs. 203.00 crores in 1988-89 and Rs. 242.00 crores in 1989-90.

20.11. Out of 36 on-going projects of Seventh Plan, 20 projects were taken up prior to Sixth Plan. The spillover cost of these projects for the Seventh Plan at 1979-80 price level was Rs. 508.58 crores. However, due to inflationary trend, the present spillover amount against updated cost is Rs. 1,186.07 crores. Besides the spilliver cost of the projects taken up in Sixth Plan is Rs. 1,065.78 crores.

20.12. Over the years, the State Government has taken steps to accelerate its development through external credit/loan assistance. The projects so far covered under external credit/loan assistance and in pipe line to be sponsored for the same are shown in the table below :

Table 20.1

(Rs. in crores)

Name of the Project	Date of Agreement	Cost	Approximate credit value
(1)	(2)	(3)	(4)
1. Mahanadi Barrage Project (1078-IN) ..	5-12-1980	92.65	69.72
2. Subarnarekha Project (Bihar and Orissa) (1289-IN).	9-11-1982	163.73	114.30
3. Upper Indravati Hydro Power Project. (Credit No. 1356-IN/Loan No. 2278-IN).	8-6-1983	481.00	326.40
4. Orissa Irrigation-II (1397-IN) ..	16-9-1983	133.56	105.00
<b>In Pipeline</b>			
1. Rengali Irrigation ..	--	..	..
2. Six Irrigation Projects. (Against new projects of Credit No. 1397-IN)			

20.13. The Rengali Irrigation Project is being processed for I. D. A. credit assistance as without the same the gestation period would be too long. The Orissa Irrigation II Project (Credit No. 1,397-IN) is a line of credit for a four year time slice (1983--87). This is a continuation of Orissa Irrigation Project (Credit No. 740-IN). The Orissa Irrigation II Projects includes 18 on-going projects of the former Credit and provides for inclusion of six new projects after 1984-85. The C. C. A. of each new project to be included could be 2.00 thousand hectares to 30.00 thousand hectares as per staff Appraisal Report. The new projects as well as the incomplete work of the on-going projects are likely to be continued under Orissa Irrigation III project. Accordingly, 10 irrigation projects are being processed for appraisal out of which about six will be finally retained under I. D. A. credit assistance.

20.14. The distribution of outlay by category of projects is as follows: -

TABLE 20.2

Serial No.	Category of projects	Updated spillover cost	Proposed outlay for 7th Plan	(Rs. in crores)
				Proposed outlay for 1985-86
(1)	(2)	(3)	(4)	(5)
1. Externally aided/World Bank Projects				
(a) Pre-Sixth Plan Projects				
(i)	Multipurpose	79.17	79.17	12.00
(ii)	Major	43.47	43.47	17.00
(iii)	Medium	134.16	134.16	27.39
(b) Sixth Plan Projects				
(i)	Major	387.79	135.00	10.00
Total—(a + b)		644.79	391.80	66.39
2. Externally Aided Pipeline Projects.				
(a) Pre-Sixth Plan				
(i)	Major	748.46	200.00	15.00
(b) Sixth Plan				
(i)	Medium (upto 30,000 ha)	362.24	87.72	2.65
Total—(a + b)		1110.70	287.72	17.65
3. Other Project				
(a) Pre-Sixth Plan				
(i)	Multipurpose	149.62	93.73	17.46
(ii)	Major	0.67	0.67	0.65
(iii)	Medium	29.75	29.72	6.12
(b) Sixth Plan				
(i)	Major	313.27	21.05	0.36
(ii)	Medium	..	..	..
Total (a + b)		493.31	145.17	24.59

(1)	(2)	(3)	(4)	(5)
<b>4. Extension and Modernisation</b>				
(a) Pre-Sixth Plan		0.74	0.69	0.35
(b) Sixth Plan		2.31	2.16	0.25
Total—(a + b)		3.05	2.85	0.60
<b>5. New Projects of Seventh Plan</b>				
(i) Major	..		1.40	..
(ii) Medium			1.30	..
(iii) Modernisation and Extension	..		15.00	0.45
Total	..	..	17.70	0.45
<b>6. Survey, Investigation Research, Arrear payment of completed projects, decretal dues etc.</b>				
(i) Survey, Investigation Research	..		10.00	1.86
(ii) Arrear payment	..		2.76	0.26
(iii) Decretal dues	..		2.00	0.20
Total	..	..	14.76	2.32
Grand Total	..	2,251.85	860.00	112.00

20.15. The present stage of different projects and the expected date of completion of spillover projects are briefly discussed below:

20.16. *Rengali Dam Project*—The latest cost of dam and appurtenant work is Rs. 133.00 crores. The cost is apportioned between flood control (30%), power (46%) and irrigation (24%). The share of different sectors is flood control Rs. 39.90 crores, power Rs. 61.18 crores and irrigation Rs. 31.92 crores. The flood control share is borne by the Government of India under Central loan assistance. On the basis of expenditure up to the end of 1983-84, i.e., Rs. 110.15 crores, the flood control share is Rs. 33.05 crores against which the reimbursement by the Government of India is Rs. 29.72 crores. By the end of the year 1984-85, the total expenditure is likely to be Rs. 128.25 crores and the flood component would be Rs. 38.48 crores. The amount to be reimbursed in 1984-85 would be Rs. 8.76 crores. During 1985-86 the expenditure is likely to be Rs. 4.75 crores and the flood share would be Rs. 1.42 crores. The progress is being accelerated for commercial generation of power in the monsoon of 1985.

20.17. *Upper Kolab Multipurpose Project*—The Upper Kolab Multipurpose Project was started in the year 1976-77. The project envisages installed capacity of 240 MW in first stage with firm a power of 95 MW. Ultimately its generation capacity will be expanded to 520 MW in the next stage. The irrigation benefit includes kharif irrigation 44.52 thousand

hectares and annual irrigation of 93.93 thousand hectares. The latest cost of the project is Rs. 277.80 crores which includes cost of dam Rs. 83.88 crores, irrigation works Rs. 75.41 crores, civil works Rs. 61.22 crores and electrical works Rs. 57.29 crores. The cost of dam is shared equally between Irrigation and Power Sectors. The anticipated expenditure by the end of Sixth Plan on the Irrigation dam share of Rs. 41.94 crores is Rs. 28.59 crores and Rs. 16.36 crores on down stream irrigation. Till June, 1984 nearly 80% of the main dam work has been completed. Besides open excavation of head race tunnel, penstock tunnel, excavation of valve house and 80% of underground tunnel, excavation have been completed. In the irrigation sector nearly 25% of the volume of work has been completed. The hydro power sector is likely to be completed by June, 1986. The irrigation sector would be completed up to 80% by the end of Seventh Plan.

20.18 *Upper Indravati Multipurpose Project*—The Upper Indravati Multipurpose Project was started in the year 1978-79. The Project envisages installed capacity of 600 MW with a firm power of 224 MW. The irrigation benefit includes kharif irrigation of 109.31 thousand hectares and annual irrigation of 185.83 thousand hectares. The latest cost of the hydro power sector is Rs. 481.00 crores, i. e., dam Rs. 200.70 crores, power civil Rs. 117.16 crores and power electrical Rs. 163.14 crores. The cost of dam and appurtenant work is shared equally between Irrigation and Power sectors. The hydro power sector has been accepted in 1983 for I. D. A. credit and I. B. R. D. loan of 326.4 million U. S. dollars. With the acceptance of hydro power sector for I. D. A. credit and I. B. R. D. loan, the work of this sector has been divided into 26 packages as 14 I. C. B. packages and 12 LCB packages. Pending finalisation of the contracts, only infrastructure work is being taken up now. Prior to it, only foundation excavation, excavation of dykes and nominal concreting were done. As per present implementation schedule, the first unit will be commissioned in March 1990 and the hydro power sector will be completed in all respects by March 1991. The expenditure, till the end of Sixth Plan against dam share of Rs. 100.35 crores, is anticipated to be Rs. 21.18 crores. The latest cost of down stream irrigation is Rs. 83.33 crores and the anticipated expenditure by the end of Sixth Plan is Rs. 8.76 crores. As the hydro power sector will be completed by March 1991, full irrigation potential cannot be developed in the Seventh Plan. The strategy is therefore to complete the downstream barrage and 15 kilometres of canals and distributaries for irrigation of about 4,600 thousand hectares in 1985 from the independent catchment of the barrage site and to continue work beyond 15 kilometres length in such a manner that there is no abnormal delay between development of irrigation potential and completion of head works.

20.19. *Rengali Irrigation*—Rengali Irrigation Project is designed to utilise the tailrace discharge of Rengali Dam. The first phase of the project comprises a barrage two main canals (right 15.79 Km. and left 144.00 Km.) and the distribution system for irrigating 2.14 lakh hectares excluding 21 thousand hectares under lift. The second phase would further irrigate 1.64 lakh hectares. The first phase of the project was started in the year 1978-79. The original estimated cost of the project was Rs. 233.64 crores. The expenditure till the end of the Sixth Plan is likely to be Rs. 43.58 crores. The latest cost is Rs. 792.00 crores. This is a gigantic project and with the expenditure incurred so far, the progress achieved till the end of the August 1984 includes, 84 per cent excavation of barrage, 36 per cent concreting and masonry of barrage, completion of right head regulator, completion of excavation of left head regulator, 10 per cent completion of concreting and masonry of left head regulator and partial construction of survey of canals system. The completion of the barrage with gates and the canals would require heavy investment. However, considering the constraint of resources the present proposal is to provide Rs. 200.00 crores during the Seventh Plan period for completion of the barrage and partial completion of the distributary system to yield a potential of about 30 thousand hectares.

20.20. *Mahanadi Barrages Project*—The Mahanadi Barrages project has been taken up since 1979-80 for replacement of the existing weirs at Cuttack over Mahanadi and Birupa rivers. This



is an I. D. A. assisted Project. The estimated cost is Rs. 92.65 crores and credit assistance is 83 million U. S. dollars. The expenditure up to the end of 1984-85 is anticipated to be Rs. 49.18 crores. In Mahanadi Barrage, out of the total estimated quantity of 3.22 lakh cum. concrete in sub-structure, superstructure and concrete blocks, the cumulative progress up to the end of October 1984 is 0.88 lakh cum. The balance 2.34 lakh cum. of concrete is programmed to be completed by June 1987 as per revised implementation schedule agreed to by the World Bank Mission. The mechanical works of Barrage gates is programmed to be completed by March 1988 as per schedule. In Birupa Barrage out of the total estimated quantity of 0.52 lakh cum. concrete the cumulative progress up to the end of October 1984 is 0.29 lakh cum. The balance of 0.23 lakh cum. of concrete is programmed to be completed by March 1986. The mechanical works of barrage gate is programmed to be completed by March 1987. As per the revised implementation schedule both the Mahanadi and Birupa Barrages would be completed by March 1988 in all respect.

20.21 *Subarnarekha Irrigation Project*—The Subarnarekha Project of Bihar and Orissa has been formulated in accordance with the tripartite agreement between Bihar West Bengal and Orissa in August 1978. The project so far as it relates to Orissa would irrigate 88.73 thousand hectares in a Tribal area of Mayurbhanj district and another 4.30 thousand hectares in the Lower region of Balasore district. As agriculture is the primary source of livelihood of tribals, the project will improve the standard of living of the tribals. The cost of the project relating to Orissa is Rs. 391.49 crores including price escalation of about Rs. 146.81 crores but excluding flood component of Chandil Dam. The project was started in the year 1982-83 along with the Bihar Project. The first phase of the Bihar and Orissa Project comprising a time slice of four years (1982—86) and with an estimated cost of Rs. 163.30 crores has been accepted for I. D. A. credit assistance of 127 million U. S. dollars. The cost of the Project relating to Orissa in the first phase (1982—86) is about Rs. 33.46 crores. The expenditure up to the end of the Sixth Plan is anticipated to be Rs. 3.50 crores. According to implementation schedule of the World Bank, the project relating to Orissa is likely to be completed in all respects by 1994-95. The Seventh Plan Outlay as per the said implementation schedule is about Rs. 180.00 crores, against which considering the resources of the State, Rs. 135.00 crores has been proposed.

20.22 *Ong Dam (Chiroli)*—The Project was started in the year 1981-82. The project will irrigate the chronically drought prone Padmapur area of Sambalpur district in Western Orissa. The irrigation potential of the project is 25.75 thousand hectares in Kharif and 32.80 thousand hectares gross. The latest estimated cost of the project is Rs. 52.64 crores. The project is included in pipeline for I. D. A. credit assistance of World Bank.

20.23. *Lower Indra*—The Project has been taken up in Western Orissa since 1981-82. The latest estimated cost of the Project is Rs. 64.54 crores and on completion, it will irrigate an area of 28.49 thousand hectares in kharif and 43.48 thousand hectares gross. The project is located in drought prone area of Kalahandi district and has been kept in the pipeline for I. D. A. credit assistance of World Bank.

20.24. *Kanupur*—The Project is located in Tribal Sub-Plan area of Keonjhar district. The latest estimated cost is Rs. 77.21 crores and it will irrigate an area of 25.14 thousand hectares in kharif and 42.44 thousand hectares annually. This project was started in the year 1981-82 and is in pipe line for I. D. credit assistance.

20.25 *Samakot*—This Project was started in 1981-82 to provide irrigation in a chronically drought-prone area and provide rehabilitation facility to the displaced families of Rengali Multipurpose Project. The latest cost of this project is Rs. 82.40 crores and irrigation potential is 24.19 thousand hectares kharif and 42.34 thousand hectares gross. The project has also been kept in the pipe line for World Bank assistance.

20-26. *Lower Suktel*—The Project has been taken up in Western Orissa since 1934-85. The latest estimated cost of the Project is Rs. 62.34 crores. Besides irrigating an area of 23.85 thousand hectares in kharif and 47.10 thousand hectares annually in Bileigir district, it will also supply drinking water to Balangir town.

20-27. *Ib*—Ib is a major tributary of river Mahanadi and an agreement has been reached with the Government of Madhya Pradesh for utilisation of water resources of Ib valley. The latest estimated cost of the project, taken up since 1934-85, is Rs. 180.00 crores and on completion, it will provide irrigation to 139.00 thousand hectares kharif and 165.80 thousand hectares gross in Tribal Sub-Plan area of Sundargarh district and parts of Sambalpur district in Western Orissa.

20-28. *Bagh Integrated Project State-I*—This project was started in 1984-85 and is located in the Bough area of Boudh-Khandmals district in Western Orissa. The latest estimated cost of this project is Rs. 65.00 crores. On completion, this project will provide irrigation to an area of 26.00 thousand hectares in kharif and 36.40 thousand hectares gross.

20-29. *World Bank (IDA) Assisted Medium Irrigation Project*—18 Medium Irrigation Projects are now being executed under World Bank credit No. 1397-IN. These are Dumerbahal, Pilsalki, Ramiala, Kuanria, Doha, Remal, Sarafgarh, Jharbandh, Talasara, Gohira, Sunei Kansabahal, Bankabahal, Khanjhari, Hariharjore, Harbhangi, Upper Jonk and Badnala. Out of the above 18 projects, the first ten are programmed to be completed by March, 1985 and by now Dumerbahal has been completed. The Sunei Project is proposed to be completed by March, 1986. The projects Kansabahal, Bankabahal, Khanjhari and Hariharjore will be completed by March, 1987 and the remaining three projects will be completed by March, 1988. Required funds have been provided for the same. On completion, these projects will generate additional kharif potential of 62.83 thousand hectares and gross potential of 101.21 thousand hectares.

20-30. *Medium Projects in pipeline for external assistance*—During Sixth Plan, six Medium Irrigation Projects namely Kusei, Rukura, Deo, Baghalati, Sapua-Badjore and Upper Samakoi were taken up in Tribal Sub-Plan and irrigation deficient areas. The project Kusei was started in 1983-84 to irrigate areas partly in tribal sub-plan area and partly in drought-prone area. The projects Rukura, Deo and Upper Samakoi taken up in 1984-85 are entirely in Tribal Sub-Plan area and the projects Baghalati and Sapua-Badjore also taken up in 1984-85, are in drought-prone areas. The total cost of these projects is Rs. 88.28 crores with potential of 35.84 thousand hectares kharif and 53.51 thousand hectares gross. All these projects are in pipeline for I. D. A. Credit assistance.

20-31. *Non-World Bank Medium Projects*—There are eight ongoing medium irrigation projects namely, Oag, Sundar, Dajarghati, Auli, Upper Suktel, Baghua State-II Bandapipili and Barsuan. All these projects are proposed to be completed during the Seventh Plan period and funds have been provided accordingly. On completion, these projects will generate additional kharif potential of 30.97 thousand hectares and gross potential of 38.09 thousand hectares.

20-32. *Extension, Modernisation of Hirakud and Delta Irrigation System*—Both Hirakud and Delta irrigation systems are more than 25 years old. The distribution system in both the systems, as was the practice then, provided outlets for 48 hectare blocks. This has reduced the scope of utilisation of potential created. The canal system of both the projects due to inadequate maintenance are in need of urgent permanent repairs. In the Delta area, the problem of salinity and water logging calls for handling of tertiary and secondary drainage to drain out water from cultivated land to drainage channels. The estimated cost of undertaking modernisation in Hirakud and Delta are respectively Rs. 32.60 crores and Rs. 65.00 crores. Due to constraint of resources, and having regard to ongoing work as well as the urgency of accelerating potential creation, it is not possible to provide the full requirement in the Seventh Plan. However, a modest beginning in this regard is proposed to be made with outlays of Rs. 5.00 crores for Hirakud and Rs. 10.00 crores for Delta.

20.33. *Strengthening of Hirakud Dam*—Around 1969 cracks were observed on right spillway of Hirakud Dam. In 1981 the State Government constituted a committee under the Chairmanship of Dr. Y. K. Murthy to ascertain the causes of the cracks and to suggest remedial measures. The committee had submitted their report in September, 1983 which has been accepted by Government. As per recommendation of the committee grouting, stitching of blocks, constant monitoring of cracks including instrumentation etc., will be undertaken. The estimated cost is about Rs. 7.05 crores. As the remedial measures are urgently required, the work has already been taken up. Considering the importance of Hirakud, for the safety of the Dam along with Additional Spillway of Hirakud, the strengthening was felt necessary. The strengthening work is likely to be completed in the Seventh Plan but monitoring and instrumentation of the cracks would be a permanent feature.

20.34. The creation of additional irrigation potential in the Seventh Plan is likely to be 188.34 thousand hectares kharif, 103.99 thousand hectares rabi and 292.33 thousand hectares gross. Thus, if the plan outlay is fixed at Rs. 860.00 crores the potential creation through major and medium irrigation at the end of the Seventh Plan would be 1022.19 thousand hectares kharif, 490.26 thousand hectares rabi and 1512.45 thousand hectares gross as in the Table below :—

Table 20.3

( Area in ' 000 ha. )

		Kharif	Rabi	Gross
1. Area irrigated before Sixth Plan	..	735.79	343.29	1079.08
2. Additional anticipated in Sixth Plan	..	98.06	42.98	141.04
3. Total at the end of the Sixth Plan	..	833.85	386.27	1220.12
4. Additional anticipated in Seventh Plan	..	188.34	103.99	292.33
5. Total at the end of Seventh Plan	..	1022.19	490.26	1512.45
6. Percentage of net kharif irrigated area to cultivated area.		15.49%	..	..

20.35 The creation of additional irrigation potential by different category of projects in the Seventh Plan and in the year 1985-86 is proposed to be as follows:—

Table 20.4

( Area in 000 ha )

Sl. No.	Category of Projects	Spill over potential at commencement of 7th Plan		Potential proposed to be created in 7th Plan (1985--90)		Potential proposed to be created in 1985-86	
		Kharif	Gross	Kharif	Gross	Kharif	Gross
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Externally aided World Bank Projects.						
	(a) Pre-Sixth Plan						
	(i) Multi purpose	..	..	..	..	..	..
	(ii) Major	..	..	..	..	..	..

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(iii) Medium	..	63.83	101.21	62.83	101.21	5.00	6.00
<b>(b) Sixth Plan Projects</b>							
(i) Major	..	93.74	156.82	5.00	7.00	..	..
<b>Total (a + b)</b>	..	156.57	258.03	67.83	108.21	5.00	6.00
<b>2. Externally aid pipe-line Projects.</b>							
<b>(i) Pre-Sixth Plan</b>							
(i) Major	..	214.30	423.60	30.00	50.00	..	..
<b>(b) Sixth Plan Projects</b>							
(i) Medium	..	139.41	214.57	14.43	20.43	..	..
<b>Total—(a + b)</b>	..	353.71	638.17	44.43	70.43	..	..
<b>3. Other Projects</b>							
<b>(a) Pre-Sixth Plan</b>							
(i) Multipurpose	..	153.83	279.76	39.60	69.60	4.60	4.60
(ii) Major	..	3.68	3.68	3.68	3.68	3.68	3.68
(iii) Medium	..	30.97	38.09	30.97	38.99	4.95	5.65
<b>(b) Sixth Plan</b>							
(i) Major	..	188.85	240.30	..	..	..	..
(ii) Medium	..	..	..	..	..	..	..
<b>Total—(a + b)</b>	..	377.33	561.83	74.25	111.37	13.23	13.93
<b>4. Extension &amp; Modernisation Projects.</b>							
<b>(a) Pre-Sixth Plan</b>							
	..	0.62	1.11	0.62	1.11	..	..
<b>(b) Sixth Plan</b>							
	..	1.21	1.21	1.21	1.21	..	..
<b>Total—(a + b)</b>	..	1.83	2.32	1.83	2.32	..	..
<b>Grand Total—(1 + 2 + 3 + 4)</b>		889.44	1459.82	188.34	292.33	18.23	19.93

20.36. *New Schemes of Seventh Plan* -- Reconciling with constraint of resources and aspirations of the people, investment on new Projects would be limited to the minimum necessary. It is proposed to invest Rs. 2.70 crores for preliminary work in 20 projects in draught-prone and tribal areas in the Seventh Plan.

#### **Tribal Sub-Plan**

20.37. A vast tract of land comprising 41.01 per cent of the total area of State is within the Tribal Sub-Plan area inhabited by 62 different tribes. The tribal population (59,15,067) of the State is the highest in India excepting Nagaland. As the tribals mostly depend on agriculture, expeditious potential creation in tribal area would go a long way in improving the standard of living of tribals. Prior to planned development, there was only one medium irrigation project, i. e., **Baldiha** in Sub-Plan area with Kharif potential of 3.83 thousand hectares only. A non-plan project namely **Bhalkel**, originally initiated by the Dandakaranya Development Authority was also completed during the plan years. Thus, the non-plan and pre-plan potential created through major and medium irrigation in the Tribal Sub-Plan area was only 6.65 thousand hectares Kharif, 2.25 thousand hectares Rabi and 8.90 thousand hectares gross.

20.38. During three decades of planned Development prior to Sixth Plan, no substantial increase in potential creation was made. By the end of the year 1979-80 only one medium irrigation project namely, **Pitamahal** was completed in the Sub-Plan area. Besides, there were 16 ongoing projects and one ongoing modernisation project. These projects are; Upper Kolak Irrigation, Upper Indravati Dam, Kalo, Khadkei, Nesa, Bondapipili, Sunel, Sarafgarh, Talasara, Remal, Harbhangi, Barsuan, Kansbahal, Bankabal Kanjhari, Pilasalki and modernisation of Baladiha. The cumulative potential created through major and medium irrigation up to the end of 1979-80 was 16.53 thousand hectares Kharif 5.43 thousand hectares Rabi and 21.96 thousand hectares gross.

20.39. In the Sixth Plan, adequate measures were taken to accelerate potential creation in the Sub-Plan area and to start new projects in the area. Out of the divisible outlay of Rs. 355.00 crores in the Sixth Plan, the outlay in the Sub-Plan area would be Rs. 140.12 crores or 39.46%. Out of 16 ongoing projects, seven projects namely Kalo, Khadkei and Nesa have since been completed and four more projects, i. e., Pilasalki, Sarafgarh, Talasara and Remal will be completed by the end of 1984-85. The additional potential anticipated to be generated during the Sixth Plan is 24.08 thousand hectares Kharif, 12.27 thousand hectares Rabi and 36.35 thousand hectares gross. The bulk of the same has already been achieved. Thus the potential created in the Sixth Plan would be more than the potential created during thirty years of planned development till the end of the 1979-80. The cumulative potential at the end of the Sixth Plan would be 40.61 thousand hectares Kharif, 17.70 thousand hectares Rabi and gross 58.31 thousand hectares.

20.40. During the Sixth Plan, in accordance with the objective of taking up new projects in tribal Sub-Plan area, three major projects namely **Suharnarekha**, **Kanupur** and **Ib** and five medium projects namely **Badanala**, **Kusei**, **Rukura**, **Deo** and **Upper Sanakol** have been started in Sub-Plan area. The Project **Badanala** is likely to be completed in 1987-88. The other projects cannot be completed primarily due to inadequate resources.

20.41. In the Seventh Plan, with an outlay of Rs. 860.00 crores, a sum of Rs. 423.82 crores or 50.14% of the divisible component has been proposed to be invested in major and medium irrigation projects of the Sub-Plan area. The Additional potential to be created during the Seventh Plan is estimated to be 88.41 thousand hectares Kharif, 59.55 thousand hectares Rabi and gross 147.96 thousand hectares.

20.42. In 1985-86 against the proposed outlay of Rs. 112.00 crores, Rs. 55.15 crores is earmarked for tribal Sub-Plan area which is 50.28% of the divisible component. The Additional potential to be created is 2.80 thousand hectares Kharif, 1.00 thousand hectares Rabi and 3.80 thousand hectares gross. It is roughly estimated that the flow of benefit to the tribals directly from investment and potential creation would be about 60%.

### Scheduled Caste Component Plan

20.43. The irrigation projects being mainly infrastructure development, it is difficult to find out the benefit that will directly flow to the Scheduled Caste population. It is however, estimated that 9% of the benefit from investment and potential creation would flow to the Scheduled Caste families.

#### The Perspective

20.44. The net Kharif feasible irrigation potential of the State from all sources is estimated to be 59.00 lakh hectares or roughly 80% of the ultimate cultivated area. The main source of the feasibility is major and medium irrigation which accounts for 39.00 lakh hectares or 66% of the feasible potential. If the outlay on major and medium irrigation is linked to the resources of the State, the Seventh Plan proposal as described earlier could be Rs. 860.00 crores. The irrigation perspective of the State at the end of the Seventh Plan (1980-90) taking into account the anticipated achievements, proposals of all sectors for the Seventh Plan and their acceptance in full, is likely to be as follows :-

Table 20.5

(Area in '000 hectares)

Source	Net Kharif potential created by end of 1979-80	Anticipated net Kharif additional potential in Sixth Plan	Anticipated net Kharif additional potential with State Plan outlay in 7th Plan	Total (net Kharif) at the end of 7th Plan
(1)	(2)	(3)	(4)	(5)
Major & Medium	735.79*	96.06*	188.34*	1,022.19
Minor Flow (all sources)	325.00	47.42	33.04	405.46
Minor Lift (surface, ground and special programme).	88.00	109.50	120.00	317.50
Private Lift (ground)	140.00	161.00	200.00	501.00
<b>Total</b>	<b>1,288.79</b>	<b>415.98</b>	<b>541.38</b>	<b>2,246.15</b>

(\*Excludes Central Sector Project of P. Uteru.)

20.45. The projection of percentage of net area irrigated against cultivated area and feasible potential at different out-off period would therefore be :

Table 20.6

Out off year	Percentage of net irrigated area to cultivated area	Percentage of net Kharif potential creation to feasible potential
(1)	(2)	(3)
At the end of 1979-80	19.53 %	21.84 %
At the end of Sixth Plan (1984-85)	25.82 %	28.89 %
At the end of Seventh Plan (1989-90)	34.03 %	38.07 %

20.46. The net irrigated area of the State from all sources in 1977-78 was only 17.9 per cent of the cultivated net sown area while the corresponding national average then was 25.7 per cent. The national objective being to irrigate all irrigable lands by 2000 A.D. it is reasonably presumed that by the end of the Seventh Plan (1989-90), the national average percentage of net area irrigated to net cultivated/sown area would be not less than 50 per cent. The corresponding percentage of the State by then would be only 34 per cent. Thus, the gap between the national average and achievement in the State would disconcertingly be larger than what it was in 1977-78 and the regional imbalance in potential creation would continue unabated. The gap can be reduced if there is additional outlay in major and medium irrigation where the feasibility is maximum.

20.47. The State Government had declared their policy objective to double the net irrigation potential created (12.90 lakh hectares) by end of 1979-80, within a period of ten years or say by the end of Seventh Plan. With the outlay based on State resources, it would not be possible to achieve this objective substantially.

20.48. The projects taken up so far are mostly in tribal and drought-prone areas and some of these projects like Upper Kolab Irrigation, Rengali Irrigation and Subarnarekha are in take off stage. Over the years, the State Government have built up the required personnel and infrastructure to expedite the progress of work. But the constraint of resources inhibits optimum utilisation of personnel and infrastructure and would ultimately lead to relative low potential creation and unless there is an additional outlay outside the State Plan.

20.49. One of the main objectives of the Seventh Plan to achieve a breakthrough in rice production particularly in the Eastern Region. Orissa is a rice producing State and unless there is a massive thrust in irrigation with additional outlay over and above Rs. 860.00 crores the breakthrough may not be possible in this State. As already stated a vast tract land of the State comes under the Tribal Sub-Plan area. Development of agriculture for optimum farm income is a reliable strategy to mitigate the poverty of tribals. This would not be achievable without adequate funds. The Western Orissa is a chronically drought-prone zone of the State. For the Seventh Plan, there will be a number of ongoing projects in the Western Orissa like Ong Dam, Upper Indravati, Lower Indra, Lower Suktel, Ib, Bagh Integrated Project Stage-I, Rukura, Hariharjore, Barsuan, Upper Jonk, etc. It would not be possible to adequately fund these projects in the Seventh Plan within the limited resources of Rs. 860.00 crores.

20.50 For a reasonable perspective of the Seventh Plan and in the interest of removing regional disparity in potential creation, alleviating poverty of the tribals, providing irrigation in chronically drought-prone areas, achieving the national objective of irrigation all irrigable land by 2000 A. D. and increasing rice production in eastern zone in Seventh Plan, additional outlay over and above of Rs. 860.00 crores is absolutely necessary. The additional outlay would also be helpful in substantially achieving the declared objective of the State Government to double the irrigation potential by 1990. Considering this and the resources of this State, in the last meeting of National Development Council held on 12th and 13th July, 1984, the Chief Minister, Orissa had suggested that the three projects namely Rengali Irrigation, Upper Kolab Irrigation and Subarnarekha Irrigation be fully funded by the Centre. A suitable modality of financing the three projects by the Centre may have to be devised for the purpose.

#### **Central Finance**

20.51. As the three projects namely Rengali Irrigation, Upper Kolab Irrigation and Subarnarekha are in take off stage the State Government propose that these projects may be fully funded by the Centre. With the available infrastructure and personnel this would ensure expeditious completion of these projects and would substantially achieve a breakthrough in rice production in eastern region as well as appreciably alleviate the standard of living of the tribals.

20.52. *Rengali Irrigation Projects*—This project is designed to utilise the tailrace discharge of Rengali Dam for irrigating a C. C. A. of 2.35 lakh hectares in the first phase and another 1.64 lakh hectares in the second phase. Commercial power generation in the Rengali Dam would commence from next monsoon when the tailrace discharge will be available for irrigation. The latest cost of the Rengali Irrigation Project phase-I is Rs. 792.00 crores against which the expenditure by the end of the Sixth Plan would be only Rs. 43.58 crores. At this rate of investment, it will take years for the State to complete the project and the tailrace discharge would go waste. With its vast potential, an early completion of the project would increase rice production in the area substantially. The Government of India would also benefit from the project as its left canal would be the source of water-supply to the proposed Steel Plant at Daitari in the public sector. The Barrage of the project is likely to be completed soon but as the canal system will not be completed without substantial investment which is beyond the capacity of the State Government, the idle pondage would adversely affect the image of Government. Hence, the project may be fully funded by the Centre. The proposed investment in Seventh Plan is Rs. 200.00 crores and the potential creation is 30.00 thousand hectares kharif, 20.00 thousand hectares rabi and 50.00 thousand hectares gross. There is scope to increase the investment also. The project is also being proposed for I. D. A. credit assistance and when accepted, the benefit would also go to the Government of India.

20.53. *Upper Kolab Irrigation*—Commercial generation of power from the Upper Kolab Dam will commence from the monsoon of 1986. The regulated discharge than available would go waste as the distribution system would not be completed. The project would annually irrigate 93.93 thousand hectares. The entire C. C. A. is located in Tribal Sub-Plan area. The completion of the distribution system would substantially mitigate the poverty of tribals. The latest cost of the project is Rs. 75.41 crores and the spillover cost for the Seventh Plan is Rs. 59.05 crores. The proposed investment in the Seventh Plan is Rs. 52.73 crores. The additional potential creation in Seventh Plan would be 65.00 thousand hectares gross as 35.00 thousand hectares kharif and 30.00 thousand hectares rabi.

20.54. *Subarnarekha Irrigation Project*—The Subarnarekha Project of Orissa has a C. C. A. of 93.00 thousand hectares, out of which 89.00 thousand hectares are in the Tribal Sub-Plan area of Mayurbhanj district. The cost of the project, with escalation is Rs. 391.49 crores. In formulating the project, it has been estimated that the project will directly benefit about 60,000 families who are mostly tribals. Presently in the project area about 70% of the farm families are below the poverty line. With the completion of the project this percentage would be reduced to 20%. Therefore, a part from helping the State, Central financing of the project would be a monumental step for mass alleviation of standard of living of tribals. The first phase of the project of Bihar and Orissa comprising a time slice of four years (1982—86) has already been accepted for I. D. A. credit assistance. Hopefully, the subsequent phases will also be accepted for I. D. A. credit assistance and the benefit in this regard would also go to Government of India when the project is financed by the Centre.

20.55. The ultimate cost, the ultimate potential, the proposed outlay by the Centre in the Seventh Plan and the anticipated potential creation in respect of these three projects are as follows:—

TABLE 20.7

Project	Ultimate cost with contingencies	Ultimate potential		Proposed outlay by Centre in 7th Plan	Anticipated potential in 7th Plan	
		Kharif	Gross		Kharif	Gross
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Rengali Irrigation	792.00	235.00	444.30	200.00	30.00	50.00

(Rs. in crores)  
(Area in 000 ha.)



(1)	(2)	(3)	(4)	(5)	(6)	(7)
Upper Kolab Irrigation ..	75.41	44.52	93.93	52.73	35.00	65.00
Subarnarekha Irrigation ( Orissa ).	391.49	93.03	156.11	135.00	5.00	7.00
		Total	..	387.73	70.00	122.00
		Say	..	390.00		

20.56 With the funding of the above three projects by the Centre it would be possible for the State to invest the entire outlay of Rs. 860.00 crores in other ongoing projects to generate additional potential. The additional potential to be generated would be 109.66 thousand hectares kharif, 96.01 thousand hectares rabi and 205.67 thousand hectares gross as follows :—

TABLE 20.8

(000 ha.)

(1)	Kharif (2)	Rabi (3)	Gross (4)
Anticipated potential of major and medium irrigation by the end of Sixth Plan.	833.85	386.27	1,220.12
Additional anticipated in Seventh Plan with proposed Central funding of Rs. 387.73 crores.	70.00	52.00	122.00
Additional anticipated in Seventh Plan with State Plan outlay of Rs. 860.00 crores.	228.00	148.00	276.00
Total at the end of Seventh Plan with Central and State Plan outlay.	298.00	200.00	498.00
Anticipated achievement with only Rs. 860.00 crores in State Plan.	188.34	103.99	292.33
Additional potential due to Central funding	..	109.66	96.01
			205.67

20.57. The additional potential to be generated would be from the following project for which additional outlay would be available due to Central funding of the three projects :—

TABLE 20.9

(Rs. in crores)  
(Potential in 000 ha.)

Serial No.	Name of Projects	Without Central Outlay of Rs. 387.73 crores			With Central Outlay of Rs. 387.73 crores		
		Outlay (3)	Additional		Outlay (6)	Additional	
			Kharif (4)	Gross (5)		Kharif (7)	Gross (8)
1	Upper Indravati Irrigation ..	25.00	4.60	4.60	60.00	34.85	64.85
2	Ong Dam ( Chitroi ) ..	10.00	..	..	42.00	12.00	23.00
3	Lower Indra ..	10.00	..	..	50.00	12.00	23.00
4	Kanupur ..	15.00	..	..	60.00	15.00	27.62
5	Samakoi ..	10.00	..	..	60.00	12.00	23.00
6	Ib ..	5.00	..	..	50.00	..	..

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
7	Lower Suktel	..	5.00	..	..	40.00	8.00	15.00
8	Bagh Integrated Stage-I	..	5.00	..	..	40.00	4.00	7.00
9	Upper Samakoi	..	5.00	..	..	10.00	5.00	8.00
10	Rukara	..	5.00	3.46	5.46	8.45	5.46	8.30
11	Deo	..	15.00	4.57	6.57	19.43	8.57	14.90
12	Baghalati	..	5.00	1.80	1.80	7.35	2.80	3.68
13	Sapua Badjore	..	5.00	1.00	1.00	9.59	2.41	3.75
14	Kusei	..	12.72	3.60	5.60	25.72	6.60	8.60
15	7th Plan New Projects--							
	(a) Major	..	1.40	..	..	12.60	Potential in these cases would be generated in the first part of 8th Plan.	
	(b) Medium	..	1.30	..	..	23.01		
	<b>Total</b>	..	130.42	19.03	25.03	518.15	128.69	230.70

#### Proposed outlay and target

20.58. Summing up, it is proposed that the Seventh Plan outlay of the State be fixed at Rs. 1,247.78 crores say Rs. 1,250.00 crores as Rs. 850.00 crores in the State Plan and Rs. 387.73 say Rs. 390.00 crores as additional Central outlay. The annual outlay and additional potential creation would be as shown in the Table below :-

Table 20.10

Year	(Rs. in crores)						(Area in 000 ha.)	
	Without Central Outlay			With Central Outlay				
	Outlay	Potential		Outlay	Potential			
		Kharif	Gross		Kharif	Gross		
(1)	(2)	(3)	(4)	(5)	(6)	(7)		
1985-86	..	112.00	18.23	19.93	142.00	18.23	19.93	
1986-87	..	136.00	38.11	58.13	192.00	38.11	58.13	
1987-88	..	167.00	17.83	24.82	252.00	17.83	24.82	
1988-89	..	203.00	25.40	43.30	303.00	36.40	56.30	
1989-90	..	242.00	88.77	146.15	358.73	187.43	338.82	
<b>Total</b>	..	860.00	188.34	292.33	1,247.73	298.00	498.00	

#### Central Sector Project

20.59. The Department of Rehabilitation, Government of India is financing a project in connection with the resettlement of displaced families in Dandakaranya area. The Project entirely lies in

the tribal sub-plan area. By the end of 1979-80 potential creation from that Project was 2.00 thousand hectares Kharif, 0.55 thousand hectare Rabi and Gross 2.55 thousand hectares. During Sixth Plan, additional potential creation is anticipated to be 29.50 thousand hectares Kharif, 14.69 thousand hectares Rabi and Gross 44.19 thousand hectares. If this project continues in the Seventh Plan, the additional potential creation is proposed to be 29.53 thousand hectares Kharif, 33.61 thousand hectares Rabi and Gross 63.14 thousand hectares with an investment of Rs. 5.58 crores.

### 20 Point Programme

20.60. The proposed outlay for Seventh Plan with reference to the resources of the State is Rs. 860.00 crores. The outlay has been distributed for early completion of certain projects to create additional potential of 188.34 thousand hectares in Kharif, 103.99 thousand hectares in Rabi and Gross 292.33 thousand hectares. In addition to above, if the project of department of rehabilitation continues the additional potential would be 29.53 thousand hectares Kharif, 33.61 thousand hectares Rabi and Gross 63.14 thousand hectares. The following table shows the yearwise target of potential creation during the Seventh Plan.

Table 20.11

Year	State Plan		Central Sector		Total	
	Kharif	Gross	Kharif	Gross	Kharif	Gross
	(2)	(3)	(4)	(5)	(6)	(7)
Proposed of 1979-80	735.79	1,079.08	2.00	2.55	737.79	1,081.63
During Sixth Plan (1980-85).	98.06	141.04	29.50	44.19	127.56	185.23
Seventh Plan (Target) 1985-86.	18.23	19.93	15.00	27.00	33.23	46.93
1986-87 ..	38.11	58.13	14.53	36.14	52.64	94.27
1987-88 ..	17.83	24.82	..	..	17.83	24.82
1988-89 ..	25.40	43.30	..	..	25.40	43.30
1989-90 ..	88.77	146.15	..	..	88.77	146.15
Total—Seventh Plan Target.	188.34	292.33	29.53	63.14	217.87	355.47
Cumulative by end of Seventh Plan.	1,022.19	1,512.45	61.03	109.88	1,083.22	1,622.33

If additional Central Outlay of Rs. 387.73 crores as proposed above is available, the additional potential creation of 109.66 thousand hectares Kharif and 205.67 thousand hectares gross would be possible.

### B. Flood Control

20.61. Orissa is among the chronically flood-affected States of India. In the recent past, floods of varying intensities have occurred in the years 1980, 1982 and 1984. Of these, floods of 1980 and 1982 caused heavy damages disrupting the economy of the State. Flood, which occurred during 1982 was the worst in the recorded history with a discharge of 15.80 lakh cusses at the Delta Head of Mahanadi despite flood moderating capacity of Hirakud Dam. Coupled with

flood and drainage congestion in the deltaic area of the State, there has been large scale damage to the crops. Lot of good agricultural land has also gone out of cultivation owing to continuous water logging. Out of the total area 41,000 Sq. Kms. of flood prone and water logged areas of the State, by end of 1953-54 an area of 27,000 Sq. Kms. has been given protection leaving 14,000 Sq. Kms. to the vagaries of flood and water logging. The main rivers, which cause flood and water logging are the Mahanadi, Baitarani, Brahmani, Budhabalang, Rushikulya, Subarnarekha and Bunsadhara. The problem of flood has been aggravated by intermingling of water of deltaic rivers and number of cross channels connecting each other. Formation of tidal bars across the mouths of the rivers also add to the seriousness of the problem. Bank erosion and sand casting also are of common occurrence along the river basins. With a view to protecting the aforesaid flood affected areas, the State Government maintains following types of embankments.

1. Capital Embankments	1,406 Kms.
2. Other Embankments	1,679 Kms.
3. Saline Embankments	1,366 Kms.
4. Test Relief Embankments	1,418 Kms.
	-----
Total	5,869 Kms.
	-----

20'62. Several expert Committees have examined the problems of flood in the state and suggested for strengthening of the embankments, taking up river training works, protection to the towns, villages, construction of sluices and saline embankments renovation of drainage cuts and construction of new drainage channels to guard against flood as well as water logging.

20'63 The Sixth Plan allocation under flood control was originally fixed at Rs. 15 crores, which has been increased to Rs. 17 crores. This is quite inadequate as compared to the needs. With this allocation, number of embankments, drainage, bank protection, anti-sea erosion schemes were taken up. But owing to resources constraint 226 schemes are likely to spill over to the Seventh Plan. Completion cost of these schemes would be Rs. 12 crores at the present price level. Besides many approved schemes, which have not been taken up, would be taken up in the Seventh plan.

20'64. Taking all these into consideration the following priority has been laid down in preparation of the Seventh Plan under flood control with an outlay of Rs. 17 crores.

- (a) Completion of the ongoing schemes
- (b) New emergent flood control and drainage schemes
- (c) Survey and investigation

The details of the schemes are as follows

#### Embankment Scheme -

20'65 There are 57 numbers of continuing Embankment Schemes which will spill over to the Seventh Plan. They require Rs. 41.40 lakhs at current price for their completion. The Rengali Dam across river Brahmani is going to be completed shortly and as a corollary to it, the Brahmani flood master plan (double Embankment Scheme) will be taken up during the Seventh Plan. A provision of

Rs. 300 lakhs has been earmarked for this. On account of sand casting and general rise of river beds raising and strengthening of Embankments along various rivers and construction of new Embankments, where protection has become essential, will be executed for which a provision of Rs. 100 lakhs has been made. As per the opinions of the Goyal Committee and Murthy Committee, a provision of Rs. 700 lakhs has been kept in the Plan towards the flood control share of the additional spillway to be provided in Hirakud Multipurpose Project as well as for strengthening of the Dam. Thus, a total provision of Rs. 1,521.00 lakhs has been made for the Seventh Plan period for the embankment schemes.

#### **Drainage Scheme:**

20.66. There are 27 numbers of continuing drainage schemes with an estimated requirement of Rs. 144.40 lakhs which will spill over to Seventh Plan. The Master plan for Mahanadi Delta system is under preparation with the assistance from World Bank. A provision of Rs. 650 lakhs for execution of part of the schemes under this Master Plan has been proposed. In several other areas the drainage congestion and water logging is causing reduction in yield of agricultural produce. A provision of Rs. 100 lakhs has been made to bring relief to these areas from drainage congestion. Thus, provision of Rs. 894.40 lakhs has been made for drainage Schemes.

#### **Bank Protection Scheme**

20.67. Altogether 120 numbers of continuing bank protection schemes with an estimated requirement of Rs. 479.80 lakhs will spill over to Seventh Plan. Erosion of river banks in some areas has assumed alarming proportions in all most all important rivers of the State threatening many towns, villages and agricultural land. A provision of Rs. 300 lakhs to prevent bank erosion at important places has been made. Thus the total provision during the Plan will come to Rs. 779.80 lakhs.

#### **Anti-Sea Erosion Schemes:**

20.68. A total number of 22 Anti-Sea Erosion Schemes (salines embankment) with estimated requirement of Rs. 154.40 lakhs will spill over to the Seventh Plan. Beach erosion has also been noticed along the coast of Orissa at places like Gopalpur, Kushabhadra mouth, Paradeep, Satabhaya and at Hookitola island. A provision of Rs. 150 lakhs has been made for the purpose in the Plan to take up some new works. Thus, a total provision of Rs. 304.40 lakhs has been made under this item.

#### **Survey and Investigation, Research and Development and Preparation of Master Plan:**

20.69. Preparation of Master Plans for the river basins like Tel, Budhabalang, Subarnarekha, and Brahmani is in progress. This requires intensive investigation and model studies etc. Collection of flood data and inland hydrographic survey are also carried out round the year in the State. Coastal survey is proposed to be taken up along Eastern Coast with the help of Indian Navy. A provision of Rs. 200 lakhs has been made under Survey and Investigation, Research and preparation of Master Plan.

#### **Annual Plan for 1985-86:**

20.70. It is proposed to provide an outlay of Rs. 7 crores during 1985-86. This will provide protection against flood to about 15,000 hectares. In this connection, it may be relevant to mention that although a large number of works taken up during Sixth Plan period have been completed, payment could not be made owing to resources constraint. The liabilities created are required to be liquidated without any further delay. Keeping this in view, annual outlay has been proposed at Rs. 7 crores during 1985-86.

## CHAPTER 21

### MINOR IRRIGATION

#### (a) Flow Projects

21.1. Ultimate Irrigation potential under Minor Irrigation in the State is of the order of 10 lakh hectares. Till the beginning of the Sixth Five-Year Plan, only 3.25 lakh hectares of irrigation potential was created in this sector, which is 32.5% of the total potential. Thus, there is vast scope for exploitation of the unutilised potential. The Sixth Five-Year Plan allocation for Minor Irrigation (Flow) Projects is Rs. 42.50 crores with a view to accelerating the pace of creation of additional irrigation potential. Steps are being taken to provide more allocation for this programme and likely expenditure during the Sixth Plan period may be of the order of Rs. 51.25 crores.

21.2. Strategy adopted in the Sixth Plan was to complete 331 Minor Irrigation Projects which spilled over from the Fifth Five-Year Plan on priority and also to take up new identified projects in the drought prone and tribal areas of the State. 67 new Minor Irrigation Projects were identified to be taken up during the Sixth Plan period with an estimated cost of Rs. 100.00 crores. The target set for creation of irrigation potential by completing 331 ongoing projects as well as 67 new projects is of the order of 48,000 hectares (gross).

21.3. During the first three years of the Sixth Plan, irrigation potential of the order of 32,398 hectares has been created after incurring an expenditure of Rs. 25.75 crores. Out of this additional potential created in the tribal sub-plan area is 8,209 hectares. Potential created in the fourth year is under verification.

21.4. Taking into consideration the additional irrigation potential of 48,000 hectares to be created by the end of Sixth Plan, the total irrigation potential that would be created by the end of Sixth Five-Year Plan is of the order of 3.73 lakh hectares which represents 37.3% of the total potential assessed.

21.5. The Seventh Five Year Plan would start with a back-log of 50 ongoing projects in which some works have been started during the Sixth Plan period. Probable estimated cost of these projects is of the order of Rs. 103.96 crores. Total amount likely to be spent on these projects by the end of Sixth Plan is Rs. 3.62 crores and the balance amount required to be spent during the Seventh Plan on these projects is of the order of Rs. 1,00.34 crores. These irrigation projects would create additional irrigation potential of 33,040 hectares in Khariff and 8,570 hectares in Rabi.

21.6. It has been proposed to take up some new Minor Irrigation Projects during the Seventh Plan period at an estimated cost of Rs. 17.00 crores. Also a number of derelict projects are proposed for renovation during Seventh Plan period in order to regain the lost potential.

21.7. The Seventh Plan proposal has, therefore, been calculated at Rs. 147.00 crores, the break-up of which is given below: -

	(Rs. in Crores)
1. For 50 on going projects	1,00.00
2. For new M.I.P.s	17.00
3. For renovation of derelict M.I.P.s	19.50
4. For clearance of liabilities of projects programmed to be completed in Sixth Plan	3.50
5. Investigation	5.00
6. Charged	2.00
<b>Total</b>	<b>1,47.00</b>

21·8. For the Annual Plan, 1985-86, an outlay of Rs. 16·00 crores has been suggested, the break-up of which is indicated below :—

	(Rs. in Crores)
1. 50 on-going projects	9·70
2. New M.I.P.s' proposed to be taken up during 1985-86	0·80
3. Renovation of derelict M.I.P.s'	1·00
4. Clearance of liabilities	3·50
5. Investigation	0·80
6. Charged	0·20
Total ..	16·00

During 1985-86 it has been proposed to create an additional irrigation potential of 6,500 hectares in Khariff and 1,820 hectares in Rabi.

#### (b) Lift Irrigation (Public Sector)

21·9 The State of Orissa has vast resources of ground water. After completion of the preliminary survey, it is assessed that 15 to 16 lakh hectares can be commanded through ground water resources. Out of this, 2·37 lakh hectares can be commanded through ground water by installation of 10,000 public tube-wells. Besides, there is scope for providing irrigation to an area of 6·50 lakh hectares through installation of River Lift Projects along the bank of different rivers in the State to lift water and irrigates the adjacent areas.

#### Sixth Plan target and achievement

21·10 With a plan provision of Rs. 40 crores, the target for the Sixth Five Year Plan was to create an additional irrigation potential of 47,500 hectares by installation and energisation of 1,900 Lift Irrigation Projects. However, during the first three years, i.e., 1980—83, the Orissa Lift Irrigation Corporation energised 2,233 projects creating irrigation potential of 52,010 hectares, which exceeded the target set for the Sixth Plan period. During the last two years of the Sixth Plan the Orissa Lift Irrigation Corporation had taken up Lift Irrigation Points under Massive Irrigation Programme to create additional irrigation potential of 200-400 hectares in each C. D. Block. Due to constraints in plan resources, the programme has been taken up with the funds available through D.R.D.A., NABARD and RIEGP 1,146 projects were energised by the end of June, 1984 with an irrigation potential of 28,630 hectares. It is expected to complete another 854 projects creating additional irrigation potential of 28,870 hectares by the end of Sixth Plan. Thus, during the Sixth Plan, 4233 Lift Irrigation Projects with an irrigation potential of 1·09 lakh hectares are likely to be installed. At the beginning of the Sixth Plan there were only 3,990 projects with an irrigation potential of 87,690 hectares representing nearly 10 per cent of the total Lift Irrigation potential of 9 lakh hectares of the State. By the end of the Sixth Plan the total number of Lift Irrigation Projects that will be energised ( 4,000 Tube Wells + 4,223 River Lift ) is 8,223 with an irrigation potential of 1·97 lakh hectares which is nearly 22 per cent of the total estimated potential of the State

#### Seventh Plan Programme

21·11. During the Seventh Plan it is projected to install and energise 5,000 projects @ 1,000 per year to create an additional irrigation potential of 1·20 lakh hectares. Thus, there may be 13,223 projects with irrigation potential of about 3·17 lakh hectares by the end of the Seventh

Plan which represents 35 per cent of the total estimated potential of the State. In the Seventh Plan it is proposed to provide an amount of Rs. 150.00 crores, details of which are indicated below—

( Rs. in Crores )		
Serial No.	Items	Amount proposed
(1)	(2)	(3)
1	Equity	
	(i) Borrowers margin, etc.	19.65
	(ii) Grants for construction of field channel of non-NABARD Project	4.20
	(iii) Grant-in-aid for infrastructure, etc.	3.00
		} 26.85
2	Debt servicing—	
	(i) Repayment of principal	26.30
	(ii) Interest	16.89
		} 43.19
3	Grant-in-aid for O. and M. of Lift Irrigation Projects (Water-rate subsidy).	38.96
4	Grant-in-aid for Ground Water Survey and Investigation	10.00
5	Subsidy for extension of L. T. Line for energisation of Pump Sets.	31.00
	Total	1,50.00

Besides Rs. 150.00 crores mentioned above a further amount of Rs. 69.64 crores would be financed by NABARD through Commercial Banks. Out of this proposed loan Rs. 43.19 crores is to be provided in the plan under the new head styled as, "Debt servicing".

#### Construction of field channel development of infrastructure, etc.

21.12. A sum of Rs. 26.85 crores is required to meet the cost of field channels of 6,149 Lift Irrigation Points and for development of infrastructure. This money is to be provided under, "Equity in the Seventh Plan".

#### Loan Liability

21.13. The loan taken by Orissa Lift Irrigation Corporation from different Commercial Banks for construction of Lift Irrigation Projects till the end of the Sixth Plan is likely to be Rs 26.00 crores. During the Seventh Plan period Bank loan may be of the order of Rs. 69.64 crores which will be utilised for construction of new Lift Irrigation Points and completion of spill over works of Sixth Plan period. The loan will be taken in a phased manner during the Seventh Plan period. It is calculated that a sum of Rs. 43.19 crores towards repayment of principal and interest is required to be provided during the Seventh Plan period.

#### Operation and Maintenance :-

21.14. There would be 8,223 operable Lift Irrigation Projects which would be taken care of during the Seventh Plan period. For this, subsidy on "Water rate" to the tune of Rs. 47.82 crores is required during the Seventh Plan period. Besides, a sum of Rs. 16.14 crores would be required during the Seventh Plan period for Operation and maintenance of new Projects. Thus, in total Rs. 63.96 crores



is required out of which a sum of Rs. 38.96 crores would be provided in the Seventh Plan. The balance subsidy of Rs. 25.00 crores has been projected to be met from non-plan budget at Rs. 5.00 crores per annum.

#### **Ground Water Survey**

21.15. The Ground Water Survey has been continuing from the year, 1967. The preliminary phase of Ground Water Survey was completed in the State by 1977-78. From 1978-79, the intensive phase of Ground Water Survey is in progress. By the end of the Sixth Plan about 57,000 square Kilo Meters are likely to be covered under such survey.

21.16. During the Seventh Plan, it is proposed to provide Rs. 10.00 crores. With this outlay, it is programmed to cover 40,000 Square Kilometers under intensive phase of Ground Water Survey. The Ground Water Units in the State can provide guidelines for rational development of Ground Water potential both in Public and Private Sectors. Based on the hydrological conditions of different areas, the Ground water units would design different types of irrigations structures considered suitable for those areas. There is a proposal to undertake micro-level survey of Ground Water resources in selected areas where the progress of Ground Water Survey is considered important and critical. Ground Water fluctuation is due to change in environmental conditions, progress in Ground Water exploitation and other reasons which are to be monitored effectively and such information would provide effective check against the over-exploitation. In view of the position, it is proposed to strengthen and reorganise the Ground Water wing of the Corporation.

#### **Energisation pump sets**

21.17. It is programmed to energise 40,000 new pump sets in the State during the Seventh Plan. This would involve a subsidy of Rs. 31.00 crores at nearly Rs. 8,000 per pump set for drawal of L.T. lines and energisation.

#### **Programme of Lift Irrigation in Tribal Sub-Plan Area**

21.18. Districts of Suncargarh, Mayurbhanj and Koraput and some parts of Sambalpur, Keonjhar, Kalahandi, Phulbani, Ganjam and Balasore come under Tribal Sub-Plan Area. By the end of Sixth Plan, 1,626 numbers of projects are likely to be energised in the Tribal Sub-Plan Area of the State to provide irrigation to 38,777 hectares. During the Seventh Plan it is proposed to instal and energise 1,760 numbers of new projects in sub-plan area to create additional irrigation potential of 42,000 hectares. The estimated requirement for the above purpose during the Seventh Plan is Rs. 45.00 crores which represents 30 per cent of the total plan outlay. Besides, 15,000 Sq. Kms. are to be covered under the Ground Water Survey during the Seventh Plan period in Tribal Sub-Plan Area.

#### **Special component plan for Scheduled Caste**

21.19. It is difficult to quantify what would be the special component plan of the total plan outlay proposed for the Seventh Plan. Roughly, 15 per cent of the total population of the State belongs to Scheduled Castes. They are dispersed more or less uniformly throughout the State. While locating Lift Irrigation Points, areas having concentration of Scheduled Castes will be given preference, it is that 9 per cent of the total plan outlay will be apportioned for the special component plan, Rs. 13.50 crores need be earmarked for the same.

#### **Employment opportunity likely to be created**

21.20. During the Seventh Plan, it is proposed to invest Rs. 96.53 crores for installation of new projects and completion of works spilled over from the Sixth Plan period. Assuming 25 per cent as the labour component, man-days that will be generated in construction work of Lift Irrigation Projects may be of the order of 2.50 crores man-days. Besides, 6,000 skilled workers would be in full time engagement for operation and maintenance of the projects. Under the Ground Water Survey employment

potential for 6.00 lakh man-days will be generated assuming 30 per cent of the works expenditure of Rs. 2.07 crores. Again, 10 more Divisions and two Circles will be created during the Seventh Plan. This will provide regular employment to 110 Graduate Engineers, 308 Diploma Engineers, 120 other non-technical persons and 1,532 skilled workers. Over and above this, 90,000 Agriculture Labourers would be engaged throughout the year as a result of creation of additional potential of 1.20 lakh hectares during the Seventh Plan period.

#### Annual Plan for 1985-86

2121. The Annual Plan Outlay for 1985-86 is kept at Rs. 16.00 crores, the details of which are indicated below :—

(Rs. in Crores)		
Sl. No	Item of expenditure	Amount proposed
(1)	(2)	(3)
1	Equity —	
	(i) Borrowers margin, etc.	.. 3.34
	(ii) Construction of field channel of Non-NABARD Projects	.. 1.00
	(iii) Grant-in-aid for infrastructure, etc.	.. 0.50
		} 4.84
2	Debt servicing—	
	(i) Repayment of principal	.. 2.82
	(ii) Interest	.. 1.63
		} 4.45
3	Grant-in-aid for operation & maintenance of L. I. Projects (Water-rate subsidy).	.. 4.21
4	Grant-in-aid for Ground Water Survey & Investigation	.. 1.50
5	Subsidy for extension of L.T. line for energisation of pump sets	.. 1.00
	Total	.. 16.00

It is programmed to energise 1,000 Lift Irrigation Projects to create additional irrigation potential of 24,000 hectares during 1985-86. Besides, 8,000 Sq. Kms. are targetted to be covered under intensive phase of Ground Water Survey.

#### (c) Private Lift Irrigation Projects

2122. This State is rich in ground water resource which can support a little over one million standard wells. In view of this, the State Government have laid due emphasis on exploitation of ground water resources, through construction of small private irrigation works. Accordingly, a Massive Dug-well Programme has been launched since 1968-69 though it came to a take-off stage in 1971-72. Over these years, this programme has become quite popular among the farming community because of its reliability in the field of irrigation. By the end of 1979-80, 3,27,067 dug-wells have been executed, out of which Co-operative Banks have financed 2,83,658 and Commercial Banks have financed 43,409.

21.23. During the Sixth Plan period it was programmed to construct four lakh tube-wells in the State. Against this, the likely achievement by the end of the Sixth Plan, is of the order of 2.50 lakh dug-wells, the year-wise break-up of which is given below: —

Achievement of dug-wells during Sixth Plan		
1980-81	..	34,528
1981-82	..	31,079
1982-83	..	54,350
1983-84	..	64,009 (Anticipated)
1984-85	..	66,000 (Target)
		2,49,966, or say
		2.50 lakhs

Nearly 75% of dug-wells have been financed through Co-operative Banks and the rest through Commercial Banks. For this programme, subsidy is being granted to small, marginal and tribal farmers at different rates from I. R. D. Programme, D. P. A. P. and I. T. D. A. The rates of subsidy are 25 per cent for small farmers, 33 1/3 per cent to marginal farmers and 50 per cent to tribal and marginal farmers. In case of community irrigation works, according to IRDP norms, subsidy at the rate of 50 per cent of the cost proportionable to small and marginal farmers in the ayacut is provided. Considering the progress of achievement during the Sixth Plan period, it has been proposed to keep a target of four lakh dug-wells during the Seventh Plan period. It is proposed to construct 75,000 dug-wells during 1985-86.

21.24. By the end of Fifth Plan period, 3,332 filter point tube-wells have been installed in the State in the private sector availing loan assistance from Co-operative and Commercial Banks. During the Sixth Plan period, it was programmed to install 15,000 filter point tube-wells in the State. The progress has not been satisfactory due to lack of response from the farmers. The achievement has been 96 tube-wells in 1980-81, 413 tube-wells in 1981-82 and about 600 tube-wells in 1982-83. The achievement in 1983-84 is only 44 tube-wells in the Co-operative Sector. The difficulties with regard to availing group loan by the farmers is being sorted out and the progress is expected to pick up in future. In view of this achievement, it is also proposed to keep a similar target of 15,000 filter point tube-wells in the Seventh Plan period with annual target of 3,000 for the year 1985-86.

21.25. Energisation of pump sets is a vital factor for increasing the irrigation potential both for the private sector and in the public sector. By the end of 1979-80, 12,844 pump sets were energised which include 8,450 pump sets energised in the private sector. During the Sixth Plan period, it was proposed to energise 75,000 pump sets in the private sector. However, the likely achievement during the Sixth Plan period would be about 21,742 pump sets, the year-wise break-up of which is given below:—

1980-81	..	3,236
1981-82	..	2,929
1982-83	..	3,777
1983-84	..	3,800 (Tentative)
1984-85	..	8,000 (Target)

21.26. Considering the progress of achievement of pump sets energised during the Sixth plan period, it is proposed to energise 40,000 pump sets during the Seventh Plan period with an annual target of 7,000 pump sets to be energised in 1985-86

**(d) Renovation of Panchayat Samiti M.I Ps. and Grama Panchayat Tanks**

21-27. During the Sixth Five-Year Plan, an outlay of Rs. 250.00 lakhs was approved for renovation of small Minor Irrigation Projects of Panchayat Samities and Grama Panchayat tanks for improving 1,250 Projects. However, only Rs. 70.00 lakhs could be provided during the Sixth Plan period, i.e., Rs. 50.00 lakhs in 1980-81 and Rs. 20.00 lakhs in 1981-82. With this allocation only 365 Panchayat Samiti Minor Irrigation Projects and Grama Panchayat tanks could be renovated. As these are small works of local importance, funds were proposed to be provided out of NRFP allocation. Since there is great demand for NRFP allocation for other local development works it has not been possible to provide adequate funds for this purpose. In the Seventh Plan high priority has been attached for increasing the productivity of agriculture and the total output therefrom. Irrigation being the foremost input to improve the agricultural production, there is urgent need to improve these small Minor Irrigation Projects which are sources of irrigation serving as crop saving devices in drought situations.

21-28. The Minor Irrigation Projects and Grama Panchayat tanks having ayacut area of 60 acres and below are under the control of Blocks. The total number of Panchayat Samiti Minor Irrigation Projects in the State under the Blocks is 7,485 and there are 6,248 Grama Panchayat tanks which are also sources of irrigation. Thus the total number of small Minor Irrigation Projects and Grama Panchayat tanks comes to 13,733. During the year 1982-83, 777 Minor Irrigation Projects have been transferred to Minor Irrigation Divisions of Irrigation Department for maintenance on account of increase in their ayacut area above 60 acres. Due to non-allocation of funds for a long time, many Panchayat Samiti Minor Irrigation Projects have become derelict and their ayacut considerably reduced. It has been identified that out of the total number of such derelict projects is 3,582. It has been estimated that out of the total number of 3,582 derelict projects, 2,671 projects require immediate renovation. The area irrigated by these projects is 14,288.36 hectares. After their renovation and restoration of the field channel the area expected to be irrigated would be about 30,669.27 hectares. For the purpose, Rs. 615.00 lakhs would be required. However, within the limited resources, only Rs. 250.00 lakhs has been proposed for the Seventh Plan for renovating 1,250 numbers of Panchayat Samiti Minor Irrigation Projects and Grama Panchayat tanks on an average of Rs. 20,000 for each project. For the year 1985-86, it has been proposed to take up renovation of 40 numbers of Panchayat Samiti Minor Irrigation Projects/Grama Panchayat tanks with an allocation of Rs. 8.43 lakhs.

## CHAPTER 22

## COMMAND AREA DEVELOPMENT

22.1. The Command Area Development Programme aims at the optimum use of water resources towards increasing agricultural productivity under irrigated conditions in the commands of the major and medium irrigation systems of the State. This programme was launched in Orissa from the year 1976-77, comprising the three major irrigation projects namely, Mahanadi, Salandi and Hirakud, with a total culturable command area of 5.31 lakh hectares in khariff and 3.42 lakh hectares in Rabi as detailed below: -

(in thousand hectares)

	Khariff	Rabi	Total
(i) Mahanadi Stage I (Cuttack) ..	179.41	107.60	287.01
(ii) Mahanadi Stage II (Puri) ..	156.89	118.64	275.53
(iii) Salandi (Bhadrak) ..	41.96	18.18	60.14
(iv) Hirakud (Sambalpur) ..	153.24	97.90	251.14
<b>Total ..</b>	<b>531.50</b>	<b>342.32</b>	<b>873.82</b>

22.2. The Command Area Development Programme is now being implemented in the State, in the above commands, covering 53 blocks in the districts of Cuttack, Puri, Balasore, Sambalpur and Balangir. Two new schemes have been proposed to be included during the Seventh Five Year Plan. Of these the question of inclusion of Protteru Satiguda medium command in Koraput district having a culturable command area of 70,000 hectares in Khariff and 53,385 hectares in Rabi hinges on the views of Department of Rehabilitation, Government of India regarding sharing of the costs. In addition, four medium and minor irrigation projects comprising the Rusikulya system in Ganjam district is under contemplation for inclusion and implementation in the command area development programme during the Seventh Plan Period and preparatory works for the same have since been undertaken. The culturable command area of these projects viz. Rushikulya (Medium) as also Puriashahi, Bhitribediguda and Padagarada Minor Irrigation Projects is 62,447 hec. in Khariff and 6,400 hectares in Rabi season.

22.3. The principal components of the Command Area Development Programme during the Sixth Five Year Plan have been (i) construction of field channels including field drains, (ii) Topographical Survey, (iii) Soil Conservation and Survey, (iv) Rotational Water Supply to the beneficiary farmers, i. e., Warabandi, and (v) Multiple Crop Demonstration, including distribution of mini-kits and Farmers' training, as also drainage-cum-recycling structures.

#### On-farm Development Works

22.4. Construction of field channels constitute the most important item of on-farm development work in the Command Area Development programme. Compared to the target of 1.55 lakh hectares of completed field channels for the Sixth Plan, the achievement up to 1983-84 has been 96,714 hectares; assuming the completion of field channels in another 54,000 hectares targeted for 1984-85, the anticipated achievement during the Sixth Plan would be around 1,50,714 hectares. Compared to the culturable command area of major Irrigation Projects of 5.31 lakh hectares, this is only 30 per cent in other words, there would still be another 3,80,286 hectares to be completed from construction of field channel in the major command areas. Besides, the four medium/minor Irrigation Projects along the Rushikulya

Irrigation system in Ganjam district proposed for inclusion within the Command Area Development Programme during the Seventh Plan would add another 62,447 hectares. Compared to the culturable command area of 4,42,733 hectares to be covered under the CAD Programmes, the target projected for the Seventh Plan, is 3,91,000 hectares.

22.5. The on Farm Development works include construction of field channels—earthen and lined, drop structures, division boxes, road/drainage crossings and delivery tanks from outlets. With the revision of schedule of rates from time to time the latest being in 1982, it has become essential to revise the cost of OFD works per hectare to Rs. 600 from the Sixth Five-Year Plan provision of Rs. 460 on the basis of the suggestion of the Technical Committee of the State Government. If however, there are further escalations of PWD rates, it may be necessary to revise the per-hectare cost for OFD works also, to ensure that the quality of work does not fall below the minimum standard, adequate quantum of lined channels and drop structures are provided and the liability on account of future repairs and maintenance does become unduly high. The estimated outlay for the Seventh Plan is Rs. 23.46 crores and that for the Annual Plan 1985-86, Rs. 3.60 crores.

### Topographical Survey

22.6. Consolidation of Holdings is closely linked with Topographical close contour survey and construction of field channels under OFD. programme. As decided by the State Government, Command Area Development work is taken up only in areas where Consolidation of Holdings have been done. The Consolidation of holdings in the commands of all major/medium irrigation projects have also been proposed to be taken up on priority basis. An area of 6,87,728 hectares in 4,227 villages in the major command areas of Mahabadi Stage-I and Stage-II, Salandi and Hirakud, have been already covered under consolidation operation. In addition, an area of 44,000 hec. under the Rushikulya Irrigation System has also been covered under Consolidation Operations. During the Seventh Plan, a target of completing consolidation work in an area of 1.30 lakh hectares per year has been postulated of which 1.00 lakh hectare would be consolidable land. Since O. F. D. work per year has been programmed for 60 to 87 thousand hectares per year, there may not be much difficulty in this regard. During the Seventh Plan consolidation has also been programmed in 2 lakh hectares under the medium irrigation projects.

22.7. The Command Area Development Organisation is required to complete Topographical Survey at closer contour intervals of 150 to 300 mms. before consolidation operations can be taken up. Till the end of the Sixth Plan, Topographical Survey is estimated to be completed in an area of 7.15 lakh hectares including 65,817 hectares targetted for completion during 1984-85. Alignment plans completed have been 6.21 lakh hectares and another 96,868 hectares would be done by 1984-85. During the Seventh Plan it has been proposed to undertake Topographical Survey over an area of 2.40 lakh hectares mainly in medium and new irrigation projects. Since Topographical Survey is essentially a staff-oriented scheme, no separate financial provision has been made for the works; the staff required for this programme has also been shown against the project-level establishment. With the tapering off of Topographical Survey work, a portion of the staff would also be absorbed in similar other schemes and also in the Rotational Water Supply Programme.

### Field Drains

22.8. Water logging in some tracts of irrigated area covered under O. F. D. works has been one of the baffling problems. Pending ultimate linkage of the field drains with the drainage system to be constructed on basis of the Master Plan now under preparation, it is necessary to construct field drains as part of the O. F. D. works. It is estimated that such field drains would need to be executed in about 20 per cent of the O. F. D. area, i.e., in about 80,000 hectares. The per hectare cost has been estimated at Rs. 600.00, the same as for O. F. D. works. The Seventh Plan outlay has been envisaged at Rs. 4.80 crores and the annual plan outlay, 1985-86, Rs. 54 lakhs for an area of 9,000 hectares.

### Land Levelling

22-9. Consolidation of holdings, formation of expanded chaks in place of small fragmented plots and taking the field channels over these new configurations required dismantling of the existing field boundaries and formation of new ridges. Some land levelling is also required especially in undulated areas, so that flow of water remains unhindered. The land levelling operation required for this programme would not, however, be of the same scale as reclamation operation for changing the category of lands. It has been estimated that the expenditure per hectare would be around Rs. 250 00 and it would be necessary to implement the programme over 15 per cent of the area proposed under O. F. D. Thus, a target of 60,000 hectares for the Seventh Plan period at a cost of Rs. 150 crores has been set but the provision for 1985-86 being the initial year, has been put at 6,000 hectares with Rs 15 lakhs as plan provision.

### Rotational Water-Supply

22-10. Rotational Water-Supply (warabandi) to the agricultural holdings of the beneficiary farmers covered under O. F. D. works is fundamental to water use planning and optimisation. In our State, however, implementation of Rotational Water-Supply especially in heavy rainfall areas, is only possible during the Rabi season. Its efficacy also varies with the undulation of terrain, soil conditions, problems of drainage and water logging. Although the Sixth Five-Year Plan did not quantify any specific target for the areas in which Warabandi should be practised, it was started on an experimental basis in about 7,933 hectares during 1981-82. The programme, however, could not be followed through in the subsequent years, due to severe floods and cyclones causing havoc to the irrigation systems. During 1984-85, efforts are again being made to introduce Rotational Water-Supply on a sample basis in 7,500 hectares in the major command areas, in addition, in the Pilot Project areas and other 5,000 hectares have been proposed to be brought under warabandi.

22-11. During the Seventh Five-Year Plan, Warabandi has been proposed to be started gradually in all the areas completed from O.F.D. works till 1988-89 and also falling within the rabi command areas, viz. 260 lakh hectares. Rs. 350 per hectare has been proposed by the Working Group on Seventh Plan for meeting the costs of this programme including additional staff, implements and maintenance of channels. This amount has been proposed to be expended over a 3-year period (Rs. 125, Rs. 125, and Rs. 100) so that the benefits get consolidated and farmers get conversant. A provision of Rs. 713.76 lakhs has accordingly been suggested for Warabandi during the Seventh Plan period and the corresponding provision for 40,000 hectares in 1985-86, is Rs. 50 lakhs at the rate of Rs. 125 per hectare during the initial year.

### Adaptive trials Farmers training and multiple crop demonstrations.

22-12. For deriving maximum advantage from the irrigation stabilisation programme, adoption of improved agricultural practices and transfer of technology to the beneficiary cultivators through agricultural extension methods, are considered essential. Right use of water ultimately depends upon the awarenesses of the farmers about the advantages of utilising the requisite quantum of water only. It has, therefore, been proposed to continue the existing programme of Adaptive Trials of various cropping patterns in the command areas through Multiple Crop Demonstration programme and Farmers' Training taken up under the Command Area Development and buttressed by mini-kits distribution programme and other improved agricultural practices as per the usual programmes of the Agriculture Department. In order to achieve this objective, it is proposed to continue the training of selected farmers on a sustained basis selected from each village where O.F.D. work has been completed and Rotational Water-Supply has been, or is proposed to be taken up, at one farmer for every 20 hectares of such area. The cost for a week's training has been estimated at Rs. 70 per farmer. Multiple Crop Demonstrations have also been proposed to be continued in 1 per cent of the area covered under O.F.D. programme proposed for Rotational Water-Supply. The area of demonstrations shall be selected by rotation from among the participant farmers in O. F. D. and Warabandi Programmes. At the

estimated cost of Rs. 1,750 per hectare, the estimated outlay for the Seventh Five-Year Plan has been put at Rs. 45.50 lakhs, the provision for 1985-86 annual plan being Rs. 7.00 lakhs under multiple crop demonstration in 400 hectares and Rs. 1.40 lakhs for training of 2,000 participant farmers.

#### **Field Irrigation Structures (Drainage and Recycling)**

22.13. The need for construction of designed field irrigation structures of adequate strength to tap the surplus water, usually wasted in the head and middle reaches of canals, in order to provide irrigation in the tail reach areas has been constantly felt in executing OFD work. Such drainage-cum-recycling structures not only improve the water use efficiency but also help in lessening of the drainage congestion. Though separate financial provision for such field irrigation structures have not been made, since these are location-specific and designs as well as estimates of each individual structure may considerably vary, it has been proposed to provide for construction of such field irrigation structures within the funds provided under Field drains as also under Adaptive Trials, especially under Research and Development. As recommended in the Working Group discussions on CAD Programme in the Seventh Plan, any future command area development programme and water management practices should give adequate attention to research and development to meet the challenges of cost effective designs suited to different soil and topographical situations as also for conducting Adaptive Trials in agricultural technology. A provision of Rs. 22.00 lakhs has, therefore, been made during the Seventh Plan period for research and development and a token provision of Rs. 1.00 lakh has been made for 1985-86.

#### **Soil Conservation and Survey**

22.14. For determining appropriate soil management practices and cropping patterns in problematic areas, such as areas affected by salinity and water logging, detailed soil survey is considered an essential prerequisite. For this purpose, a provision of Rs. 30.52 lakhs to cover an area of 1.20 lakhs hectares under the programme of soil conservation and survey has been envisaged during the Seventh Plan period, the corresponding provision for 1985-86 being Rs. 5.00 lakhs, for 24,000 hectares.

#### **Administration and Establishment**

22.15. At the State level, for the management of a substantially higher physical programme during the Seventh Five-Year plan, compared to those in the previous years, a sum of Rs. 22.10 lakhs has been proposed towards the cost of the establishment in the State Secretariat, the corresponding provision of the annual plan 1985-86 is Rs. 4.00 lakhs only. Similarly for headquarters administration in the Directorate has been proposed to strengthen the Monitoring Unit of the Agricultural and Engineering Programmes under Command Area Development, by providing the requisite number of Research and Accounts personnel as also additional staff. A Design and Investigation Unit would also be attached to the headquarters to achieve cost effectiveness and durability in OFD works as also to find out solutions to the various technical problems. A provision of Rs. 27.65 lakhs has accordingly been suggested for the purpose for the Seventh Five-Year Plan and the corresponding provision for 1984-85 is Rs. 5.00 lakhs.

22.16. Regular monitoring of achievements as well as independent evaluation of the CAD programme at definite intervals are a must. Several difficulties have been faced from time to time to collect up-to-date data as full-fledged Monitoring Units are not available at headquarters. Evaluation of the CAD programmes needs also to be carried out internally as well as by independent organisations. For this purpose, a sum of Rs. 8.36 lakhs has been proposed during the Seventh Five-Year Plan period with a provision of Rs. 1.60 lakhs during 1985-86.

22.17. At the Project level, four Command Area Development Authorities, which have already been started, will be continued and one more Command Area Development Authority, for new projects, as aforesaid have been proposed to be started during the Seventh Five-Year Plan. Since the



plan programme also envisages substantially wider coverage for each of the existing CADAS, necessary provisions for additional staff and contingencies, have also been made, with five per cent escalation of expenses over years provided for. The requirement of the Fifth Command Area Development Authority has been envisaged from the second year of the Plan. Thus, Rs. 105.64 lakhs has been proposed as the Seventh Five-Year Plan outlay, with a provision of Rs. 16.00 lakhs for the year 1985-86, for this purpose.

22.18. The Command Area Development Organisations, has, at present, seven C. A. D. Engineering Divisions for topographical survey, execution of OPD works and co-ordination of agricultural extension, including Rotational Water-Supply (Warabandi) programmes. The propose expansion programmes during the Seventh Five-Year Plan period are substantial and will require creation of three more Divisions which will cover both the existing major command areas as well as new/medium/minor command areas proposed for inclusion, during the Seventh Plan. One new C. A. D. Engineering Division has been proposed to be grounded in the second year of the plan followed by two more Divisions to be grounded from the third year of the Seventh Plan. With 5 per cent escalation of expenses over years, the Seventh Plan outlay has been proposed at Rs. 548.20 lakhs with Rs. 80.00 lakhs for the Annual Plan 1985-86.

22.19. The Seventh Five-Year Plan Programme thus envisages a financial outlay of Rs. 4,510.70 lakhs under Command Area Development with a provision of Rs. 600.00 lakhs for the Annual Plan 1985-86. With this, almost the entire Culturable Command Area in the Major Irrigation Systems of the State as also a part, of the command area of the Medium Irrigation system in Rushikulya would be covered by on-farm development works.

## CHAPTER 23

## POWER

**Generation Requirement by the end of the Seventh Plan**

23.1. The Central Electricity Authority and the Orissa State Electricity Board have conducted surveys to assess the generation requirement of the State by the end of the Seventh Plan i. e. 1989-90. The results of the surveys are given below :—

Name of the agency conducting the survey	Requirement of power by the State in 1983-84	Requirement forecast for 1989-90	Growth rate assumed
(1)	(2)	(3)	(4)
Eleventh Power Survey ..	5204 M. U.	9901 M. U.	11%
Twelfth Power Survey ..	4841 M. U.	7803 M. U.	9%
O. S. E. B. ..	5597 M. U.	15647 M. U.	15% to 20%

23.2. The actual unrestricted requirement of power by the State in 1983-84 was 5957 M. U. This is nearer to the generation requirement forecast made by the Orissa State Electricity Board. So this figure has been adopted in projecting the generation requirement of the State in the Seventh Plan.

23.3. The power demand in the State was about 380 M. W. in October, 1980. Due to rapid industrialisation and rural electrification the demand went up to 680 M. W. in October, 1983. The growth rate is between 18 to 20%. It is relevant to note that this rate of growth has taken place in spite of load restrictions and power cuts. During the Seventh Plan period, bulk industrial loads have been committed in a large number of cases in order to maintain the tempo of industrialisation. Secondly, the national objective is to achieve 100% rural electrification during the Seventh Plan period. Besides, 40,000 Lift Irrigation Points are proposed to be energised. So the growth rate will be much more than that suggested by the power surveys conducted by the Central Electricity Authority. But we have calculated the generation requirement of the State in the most conservative way by taking 9% growth rate as suggested by the twelfth power survey and then adding the power commitments for bulk consumer industries from year to year. It has been estimated that the generation requirement of the State by 1989-90 would be 15647 M. U.

**Generation availability by the end of the Sixth Plan**

23.4. The installed capacity of the power projects at the beginning of the Sixth Plan was 914 M. W. with firm power of 464 M. W. The ratio of hydro and thermal power was 73:27. After commissioning of the two units of Talcher Thermal Power Station (T. T. P. S.) Expansion the total installed capacity has risen to 1134 M. W. and the firm power to 614 M. W. The present ratio of hydro-thermal in the State is approximately 58:42. The capacity of the existing power plants is given below:

Table - 23.1

Serial No.	Name of the power plant	Hydro or thermal	Installed capacity in M. W.	Firm power
(1)	(2)	(3)	(4)	(5)
1	Balimela	Hydro	340	135
2	Hirakud Stage I and II	Do.	270	120
3	Machkund (Orissa share)	Do.	34	29
4	T. T. P. S.	Thermal	250	180
5	T. T. P. S. (Expansion)	Do.	220	150
	Total	..	1134	614

23.5. To meet the increasing demand of power in the State due to rapid industrialisation four hydro-electric projects, namely, Rengali Upper Kolab Upper Indravati and Hirakud Seventh unit have been taken up. All these will spill over to the Seventh Plan period and Upper Indravati will spill over to the Eighth Plan period. On completion of these projects the additional installed capacity of the power plants in the State will go up by 977.5 M. W. and firm power will increase by 395 M. W. The capacity and the year of completion of these ongoing projects is given in the table below.

Table -23.2

Sl. No.	Name of the Project	Installed capacity in M. W.	Firm Power	Date of commission
(1)	(2)	(3)	(4)	(5)
1	Rengali Stage-I	100 (i.e. 2 × 50 MW)	60	1st Unit, March, 1985 2nd Unit, August, 1985
2	Upper Kolab	240 (i.e. 3 × 80 MW)	95	1st Unit, December, 1985 2nd Unit, June, 1986 3rd Unit, December, 1986
3	Upper Indravati	600 (i.e. 4 × 150 MW)	227	1st Unit, March, 1990 2nd Unit, } in 8th 3rd Unit, } plan 4th Unit } period.
4	Hirakud 7th Unit.	37.5 MW	13	May, 1986

23.6. Presently the three Hydro Power Generation Stations at Balimela, Hirakud and Machkund, having a total installed capacity of 664.5 M. W. are providing 2634 M. U. of power in a year of normal rainfall. The Thermal Power Stations having an installed capacity of 470 M. W. can supply a maximum of 22.5 M. U. of power (1100 M. U. from Stage I and 1125 M. U. from Stage II) at 50.23% and 58.37% plant load factor (P. L. F.) respectively. The first stage four units at Talcher at 62.5 M. W. capacity each are able to produce now about 850 to 900 M. U. in a year. This is due to excessive wear and tear experienced in coal mills, non-functioning of the Electrostatic Precipitator right from the inception of the plant and consequential heavy wear and tear of the I. D. Fans. Design constraints like availability of a single I. D. fan per unit, absence of stand by pulveriser mills are also contributing factors for partial/forced outages. This is the first Thermal Station in the Country using Talcher coal which has excessive ingrained Silica content. The design of the Plant is not geared to deal with the high impurity content of the raw materials. As a result, forced outages have become too frequent in this station. The renovation works suggested to remedy the situation have not been taken up so far. This will be taken up during the Seventh Plan Period. Regarding Talcher Stage II the two new units have not stabilised as yet to give the expected load factor due to some inherent problems in the boiler and auxiliary equipment in spite of best attempt of B H E L, and Orissa State Electricity Board to rectify them. Therefore, a maximum availability of 1100 M. U. from Stage I and 1125 M. U. from Stage II can be expected if the sets operate with best performance after full scale renovation is completed.

23.7. Rengali and Upper Kolab Hydro Electric Projects, which are under construction, are expected to start generation by 1985-86 and 1986-87. These two projects on completion can provide additional installed capacity of 340 M. W. and 1337 M. U. of energy. The Indravati Power station is expected to provide benefit after the Seventh Plan period.

23.8. As regards Orissa's share of power from the Central Sector Projects like Chukha, Farakka and Kahalgaon, no firm allocation has yet been made nor is there any indication about completion of supporting transmission links nor the exact year of availability of power to Orissa. However, availability of about 320 M. U. (37 M.W.) has been assumed for Orissa from these Projects in Seventh Plan, after taking into consideration the availability from the power stations and transmission losses.

23.9. Thus by 1989-90 the gross generation in the State including share from central generation would be 6950 M. U. only. Excluding auxiliary consumption of 242 M. U., the net availability would be 64.8 M. U., against requirement of 15647 M. U. There will therefore, be a shortage of 9239 M. U. From the above analysis it may be seen that by the end of Seventh Plan period, there will be a generation short-fall of 9239 M. U., i. e. 1055 M. W.

#### Seventh Plan Proposals

23.10. In order to meet this short-fall it is proposed to take up a few new power projects in the Seventh Plan as indicated in table below :-

Table—23.3

Serial No.	Name of the Project.	Installed capacity	In. M. W.	Firm Capacity in M. W.
1.	Rengali Stage II	3 × 50 =	150	26.7
2.	I. B. Thermal	4 × 210 =	840	457.00
3.	Hirakud Stage III	5 × 50 =	250	70.00
4.	Bhimkund	393 =	393	41.00
5.	Potteru	2 × 3 =	6	5.00
6.	Bargarh Head Regulator	3 × 4 =	12	5.00
7.	Small Hydel Projects.	50 =	50	30.00
8.	Gas Turbines. (6 sets)	6 × 35 =	210	168.00
Total			1,911 M. W.	278.7 M. W.

23.11. Out of these projects mentioned above Rengali Stage II, one unit of I. B. Thermal Project, all the six sets of Gas turbine, Potteru, Bargarh Head Regulator and a few small hydel projects (30 M. W.) will be commissioned during the Seventh Plan period. The combined installed capacity of these projects will be 618 M. W. and firm capacity 278.7 M. W. A brief description on each of the ongoing and new power projects given below.

#### Rengali Stage I

23.12. During 1974 Government of Orissa have accorded administrative approval for this project. This Scheme provides for construction of a Dam across the River Brahmani and construction of a Hydro Electric Power Station with firm power capacity of 60 MW. The plant provides for ultimate installation of 5 Units of 50 M. W. each out of which 2 Units are to be installed in Stage-I. The revised Project estimate of Rengali Stage-I submitted to Government of India in July 1983 was for Rs. 10382 crores. The latest estimate of the Project is Rs. 11390 crores out of which Rs. 1,0000 crores is likely to be spent by the end of Sixth Plan Period. The requirement for the Seventh Plan is the balance amount of Rs. 790 crores. The first and second Units of the Project are scheduled to be commissioned during 1983.

23.13. Embedded parts for all the five Units have been received from M/s. BHEL. But Turbine Generators, Generator Transformer, E. D. T. cranes and other major equipments for the first two Units have also been received. The draft tube and D. T. cone for Unit I and II have already been erected and concreted. Erection of two numbers of E. D. T. cranes have been completed. First layer of grounding mat has been laid, 240 Ton. of switchyard structure materials have been received. Purchase orders for 220 K. V. C. T. Auxiliary Transformer and bus duct have been placed. Cable trenching and slab casting, construction of 200 labour sheds are in progress. The assembly of spiral casing and speed ring of Unit I has been completed. The speed ring of Unit II has been lowered. Laying of embedded parts in the auxiliary room and in the cable gallery is in progress. Preventive preparation for turbine shaft is in progress.

23-14. Programme for the Seventh Plan envisages that, all the power house and switchyard equipments which are ordered/to be order will be received. Erection of turbine Generator and all auxiliary equipments switchyard equipments etc. will be completed. Both the Units have been programmed to be commissioned during 1985.

#### **Upper Kolab Hydro Electric Project**

23-15. The estimated cost of the Project, which was assessed at Rs. 1,55.82 Crores need further upward revision by Rs. 10 Crores. Rs. 1,23.96 Crores is likely to be spent by the end of the Sixth Plan. In view of the upward revision in the estimate the actual requirement for the project in the Seventh Plan would come to Rs. 41.86 Crores. During August, 1975 Government of Orissa accorded the administrative approval for this Project. This Scheme provides for construction of a Dam across the river Kolab and a Power Station with headrace, water conductor system and tailrace etc. The Power House discharge will be utilised for irrigation. Three Units of 80 M. W. each have been sanctioned in the first stage, with a total installed capacity of 240 M. W. and a firm power of 95 M. W. Construction work for three Units is in progress. Proposals for installation of the fourth Unit has been cleared by Central Electricity Authority and is awaiting clearance of Planning Commission.

23-16. Embedded parts and Generators for all the three Units, turbine and static excitation for Unit-I and major portion of turbine parts for Unit-II two numbers of 120/25 Ton E. D. T. Cranes one 40 Ton and one 10 Ton E. O. T. Cranes, Power Transformer for three Units have been received. All the 6 sets of 220 K. V. MOCBs and all the 18 numbers of Isolators have been received. Purchase orders for 220 KV, switchgear and B. E. Valves have been placed. The construction of residential and non-residential buildings are in progress. The grounding mat for Unit-I and II have been laid down. Earthing flat in column of service bay have been laid. Erection and lowering of D/F No. 1 has been completed and concreted. Dewatering pipes in first stage foundation for Unit-I have been embedded. Order for complete drainage and dewatering system for the three Units have been placed and 60% materials have been received at site. The 220 K. V. switchyard layout has been made and given to C. E. A. for approval purchase order has been placed for fabrication of 220 K. V. and 33 K. V. switchyard structures. Compound wall and retaining wall of switchyard is in progress. Pre-assembly of Draft Tube in Unit II has been completed and that of Unit III is in progress.

23-17. Programme for the Seventh Plan anticipates that, balance materials will be received. Erection of turbine, Generator and all auxiliary equipments, switchyard equipments etc. will be completed. Unit-I has been programmed to be commissioned in 1985-86 and other two Units at an interval of six months thereafter.

#### **Upper Indravati**

23-18. The power component of this multipurpose Project has been approved for World Bank (IDA) assistance. The estimated cost of this Project was Rs. 380.50 crores. By the end of Sixth Plan, Rs. 39.85 crores will be spent and the balance amount likely to be required in the Seventh Plan is Rs. 333.32 crores. The balance Rs. 6.93 crores will be provided in the Eighth Plan. Government of Orissa have accorded administrative approval for the Project for an estimated cost of Rs. 208.15 crores. During the subsequent appraisal, the Project cost has been revised to Rs. 481.00 crores, including physical Contingencies but excluding escalation, which includes Irrigation Dam share Rs. 100.85 Crores and power component Rs. 30.65 Crores. Proposals for revised administrative approval will be taken up once major tenders which have now been invited are finalised giving a more realistic basis for the cost estimate. The Project provides for construction of four Dams eight dykes across the river Indravati and its tributaries and construction of a power station with an installed capacity of  $4 \times 150$  M. W.

23.10 Act regards the present progress of the project it may be mentioned here that the Loan agreement with World Bank group was signed on 8th June, 1983 for a loan of 156 million SDRS and 164 million U. S. dollars. Pre-qualification tenders for generating equipment have been received. Agreements for power supply for the various work sites of the Project are almost completed. The construction of residential and non-residential buildings at various Project sites is in progress.

23.11. Seventh Plan (1985-90) includes that procurement of Turbine (Generator sets and auxiliaries) 11 kV bus duct, 11/220 K.V. Power transformer, Unit auxiliary station services transformer, 220 K. V. Circuit breakers, P. T. G. T. 220 K. V. Isolators, L. A. B. O. T. Crans. B. F. Valve etc will be taken up.

#### Hirakud (7th Unit) -37.5 M. W. (Continuing Scheme)

23.21. The estimated cost of the Project is Rs. 27.00 crores. The expenditure upto March 1984 is 3.94 crores (Provisional). The allocation for the current year is Rs. 7.00 crores. Therefore the balance amount of Rs. 16.06 crores will be required during the Seventh Plan period.

The physical progress of work till October, 1984 has been given in the following table :-

Table - 23.4

Item	Total Quantity as per estimate	Target date of completion	Cumulative progress till October, 1984
(1)	(2)	(3)	(4)
<b>1. Construction of Power House</b>			
(i) Power House pit rock excavation	2,550 Cum.	31-12-1984	2,280 Cum
(ii) Power House concreting ..	11,000 Cum.	July/August 1985	220 Cum
<b>2 Surplus escape</b>			
Foundation excavation ..	18,600 Cum.	31-12-1984	17,811 Cum
Concreting ..	5,500 Cum.	31-3-1985	3,267 Cum.
Masonry	3,500 Cum.	31-12-1984	2,228 Cum

23.22 Execution work of draft tube will commence from January/February 1985 and that of Spiral casing from August, 1985. According to latest Schedule, the T. G. would be installed in March, 1987 for commissioning of the Seventh Unit in April, 1987.

#### New Starts

##### Rengali Stage II

23.23. A proposal for installation of three additional Generating Units of 50 MW each of the Rengali Hydro Electric Station has been cleared by the C. E. A. and is awaiting clearance by the Planning Commission. The estimated cost of the three Units is Rs. 12,500 lakhs. Government of Orissa have, however, already decided to instal two Units in Stage II. A letter of intent for manufacture and supply of the generating equipment for two units has been placed with M/s. BHEL. They require an advance payment of Rs. 1,64.00 Lakhs to formally book the order. A sum of Rs. 36 lakhs has been paid during

1983-84. The balance Rs. 1,28.00 lakhs, will be paid during the financial year 1984-85. The work relating to the third Unit of Stage II will also be taken up in the Seventh Plan. The first, second and third Units are proposed to be commissioned by October, 1987, April, 1988 and October, 1988 respectively.

#### **Ib. Thermal Project**

23-24. The Project with an installed capacity of 4 X 210 M. W. at an estimated cost of Rs. 5,87.60 crores has been submitted to C. E. A. for clearance. Clarifications sought for by the C. E. A. have been furnished from time to time. An amount of Rs. 31 lakhs has been allocated during the year 1984-85 for preliminary works. The latest estimated cost of the Project is Rs. 8,40.00 crores. One of the Units having installed capacity of 210 M. W. will be commissioned during 1989-90 and the rest at an interval of six months each. It is proposed to execute this Project through Orissa Power Generation Corporation which is being set up. The Corporation will avail of institutional finance, market borrowings etc. to implement the project. An outlay of Rs. 75.00 crores will be Provided under the State Plan towards equity participation by the State Government.

#### **Hirakud Stage-III**

23-25. The project report has been prepared on Hirakud Stage III by the Engineer-in-Chief, Irrigation and is being scrutinised by Electrical Projects Organisation at present. The project proposal envisages construction of a diversion dam across river Mahanadi near Sindol in Bolangir district. A power channel of 64 Kms. length has been proposed to connect the diversion dam with the four bay pond near Lower House, which is to come up at Dhuleswar. The releases from the power house is to be fed back into the Mahanadi river through tailrace channels of 25 Kms. length. The power potential of the project is envisaged to be 250 M. W. (5 X 50 M. W.) of installed capacity and 69 M. W. of firm power. The estimated cost of the project is Rs. 425.00 crores and the project may take a period of seven years for execution.

#### **Bhimkund Hydro Electric Project**

23-26. The Bhimkund project envisages setting up of two power Stations namely, Nuapara and Baigundi with installed capacity of 3 X 16 M. W. (F. P. 10 M. W.) and 3 X 115 M. W. (F. P. 60 M. W.) respectively. Project report has been submitted to the C. W. C. and their queries are being attended to by the Irrigation Wing.

#### **Gas Turbines**

23-27. It was proposed to instal six gas turbines with capacity of 35 M. W. each at a cost of Rs. 145 crores as a short term measure to improve the power supply position in the State. The proposal is made keeping in view the fact that the gas turbines could be commissioned within a period of two years as against longer gestation periods for other projects. However, it was not considered necessary to include the entire project cost of Rs. 145 Crores in the Plan. Instead, a provision of Rs. 26 crores has been suggested for equity support of the proposed Orissa Power Generation Corporation which would be adequate for the purpose.

#### **Potteru Hydro Electric Project**

23-28. This Project at an estimated cost of Rs. 546 lakhs provides for installation of 2 X 3 M. W. Hydro-Electric Machines utilizing the canal falls on the Gompakoula main canal constructed by the Potteru Irrigation Project. This Project has been cleared by C. E. A., Department of Environment and Planning Commission. It would be ready for execution on provision of funds.

#### **Bargarh Head Regulator**

23-29. A small Hydro Station has been proposed at the Bargarh Head Regulator where the Bargarh Main Canal takes off on the right dyke of Hirakud reservoir. The proposed power station will have three units of 4 M. W. capacity and the energy generation may be around 44 M. W. p.a. annum. The cost of the project is envisaged to be Rs. 18.00 crores and the construction may take four years approximately for completion.

### **Small Hydel Projects**

23-30. There is scope for construction of Small Hydel Projects in the State. A sum of Rs. 30.00 crores has been provided for in the Seventh Plan for this purpose. This amount does not include the cost of Potteru and Bargah Head Regulator.

### **Strengthening of Hirakud Dam**

23-31. Strengthening of Hirakud Dam is felt necessary as cracks have developed on the right spillway. The total cost of strengthening will be Rs. 7.00 crores out of which the power share will be Rs. 2.50 crores.

### **Additional Spillway for Hirakud Dam**

23-32. One additional spillway is also necessary to ensure adequate discharge at the time of heavy floods. The estimated cost of additional spillway will be Rs. 20.00 Crores, out of which power share will be Rs. 6.66 Crores.

### **Orissa Power Generation Corporation**

23-33. A corporation called the "Orissa Power Generation Corporation" is being set up in the State. It will be entrusted with the execution of a few power Projects. The advantage of having such a Corporation is that it will attract institutional finance and market loan. It will have greater flexibility than the Government Department. State Government will contribute equity capital to the Corporation. To start with, it has been decided to entrust the execution of Ib Valley Thermal Power Project (840 M.W.) and setting up of gas turbines to this Corporation. A sum of Rs. 75.00 Crores towards equity participation in Ib Valley Thermal Project and Rs. 28.00 Crores for the gas turbines have been provided for during the Seventh Plan.

### **Central Sector Projects**

#### **Revamping of T. T. P. S. Stage I**

23-34. Central Government have decided to include renovation of Talcher Thermal Power Station Stage-I in the Central Sector. It will cost Rs. 45.67 Crores. The work will be executed by the Orissa State Electricity Board on getting a direct loan covering the total Project cost from the Central Government for which State Government have already agreed to give guarantee.

#### **Talcher Super Thermal Power Project**

23-35. The Super Thermal Power Station at Talcher with 3000 M. W. (6×506 M.W.) capacity has been proposed to be taken up during the Seventh Plan period. The Project report has been submitted by the National Thermal Power Corporation to the C. E. A. for clearance. In the first stage, two units of 500 M. W. each have been proposed to be taken up alongwith 400 KV AC transmission system, the total cost of which will be Rs. 1036.40 Crores including interest during construction period. It is imperative to start the Project during the Seventh Five-Year Plan to meet Power shortage in the State to some extent.

#### **Construction of a 400 K. V. Transmission line**

23-36. Construction of a 400 K. V. transmission line connecting Jeypore with Talcher has been taken up by the National Hydro Power Corporation. Its original estimated cost was Rs. 51.00 crores.

### **Transmission and Distribution**

23-37. All round development of transmission and distribution (T and D) system could not be possible in Sixth Plan due to resources constraints. Against a recommended outlay of Rs. 110.00 crores, the anticipated expenditure for the Scheme in Sixth Plan may remain at a level of Rs. 102.19 crores. This agreed outlay include the provision for construction of 400 K. V. Jeypore-Rengali S. C. line, which has since been excluded from State Plan. The reported expenditure against 400 K. V. works up to August '81 is Rs. 8.06 crores and the same is yet to be reimbursed by NHPC, to whom the work has been transfer.



23.38. In order to develop the T. & D. network in the desired course by removing its constraints now existing, an outlay of Rs. 445 crores is considered for the Seventh Plan. This has a component of Rs. 68.00 crores to complete the ongoing works. The breakup of proposed outlay is given in the table below:—

Table 23.5

(Rs. in lakhs)

Works (1)	Proposed outlay of 7th Plan					Total (7)
	1985-86 (2)	1986-87 (3)	1987-88 (4)	1988-89 (5)	1989-90 (6)	
(a) R. E. C. Special T. & D. (Continuing).	4 90.00	1 91.00	93.00	—	—	7,74.00
(b) B. T. Scheme (Theruvai-Kesinga Line) (Continuing).	10.00	—	—	—	—	10.00
(c) Boards E. H. T. Works Continuing.	10,50.00	24,50.00	9,50.00	16.00	—	53,66.00
New	2,00.00	25,00.00	42,00.00	50,00.00	53,00.00	1,72,00.00
<b>(d) 33 K. V. &amp; Below</b>						
(i) System Improvement.	5,50.00	}	}	}	}	}
(ii) R. E. Supporting line not included in R. E. programme.	2,00.00					
(iii) Other T. & D. works like extn. in Urban areas & power supply to Industries, etc.	5,00.00					
		18,59.00	37,57.00	69,84.00	73,00.00	2,11,50.00 (including 650 for S. I. Scheme ongoing works).
Total ..	39,00.00	70,00.00	90,00.00	1,20,00.00	1,26,00.00	4,45,00.00

23.39. The expansion of T. & D. system envisaged in Seventh Plan is adequate to transfer the committed load of all new Industries and normal growth of power demands in all categories of consumption. According to State estimate, the power demand in 1989-90 will exceed 15047 Gwhs against the present unrestricted level of 5178 Gwh in consumer end. The highest peak-load with restriction on drawal of 12 Heavy and power intensive Industries went up to 792 M. W. on 20th October 1984. In 1989-90, the system peak is expected at 2055 M. W.

23.40. At the end of the Sixth Plan, the State will have 2004 K. M. of 220 K. V. line and 2882 K. M. of 132 K. V. line. The Seventh Plan proposals will add 1125 K. M. of 220 K. V. line and 553 K. M. of 132 K. V. line. This improvement in the transmission system is expected to reduce the transmission losses from 18% to 16%.

**Rural Electrification**

23.41. Planning Commission had recommended an outlay of Rs. 74.70 crores for investment under Rural Electrification during the Sixth Plan. The activities under the programme, however were finalised on an annual basis taking into consideration resources available for the work. The allocation made during years from 1980-81 onwards physical target fixed, progress achieved in the State etc are given below. The achievement includes energisation of pump sets through SPA, a non-plan programme.

**Table- 23.6**

Year	Plan allocation (Rs in lakhs)	Electrification of villages			Energisation of Pumps		
		Target Annual	Achievement during the year	Cummulative total at the end of year	Target	Achievement during the year	Cummulative total at the end of year
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
UP to 1979-80 Sixth Plan.	..	..	..	17,231	..	..	12,958
1980-81	10,60.00	1,200	1,573	18,804	5,810	3,236	16,194
1981-82	10,69.00	1,200	1,226	20,030	5,300	2,829	19,123
1982-83	12,38.00	1,200	1,250	21,280	9,000	3,777	22,900
1983-84	13,89.00	1,210	1,240	22,520	7,900	3,491	26,391
1984-85	13,19.00	1,225	1,225	23,745	6,840	6,640	33,031
				( expected )			

23.42. With the completion of electrification of 33,745 CC villages by the end of Sixth Plan, the level of electrification will go up to 50.28% against 60.6% already achieved at National level by May 1984). The pumpset energisation, however, will remain low as against the 5 lakh potential estimated for the State.

23.43. The physical programme of Rural Electrification in the Seventh Plan covers electrification of balance 23,247 CC villages to achieve cent percent level of village electrification. In addition, it has been programmed to energise 40,000 pump sets during the Plan Periods. Out of these 26,500 pumpsets are to be energised through SPA, a non-Plan Programme.

23.44. For electrification of left out 12,160 tribal villages, RMNP loan has to be released irrespective of level of electrification attained in those areas. It has been proposed to cover 11,669 of such villages through RMNP funds and balance through State's normal development programme.

23.45. According to 1971 Census, there were about 41,87,454 households in the State of which 3,79,469 were electrified by March, 1980 registering a coverage of only 7.8 per cent (when at National level it was 20.3 per cent). After 1981 Census, it is seen the number of household has gone up to 46,07,626, out of which power supply to 4,57,380 could be extended by March, 1983. This means the level household electrification by March, 1983 is 10 per cent. This may go up to 12 per cent by the end of Sixth Plan. In order to have more intensive use of lighting higher investment to develop infrastructure in electrified villages is inevitable. In the present estimate Rs. 25.00 crores has been earmarked for the purpose. The level of household electrification is expected to rise to 25 per cent by the end of the Seventh Plan.

### Tribal Sub-Plan and Scheduled Caste Component Plan

23.46. There are 18491 villages inside Sub-Plan area which covers 118 blocks out of total 314 blocks of the State. Besides under the Modified Area Development Approach, 2655 villages (in 47 pockets) are also considered as tribal villages. By the end of Sixth Plan, 6322 tribal villages will be electrified in the Sub-Plan area. It is seen, that by March, 1984, with the completion of electrification of 5,007 tribal villages, 55.8 per cent of tribal population of Sub-Plan area was covered under electrification programme. By the end of Seventh Plan, all tribal villages will be electrified due to 100 per cent village electrification programme proposed. In order to provide street light in 3000 Tribal villages in Seventh Plan, a sum of Rs. 3.60 crores has been separately earmarked in the estimate.

23.47. Under the Scheduled Caste component Plan, there are two programmes namely village electrification in harijan concentrated villages and street lighting of harijan bastis. Out of total 23,745 electrified villages by March 1985 it is expected that 3,385 villages would be having Scheduled caste population of 200 or more. During the Seventh Plan balance 637 numbers of such villages and left out other villages having less than 200 Scheduled Castes will also be electrified. It is estimated that by the end of Sixth Plan, street light in 2464 harijan bastis could be provided as per sanctioned Schemes of REE. In the Seventh Plan, 5000 additional bastis will be covered under the programme.

23.48. The physical programme of the Seventh Plan RE works is as below. The estimated requirement of funds for works covered under Plan Programme is Rs. 350 crores. To cover energisation of 26,500 pumps under SPA non-plan, additional Rs. 39.75 crores will be required.

**Table - 23.7**

Items	Physical programme in 7th Plan					1985-90
	1985-86	1986-87	1987-88	1988-89	1989-90	
Village Electfn. (Nos.)	1,525	4,300	5,400	6,450	5,572	23,247
Pump energisation (Nos.)	7,000	7,550	8,000	8,550	8,900	40,000
Street light in Harijan Bastis (Nos.)	850	900	1,100	1,150	1,000	5,000
Street light in Tribal villages (Nos.)	300	500	750	850	600	3,000

### Special Central Assistance

23.49. Special Central Assistance to execute the electrification programme of Tribal and Harijan house-holds should be made available during the Seventh Plan. In order to accommodate the cost of internal wiring with one point domestic connection to 3.30 lakh tribal house-hold and 1.50 lakh Scheduled Caste house-hold, a sum of Rs. 7.20 Crores will be required. The rate per house-hold electrification has been assumed as Rs. 150.00. This programme can be taken up provided Harijan & Tribal Welfare Department agrees for funding the energy charges @ Rs. 5.00 per month per house-hold. Further, to improve economic condition of tribals and Harijans through farming, earmarked provision in special Central Assistance should be made for taking community/individual L. I. Pumps for their benefit.

### Miscellaneous Scheme

23.50. For improvement of the performance of the existing hydro-thermal power stations, several schemes have been taken up. In addition, residential and non-residential buildings at various places are required to be constructed for efficient management of the works of State Electricity Board. In order

to discharge the training functions effectively during the Seventh plan, a provision of Rs. 1 crore has been kept under miscellaneous scheme. The total anticipated expenditure in the Seventh Plan under this scheme would be Rs. 11.19 crores. The break up of individual schemes is as below.

Table 23-8

Item	Proposed outlay of 7th Plan ( Rs. in lakhs )					Total
	1985-86	1986-87	1987-88	1988-89	1989-90	
(a) Capital nature of maintenance work in Talcher, Hirakud, Chiplima and Balimela Power House.	20	75	75	1,05	80	3,55
(b) Building of trainees in different places to accommodate institute and hostel.	20	25	30	15	10	1,00
(c) Civil works Schemes	50	80	1,20	1,50	1,31	5,31
(d) T. & P. General, etc.	10	20	25	30	29	1,14
<b>Total</b>	<b>1,00</b>	<b>2,00</b>	<b>2,50</b>	<b>3,00</b>	<b>2,50</b>	<b>11,00</b>

## CHAPTER 24

## INDUSTRIES

24.1. At the beginning of the Sixth Plan, Orissa, an economically poor State, presented a bundle of paradoxes. Endowed with abundant natural resources, it had an anaemic industrial growth; accomplished craftsmen languished in poverty; labour available a plenty had limited source for absorption; with a vast area of land, it had no infrastructural base. Hence the determined aim in the Sixth Plan was to end these paradoxes once for all thereby narrowing the gap of regional disparity in comparison to other States of the country. The determination paid dividends and the achievements were undoubtedly splendid if not phenomenal. Meanwhile, we are on the threshold of the Seventh Plan and exercises are in full swing to give a final shape to the ensuing plan.

24.2. Before enumerating the proposed strategy for the Seventh Plan, it is necessary to take an inventory, to have a glance at the picture of the road traversed, the pits and plateaus crossed, of the feathers acquired and the dreams lost on the wayside, of our growing family of industries and above all our determination to go on. Realising the importance of infrastructure for speedy development of Industries, an Infrastructure Development Corporation came into existence. This corporation developed an area of 1,765 acres of land and constructed 906 No. of sheds providing splendid infrastructures for different Industrial Units to sprout. Another new Corporation i. e. Electronic Development Corporation has also come up during the Sixth Plan for induction of modern era of Electronic Technology. The Industrial Promotion and Investment Corporation, popularly known as IPICOL has already brought about 80 large/medium Industries to production. The Industrial Development Corporation has added six more medium type industries to their existing set up during the Sixth Plan period. The Orissa State Financial Corporation has succeeded in disbursing in total a sum of Rs. 10,652.93 lakhs by the end of 1983-84 and proposes to sanction a further sum of Rs. 6,000.00 lakhs during 1984-85.

24.3. Under the Small Scale Sector 11,116 Small Scale Units with an investment of Rs. 8,848 lakhs have been set up by the end of 1983-84. In the last year of the plan, i. e. 1984-85, 3,000 more units with an investment of Rs. 3,000 lakhs is proposed to be set up, thereby exceeding the target of 14,000 units fixed during the Sixth Plan. This has generated employment for 1,06,290 persons. In the artisan sector, 2,66,077 units with an investment of Rs. 5,428.85 lakhs have been set up during the Sixth Plan. (This includes the proposal for 1984-85). 262 Handicrafts Co-operatives have been formed covering nearly 9,500 artisans by the end of 1983-84. During 1984-85, 40 Nos. of new societies are proposed to be formed to bring in 1,200 more families to the Co-operative sector. This has enabled the State to produce handicrafts goods worth Rs. 1,400 lakhs providing employment facility to 56,000 persons. The number of handlooms in the State has risen from 1.05 lakhs at the beginning of the Sixth Plan period to 1.50 lakhs by the end of said plan providing direct employment to 3 lakhs persons and indirect employment to 0.75 lakhs persons. The production of fabrics in the organised sector has also phenomenally increased, as it has reached the level of 667 lakhs metres valued at Rs. 3,844.00 lakhs by the end of 1983-84, from the level of 194 lakh meters valued at Rs. 774 lakhs valued at the beginning of the Plan period. The production of fabrics is expected to be 760 lakh metres valued at Rs. 5,600.00 lakhs by the end of Sixth Plan. The production of Janata fabrics has also soared up substantially from the level of 128 lakh meters at the beginning of the Sixth Plan to 270 lakh metres by the end of 1983-84. In the sphere of Sericulture 61 Primary Tassar Grower's Co-operatives have been organised covering 31,715 rearers, out of which as many as 24,916 belong to Scheduled Tribes, 3,580 [Scheduled Castes and 3,219 to other economically backward classes. Eri rearing has been taken up by 500 tribals in 20 new centres established during the Sixth Plan. 721 farmers including 571 tribals, 108 Scheduled Castes and 114 other weaker sections have taken up Mulberry plantation in a total of 688 acres.

24.4. In spite of the above successes, we are still in the drag of incompleteness. Some of the projects identified by the IDC could not be materialised. Out of seven Co-operative Spinning Mills assured to be completed during the Sixth Plan only two could be completed and two are on the verge of completion.

In the powerloom sector too, the State could not be able to make such headway. In the Khadi Industry there is still much to be done. The main reason behind this incompleteness has always been lack of adequate financial resources. Though nature is kind enough to endow the state with vast resources still it shows its ugliest face through frequent visit of calamities which push back the economy by years and it was very much of an untorturate reality in the Sixth Plan period. Notwithstanding the above, the state made a quantum leap in industrial development. An optimum investment in Public Sector Undertakings and varieties of incentives granted to the enterprenurs have brought about a visible change in the industrial profile of the State. An air of hope and aspiration have pervaded the atmosphere.

24.5. Now it will be unwise to frustrate these hopes and aspirations. Various projects are in the mid-way. Some of them have already reached the chrysalis stage. Government stand committed to give incentives to a number of aspiring entrepreneurs. Squeezing of funds at this stage will definitely put a back gear to all the advancement made with so much of labour and endeavour. So, the main aim of the Seventh Plan is to utilise fully what we have, to complete the incomplete works, and maintain the tempo. The track is now laid and the wheels must be allowed to move. The dawn has beamed and we cannot afford to cloud the smile of sunrise. In brief the strategy for the 7th plan will be (i) full capacity utilisation, (ii) complete the incomplete works, (iii) modernisation, (iv) generation of employment with special thrust on the weaker section, (v) labour absorption and (vi) stress on agro-based industry. It is proposed to invest Rs. 23000 crores during the Seventh Plan period and an outlay of Rs. 3260 crores has been suggested for the year 1985-86 as shown below:

(Rs. in lakhs)

Sl. No.	Item	Proposed outlay in the 7th plan	Proposed outlay in 1985-86
(1)	(2)	(3)	(4)
1.	Village & Small Industries	7,500.00	950.00
2.	Medium & Large Industries	15,500.00	2,310.00
	Total	23,000.00	3,260.00

24.6. Most of the programmes included in the Seventh Plan represent only budgetary support which the State Government can extend for promotion of industrial ventures in the State. Considering the industrial backwardness of the State, this provision is undeniably on the lower side. However, it is hoped that through these provisions an industrial climate would have been built up to attract significant investment in the State in the industries sector. Details of industrial programmes envisaged are elaborated in the following paragraph.

(a) Medium and Large Industries

Industrial Development Corporation

24.7. The Industrial Development Corporation has since completed a number of large and medium projects and they are now engaged in maintaining those projects. The Corporation has taken up the following projects during Sixth Five-Year Plan involving total cost of Rs. 30,057.00 lakhs for which equity of Rs. 9,924.30 lakhs is required. By the end of this plan, expenditure to the extent of Rs. 47,570 lakhs has already been provided leaving a balance of Rs. 9,448.60 lakhs out of which the State

Government have been requested to provide an equity of Rs. 8,840.30 lakhs during the Seventh Five-Year Plan. The balance of Rs. 608.30 lakhs is to be provided by the Corporation out of their own resources.

(Rs. in lakhs)

Name of the Projects	Original costs	Equity participation by Government during Seventh Plan	Equity participation by Government during 1985-86
(1)	(2)	(3)	(4)
<b>Continuing Projects</b>			
1. Aska Spinning Mill ..	732.00	115.00	115.00
2. Hira Cement Works Stage-II ..	40,00.00	1,179.00	..
3. Ferro Nickel Project (Diversification of Ferro-Chrome Plant).	500.00	157.00	100.00
4. Boiler Piping & Accessories Phase-II	600.00	199.00	50.00
5. Special Alloy Steel Project ..	3,000.00	859.00	50.00
6. Refractory Unit ..	57.00	..	..
7. Textile Machine Manufacturing Unit.	640.00	..	..
8. Continuous Welding Consumable Projects.	328.00	..	..
9. Mini Computer/Micro-Process Project.	100.00	..	..
<b>New Projects</b>			
1. Semi-Coke Plant ..	1,100.00	364.00	..
2. Ferro Nickel Project ..	6,000.00	1,995.00	..
3. Koraput Cement Plant ..	12,000.00	2,971.00	..
Total ..	30,057.00	8,840.00	315.00

24.8. The Seventh Plan Programmes of I. D. C. (Expansion, Diversification and New Works) are briefly discussed below :

#### Continuing Projects

24.9. *Aska Spinning Mill, Aska* —Construction and erection of the mill are under process. Commercial production is expected by January, 1986.

24.10. *Expansion Hira Cement Works (Stage-II), Bargarh* :—The existing unit of Hira Cement Works has a capacity to manufacture 4.65 lakh M. Ts of cement per year. Looking at the demand of the product and potentiality of the unit, it has been decided to expand into the capacity of 9.00 lakh M. Ts. Necessary letter of intent has already been received and the feasibility report is under preparation.

24.11. *Ferro-Nickel Project (Diversification of Ferro-Chrome Plant)* :—Owing to change in technology of manufacture of stainless steel the demand of Low Carbon Ferro-Chrome that is presently being produced in the Ferro-Chrome Plant of IDCOL at Lajpur Road is going down and it is necessary for the Plant to diversify by way of production of Ferro-Nickel. Letter of intent has been obtained by IPICOL.

Transfer of the same in favour of IDCOL, has been initiated with Government of India. Offer has been received from M/s. ELKEM, Norway for modification of the slag-line furnaces of Ferro-Chrome Plant for production of Ferro-Nickel. M/s. MECON, Ranchi shall prepare the TEFR for this project. A team of officials are expected to discuss with M/s. ELKEM in the near in connection with the furnace, equipments and technology. M/s. MECON will prepare the TEFR after getting the detailed data from M/s. ELKEM.

24.12. *Boiler Piping and Accessories Works (Stage II), Bhubaneswar*—The IDCOL had received a letter of intent from Government of India to set up a Boiler Piping and Accessories Plant at Bhubaneswar with a capacity to manufacture of 3,000 Tonnes of carbon and Alloy Steel Seamless piping bendings etc, per annum. The TEFR which was prepared earlier is under process of revision. The market study for the project is over. Revised TEFR on the basis of revised capacity is under preparation. Infrastructure facilities are available.

24.13. *Special Alloy Steel, Jajpur Road*—This is another diversification programme of the Ferro-Chrome Plant of Jajpur Road. Letter of intent has been obtained by IPICOL. Transfer of the same in favour of IDCOL has been initiated. Order for preparation of TEFR has been placed with M/s. M. N. Dastur & Co. The State Government have already approved the project and have agreed to provide Rs. 400 crores out of State Plan funds towards equity requirement of this project.

24.14. *Refractory Unit, Choudwar*—With a view to diversifying production, the IDCOL has obtained a letter of intent for manufacture of 5,000 tonnes of fire bricks and refractories per annum. Project report has already been prepared. Detailed engineering for setting up the project is being worked out. Infrastructure facilities are available.

24.15. *IDCOL Star Machinery Unit, Bhubaneswar*—IDCOL has received a letter of intent from Government of India to set up a textile manufacturing unit at Chandaka, Bhubaneswar for manufacture of textile spinning machines with a project cost of Rs. 225.56 lakhs. This is a joint sector project being promoted by IDCOL and M/s. Star Group, Bombay. The project report is ready. Selection of land has been made. G. G. Clearance has been obtained and collaboration agreement has been executed. Phase manufacturing programme has been approved by the Textile Commissioner. Construction work of the project will start as soon as funds are arranged.

24.16. *Continuous Welding Consumable Project, Bhubaneswar*—IDCOL has received a letter of intent from Government of India to establish a continuous welding consumable plant at Bhubaneswar with a capacity to manufacture 5,000 tonnes per annum of welding wires and 2,000 tonnes per annum of fluxes with an estimated cost of Rs. 328 lakhs. This project will be implemented in the joint sector with M/s. Indian Oxygen Ltd., TEFR has been prepared.

24.17. *Mini Computers/Micro Processor Project, Bhubaneswar*—Letter of intent has been obtained by IPICOL. Transfer of the same in favour of IDCOL has been initiated. Order for preparation of TEFR has been placed with M/s. M. N. Dastur & Co.

#### New Projects

24.18. *Semicoke Plant, Talcher*—A letter of intent has been obtained by IDCOL to set up a plant for manufacture of 1,0,000 tonnes of Semi-Coke at Talcher. TEFR has already been prepared by RRI, Hyderabad. Action is being taken up for making arrangement for land for the project with M/s. Central Coal Fields Ltd., Talcher.

24.19. *Ferro Nickel Project*—This will be a 60 crore project for production of Ferro-Nickel. Application for issue of letter of intent has been made by IPICOL, which will be transferred to IDCOL for implementation. Draft TEFR has been prepared by M/s. MECON, TEFR will be finalised after discussion with M/s. ELKEM of NORWAY.



24.20. *Large size Cement Plant, Koraput*—Application for letter of intent has been made. Mining and prospecting licences in favour of IDCOL has been granted. Draft TEFR has been prepared and under scrutiny. Survey of railway line from Malkaugiri to Jeypore has been completed by Rail India Techno Service.

24.21. The notes above indicate that there are quite a few good projects that the IDC has planned to set up in the Seventh Plan. However availability of funds being limited only to a sum of Rs. 1,080 lakhs has been projected to be given as share capital out of the State Plan funds in the Seventh Plan as given under:

1. Aska Spinning Mills	..	Rs. 100 lakhs
2. Boiler Piping & Accessories Plant	..	Rs. 150 lakhs
3. Expansion of Hira Cement Works	..	Rs. 230 lakhs
4. Special Alloy Steel Project	..	Rs. 400 lakhs
5. Semi-Coke Plant	..	Rs. 200 lakhs

#### Film Development Corporation

24.22. The Film Development Corporation was incorporated in 1976, for Development of Film Industry in the State. During the Sixth Plan period the Corporation has received a sum of Rs. 155.36 lakhs as against the Sixth Plan outlay of Rs. 112.00 lakhs. During this period, different development programmes like Low Cost Cinema houses in rural and semi urban areas establishment of studio complex near Bhubaneswar, payment of subsidy to the producers of Oriya Films, etc., are taken up. In the Seventh Plan an allocation of Rs. 225.00 lakhs has been proposed for the following schemes :—

		(Rs. in lakhs)
Name of the Scheme		Proposed outlay
1.	Low Cost Janata Cinema Halls	14.40
2.	Low Cost Rural Cinema Hall	38.95
3.	Establishment of Office Complex	8.00
4.	Establishment of Kalinga Studio	45.35
5.	Soft loan to producers	12.00
6.	Loan to producers for production of Oriya Films	35.00
7.	Construction of Art Theatre	5.00
8.	Subsidy-cum-Soft loan to Oriya Film	37.00
9.	Storage of film Classics in Archive (Building)	8.00
10.	Managerial Assistance to Corporation	17.50
11.	Organisation of Film Festival	2.50
12.	Financial Assistance to Cinema Society	1.30
Total		225.00

24.23. During the year 1985-86. it is proposed to provide a sum of Rs. 50 lakhs to this Corporation.

#### The Orissa State Electronics Development Corporation

24.24. The Orissa State Electronics Development Corporation was constituted in the year, 1981 with a view to developing electronic industries in the State. During the current year the Corporation has been allotted a sum of Rs. 90.00 lakhs (i.e. Rs. 84.00 lakhs as share capital investment and

Rs. 600 lakhs as grant for B. T. D. C.). In the approach to the Seventh Five-Year-Plan, it has been suggested that a major thrust needs to be given to the electronic industries. Therefore it is proposed to provide ample scope to this corporation for expansion of electronic industries in the State during the Seventh Plan period.

24.25. The Corporation has taken up steps for setting up 27 projects. Out of which eight industries which require Rs. 424.00 lakhs as Corporations share of equity are identified as spillover projects in the Seventh Plan requiring an investment of Rs. 381.85 lakhs. The Corporation has also identified 19 new schemes for implementation in the Seventh Plan period, with an investment of Rs. 837.00 lakhs. But due to paucity of funds, a sum of Rs. 600.00 lakhs is proposed to be invested in Electronic Development Corporation during Seventh Five-Year Plan, 1985-90 and Rs. 155.00 lakhs is proposed to be invested during the Annual Plan, 1985-86.

#### **Co-operatives Spinning Mills and Textile Mills**

24.26. In order to meet the yarn requirement of the State both in the Powerloom and Handloom Sectors which was estimated to be Rs. 300.00 lakh Kgs. by end of the Sixth Plan period, it was decided to establish 10 Spinning Mills of 25,000 spindles each in the State during the plan period out of which seven were to be set up in the Co-operative Sector and three in the Public Sector. The seven mills proposed to be set up were to be located at Nuapatna, Khurda, Sundargarh, Tirtol, Nilagiri, Kesinga and Keonjhar.

24.27. These Spinning Mills were to be set up in addition to the two existing mills located at Baragarh and Dhenkanal. It was also contemplated to expand Orissa Weavers Co-operative Spinning Mills Ltd. located at Balagarh, to 30,280 spindles from 18,400 spindles. During the plan period Shree Jagannath Weavers Co-operative Spinning Mills Ltd. located at Nuapatna and Utkal Weavers Co-operative Spinning Mills Ltd., located at Khurda have already gone into production, and expansion work of Orissa Weavers Co-operative Spinning Mills Ltd., Baragarh has been completed as envisaged. Gangpur Weavers Co-operative Spinning Mills Ltd. and Shree Sarala Weavers Co-operative Spinning Mills Ltd., Tirtol are in the final stage of completion and are likely to go into production during the plan period. Progress in respect of three Co-operative Spinning Mills scheduled to be established at Nilagiri, Kesinga and Keonjhar was seriously effected due to lack of financial accommodation from NCDC, who were to meet a substantial portion of the project cost. Compared to the national standard the State had fallen behind in the field of Spinning Mills and Textile Mills. It is only during the Sixth Plan period that a conscious attempt has been made to boost up this industry in the State. But getting finance from the financial institutions has posed a big problem since they have become quite hesitant to make further sanction in this field. Consequently there would be a higher constraint on the state resources to meet the requirement. In case of Kesinga Spinning Mill the State Government have already taken a decision to meet the full equity in case NCDC funds are not available. During the sixth plan period, total amount provided towards Spinning Mill has been Rs. 424.77 lakhs and for the Seventh Plan period the requirement would be Rs. 705 lakhs. More over, the Textile Mills in the State in private sector had gone sick on account of various factors. State Government under compelling circumstance had to step in so as to run these mills without which a large number of people would have become jobless. By the end of 1983-84 an amount of Rs. 50 lakhs has been given to the Orissa Textile Mills and a further amount of Rs. 50 lakhs provided in the budget of 1984-85. Another Textile Mill at Iharsuguda has been closed and that State Government have already proposed the Government of India to take over this unit under the IDR Act and run the same through the State Textiles Corporation. Some provision has to be kept for this in view of the above, it is proposed to keep a provision of Rs. 10 crores for the Co-operative Spinning Mills and sick Textile Mills in the State.

#### **Orissa State Financial Corporation (OSFC)**

24.28. The O. F. C. is the main loan lending Institution for Small/Medium Industries in the State. During the first four years of the Sixth Plan period the Corporation has availed finance of Rs. 14,454.35

lakhs from different sources and sanctioned and disbursed loans of Rs. 17,678.77 lakhs and Rs. 10,652.93 lakhs, respectively. During the current financial year 1984-85 the Corporation has made a programme to avail a finance of Rs. 5,525.00 lakhs and to sanction/disburse loan of Rs. 6,000 lakhs/Rs. 4,500.00 lakhs as detailed below:—

	(Rs. in lakhs)		
	1980—84	1984—85	Total
1. Share capital from Government.	919.94	450.00	1,369.94
2. Marketing share from I. D. B. I.	919.94	450.00	1,369.94
3. Refinance availed	6,646.08	2,300.00	8,946.08
4. Recovery out of principal that disbursed.	1,959.36	700.00	2,659.36
5. Bonds	2,777.50	1,155.00	3,932.50
6. Other borrowings and internal accrual.	1,231.53	470.00	1,701.53
Total	14,454.35	5,525.00	19,979.35
7. Loan sanctioned	17,678.77	6,000.00	23,678.00
8. (i) Loan disbursed	10,652.93	4,500.00	15,152.93
(ii) Other expenses	3,014.46	1,413.00	4,427.46

24.29. The Corporation has made a programme to avail of finance of Rs. 41,858.59 lakhs and Rs. 6,720.00 lakhs during Seventh Five-Year Plan and Annual Plan, 1985-86, sanction loan of Rs. 39,000.00 lakhs and Rs. 6,500.00 lakhs and disburse Rs. 32,500.00 lakhs and Rs. 5,500.00 lakhs respectively. The share capital investment required for the purpose is Rs. 2,750.00 lakhs and Rs. 450.00 lakhs during the Seventh Plan and Annual Plan 1985-86, respectively. Equal amount will be received from I. D. B. I.

24.30. Besides the Corporation assessed that a sum of Rs. 106.00 crores would stand as outstanding commitment by the end of 1984-85 and this amount would be spilled over to Seventh Plan for which a sum of Rs. 12.00 crores is required as investment to be made by State Government which would be matched by an equal amount by IDBI. Thus, the Corporation requires a sum of Rs. 3,950.00 crores during the Seventh Five-Year Plan to meet the total requirement for disbursement including spill over from State Government. But within the limited allocation of funds, it has been decided to project a sum of Rs. 2,750.00 lakhs only for Seventh Plan period and Rs. 450.00 lakhs for the Annual Plan 1985-86.

#### **Orissa Industrial Infrastructure Development Corporation**

24.31. One of the spectacular achievement of the Sixth Plan is the creation of Orissa Industrial Infrastructure Development Corporation. This Corporation has been established in January, 1981 with a view to developing industrial sites, construction of factory sheds, provision of water, power, communication and housing facilities for rapid growth of industries. In the approach paper, considerable stress has been given on building up necessary infrastructural base. The main aim of this Corporation is to achieve the above purpose.

24.32 The Sixth Plan outlay of this Corporation was formulated at Rs. 2,805.00 lakhs, out of which Government loan assistance was Rs. 672.00 lakhs and Rs. 188.00 lakhs towards NALCO land totalling Rs. 860.00 lakhs. As against this, a sum of Rs. 741.00 lakhs have been provided by the Government leaving a balance of Rs. 157.00 lakhs. Despite shortfall in the allocation the Corporation has made substantial achievement during the Sixth Plan period as indicated below :-

	Target	Achievement	Shortfall
1. Development of land (In acres)	2,000	1,318 (Till 31-3-1984) + 447 (1984-85)	
		----- 1,765	
2. Construction of Industrial sheds	1,075	605 (Till 31-3-1984) 401 (1984-85)	
		----- 906	169
	(Nos.)		

24.33 Keeping the Seventh Plan objective in view, a massive programme has been proposed for the Seventh Plan. It is proposed to take up development of industrial land in 3,940 acres construction of industrial/commercial sheds, 1,990 Nos. and housing for industrial houses 1,320 Nos. To achieve these targets, the following sources of finance has been proposed :-

Sources of finance	(Rs. in lakhs)
1. (a) State Government for Spill over	157.00
(b) State Government for new Schemes	843.00
(c) State Government for N. I. D. Schemes	1,385.00
	2,385.00
2. Grant from Government of India for N. I. D. Schemes	600.00
3. Assistance from I. D. B. I. for N. I. D. Schemes	1,500.00
4. From HUDCO (N. I. D. Schemes)	297.75
5. I. D. C. O's own sources	103.03
6. Matching loan from financial institutions	2,431.00
	-----
Total	7,316.78
	-----

24.34. As against the total requirement of funds as indicated above, the Seventh Plan outlay for the scheme has been kept at Rs. 2,385.00 due to paucity of funds. The proposed outlay for the Annual Plan 1985-86 has been kept at Rs 125.00 lakhs.

**No Industry District Scheme**

24.35. This scheme was not in operation during the Sixth Plan period in the State. According to the scheme, Government of India have identified three districts namely, Balasore, Balangir and Phulbani as no industry districts (N. I. Ds). Government of India will grant a maximum of Rs. 2 crores in each district for infrastructural development. Besides I. D. B. I. will assist in terms of loan up to a maximum of Rs. 5 crores in each district. The State Government has to provide Rs. 4 crores in each district to avail above grant from Government of India and loan from I. D. B. I. To gear up the industrial activities in the three N. I. Ds of Orissa, the Orissa Industrial Infrastructure Development Corporation has proposed to take up the following programmes during the Seventh Five-Year-Plan period.

Name of N.I.D.s	Land to be developed	Sheds to be provided	Housing to be provided	Total project cost
	(Acres)	(Nos.)	(Nos.)	(Rs. in lakhs)
1. N. I. D., Balasore ..	1,205	90	420	1,567.78
2. N. I. D., Bolangir ..	500	50	100	1,257.00
3. N. I. D., Phulbani ..	400	200	200	1,189.00
<b>Total</b> ;	<b>2,105</b>	<b>340</b>	<b>720</b>	<b>4,013.78</b>

24.36. To achieve the above target during the Seventh Plan the following sources of finance are proposed.

	(Rs. in lakhs)
1. Grant from Govt. of India ..	600.00
2. Assistance from IDBI ..	1,500.00
3. Loan from financial institution for Construction of sheds ..	231.00
4. Loan from HUDCO ..	297.75
5. State Government assistance ..	1,385.03
<b>Total</b> ..	<b>4,013.78</b>

24.37. Out of total assistance of Rs. 1,385.03 from State Government a sum of Rs. 533.78 has already been spent by Government of Orissa in N.I.D., Balasore. As such the State Government has proposed to spend the balance Rs. 851.25 during the Seventh Five-Year Plan.

**Industrial Promotion and Investment Corporation of Orissa Ltd.**

24.38. The Industrial Promotion and Investment Corporation of Orissa Ltd. (IPICOL) was established in 1973 as a State-owned Corporation for identification and promotion of medium and large scale industries in the State of Orissa. Subsequently, it also functioned as a term-lending institution, securing refinance from the Industrial Development Bank of India. In course of the last 10 years, this organisation has expanded its activity substantially and is considered as a premier SIDC in the

country. It has been able to attract a large number of entrepreneurs from inside and outside the State, identify and promote industrial units to their choice, secure foreign collaboration, both in technology and equity participation, syndicated equity, loan risk capital assistance, seed capital assistance as well as working capital funds from various All India Financial Institutions and Nationalised Banks.

24.39. During the Sixth Plan period, this Corporation has shown remarkable progress in identification promotion and establishment of medium and large industries in the State. Till date, through its efforts, 80 Industrial Units have gone into production in the State with a total project outlay of Rs. 94.20 crores and generating employment opportunity for 8,610 persons. Besides the above, financial assistance in respect of 90 units with a total project outlay of Rs. 259.60 crores and aiming at an employment generation of 19,360 persons, are in various stages of implementation. During the Sixth Plan period, the Corporation has received equity assistance from the State Government to the tune of Rs. 1,780.83 lakhs (including current year's approved outlay) for investment in various industrial units. During this period, 19 Joint Sector projects have been launched with a total project cost of Rs. 262.57 crores in various Key sectors of medium and large industries. A number of other such Joint Sector projects are in various stages of consideration by All-India Financial Institutions for grant of financial assistance.

24.40. In the above back ground, IPICOI has planned for a substantial expansion of their activity during the Seventh Plan period in order to consolidate and sustain the industrial projects promoted by them as well as promote new industrial projects, with an aim to utilise the available resources in the State, cater to the growing market demand for manufactured goods and industrial intermediaries in the country, participating in import substitution and export promotion efforts and at the same time provide employment opportunity for a large number of local persons. Identification of new projects was under-taken by IPICOI through a Multidiscipline approach, keeping the above objectives in view and also considering the likely power constraint during the first part of the Seventh Plan period, by restricting promotion of highly power intensive industries, during this period. Instead of limiting the identification to such projects which could only be taken up through Joint Sector by established houses, a number of medium sized projects within the range of Rs. 150 lakhs per project have also been identified so that it would be within the easy reach of local entrepreneurs and technocrats, coming into this field. Care has been taken to identify such projects which would throw-up substantial ancillary potential. Projects with comparatively large employment potential have also been given priority.

24.41. In view of the projects in the pipe-line, which are presently at different stages of implementation and would require provision of funds during the Seventh Plan period, a list of projects which are likely to spill-over into the Seventh Plan was prepared limiting it to only 61 in view of the paucity of funds at a total project outlay of Rs. 629.85 crores, which would provide employment to about 13,000 persons when they are completed. Besides these projects a further list of 104 number of projects have also been drawn up at a total project outlay of Rs. 839.03 crores, which would provide employment to about 28,000 persons when they are completed. All efforts would be made to complete these projects during the Seventh Plan Period, so as to derive the required socio-economic benefits. Requirement of funds by IPICOI for taking the above programme would be mainly on two accounts, namely, providing equity participation in the projects and a ranging margin money required to the required Term-loan-refinance from IDBI.

24.42. *Equity requirements*- The spill-over projects from the Sixth Plan Period would require equity participation to the extent of Rs. 42.33 crores. This equity participation has been considered essential in view of the size of the project and ability of the entrepreneurs to bring in their own contribution. In respect of joint sector projects, IPICOI has to provide 26 per cent of the equity, while in joint venture and assisted sectors, the proportion of equity would range between

10—20 per cent. In respect of new projects the total equity requirement would be Rs. 56.77 crores. The estimation of equity required for each project has followed the above principle. However, in respect of projects where the project cost exceeds Rs. 100 lakhs, IPICOL has proposed not to provide any equity assistance as it is expected that the minimum promoters' contribution along with Investment Subsidy, would make up the required equity base.

24.43. The total term loan requirement by the spill over projects would amount to Rs. 12.77 crores. It may be indicated that IPICOL takes up part of the term loan burden only in respect of projects which are below Rs. 300 lakhs in project cost. When the project cost is beyond Rs. 300 lakhs, the term loan burden is directly taken by the financial institutions. In order to provide term loan assistance for the spill over projects to the tune of Rs. 12.77 crores, IPICOL will require a margin money of Rs. 1.91 crores, for availing necessary refinance from IDBI. It may be indicated here that the margin money requirement by IDBI varies between 10—20 per cent, depending upon the location of the industrial units in a backward or forward district. In respect of the new projects, the total loan burden to be borne by IPICOL would be Rs. 35.54 crores. In order to provide the above assistance, IPICOL will require a margin money of Rs. 5.33 crores, estimated an average of 15 per cent of the total term loan requirement, since the exact location of these identified industries are yet to be finalised.

24.44. In view of the above, it would be evident that in order to complete the 61 projects which are spilling over from the Sixth Plan to the Seventh Plan as well as to promote and establish 104 number of new projects identified for the Seventh Plan Period, the total equity requirement by IPICOL for investment in these projects would be Rs. 99.10 crores. Besides, it will need a total margin money assistance to the extent of Rs. 7.24 crores for providing term loan assistance to the projects which are spilling over to Seventh Plan Period as well as the new projects to be taken up. Putting both these requirements together, the total requirement of funds by IPICOL from the State Government would therefore be to the tune of Rs. 106.34 crores. But funds are limited and the 'Approach Paper' has clearly spelt out that extreme selectivity has to be observed in case of new ventures. So, only a sum of Rs. 40 crores has been projected during the Seventh Plan which will not be sufficient even for the spill over projects. Accordingly planning has been made to continue only some of the important projects within the annual ceiling of Rs. 7.00 crores during the year 1985-86.

#### Incentives

24.45. Package of incentives to large and medium industries are given through IPICOL. These incentives include supply of project feasibility reports, power subsidy and sales tax loan. During the Sixth Plan period the amounts indicated below have been utilised as against the Sixth Plan target.

(Rs. in lakhs)		
Name of Scheme	Sixth Plan target	Actuals of 6th Plan period.
1. Project feasibility report.	33.00	39.00
2. Power subsidy and electricity duty	56.00	44.50
3. Sales tax loan	67.00	123.00

24.46. Under the schemes project feasibility report and power subsidy, it is proposed to provide Rs. 5,000.00 lakhs each during the Seventh Plan period and Rs. 10 lakhs and Rs. 20 lakhs respectively in the annual Plan for the year 1985-86.

24.47. IPICOL has another junction of disbursing sales tax loan to eligible large and medium industries under the Industrial Policy Resolution. A new industry or one having undergone substantial expansion is entitled to an interest free loan of an amount paid as sales tax for 5 years after the industry has gone into production. Sales tax loan claims are pending at various stages from many large and medium industries. Besides a number of industries have gone into production and will also go into production during the coming years. To take care of these claims an amount of Rs. 4.30 crores will be the spill over requirement. Besides, Rs. 1100.00 lakhs has been proposed for new industries. Hence, the requirement under this scheme has been estimated Rs. 15,00.00 lakhs for the Seventh Plan period and Rs. 1,50.00 lakhs for the year 1985-86.

#### State Investment Subsidy

24.48. The O. S. F. C. act as the disbursing agency in the matter of State Investment Subsidy. As per the Industrial Policy Resolution industries set up in non-backward areas are eligible to get State Investment Subsidy at the rate of 15% subject to a limit of Rs. 15.00 lakhs. The total outstanding commitment towards disbursement of State Investment Subsidy by the end of Sixth Plan period has been assessed at Rs. 18,74.18 lakhs. Out of this amount, Rs. 12,86.96 lakhs would be required for disbursement to small scale industries and Rs. 5,87.87 lakhs to be disbursed to large and medium industries. In addition to the above requirement the normal sanction and disbursement in respect of the new schemes to be set up during the Seventh Plan period will generate additional commitment on O. S. F. C. for payment towards State investment subsidy. To meet the requirement an amount of Rs. 18,91.00 lakhs is proposed during the Seventh Plan period and Rs. 2,75.00 lakhs during the Annual Plan 1985-86.

#### (b) Village & Small Scale Industries

##### Small Scale Industries (S. S. Is)

24.49. The Sixth Five-Year Plan target for small scale industries fixed by the State Government was to set up 14,000 S.S. Is. with a capital investment of Rs. 1,04.71 lakhs generating employment for 103,860 persons. During the first four years the actual achievement has been 11,116 S. S. I. Units with investment of Rs. 88.48 lakhs and generating employment for 82,290 persons. The target for the current year, i. e. 1984-85 is to set up 3,000 S. S. Is. with an investment of Rs. 30.00 lakhs providing employment to 24,000 persons. This target is expected to be achieved in full keeping this achievement in view, a target of 21,000 S. S. Is. have been proposed for the Seventh Plan period with a capital investment of Rs. 4.20.00 lakhs and generating employment for 2 lakh persons. The target for 1985-86 has been proposed at 3,200 units with a capital investment of Rs. 64.60 lakhs and employment for 32,000 persons.

24.50. In the artisan sector, the Sixth Plan target has to set up 243,000 artisan-based units with investment of Rs. 25.55 lakhs and generating employment for 342,300 persons. The achievement during the first four years of the Plan is 260,077 units with investment of Rs. 43.48.85 lakhs and employment for 420,107 persons. The target for 1984-85 is to set up 6,000 more artisan-based units with an investment of Rs. 10.80 lakhs providing employment for 6,000 persons. This target too is expected to be achieved in full. Therefore, keeping this achievement in view, it has been proposed to fix a target of setting up 375,000 artisan-based units during the Seventh Plan period with a capital investment of Rs. 1.87.50 lakhs employing 750,000 persons. For 1985-86 the target proposed is 69,000 artisan-based units with investment of Rs. 34.50 lakhs generating employment for 138,000 persons.

24.51. According to a survey, there were 40,000 families in Orissa engaged in various types of handicrafts. Government's strategy for this sector has been to form Co-operatives of these craftsmen, impart training for upgradation of skill, provide raw material and other inputs in time and arrange marketing of handicrafts products through these Co-operative Societies. By the end of 1983-84, 262 Handicraft Co-operative Societies have been formed in the State covering approximately 9,500



artisans. A target for 1984-85 is to form 40 new societies and bring 1,200 more families under the Co-operative fold. It is proposed to cover 25,000 families under the Co-operative fold by the end of the Seventh Plan. It has been further proposed to sufficiently strengthen the Orissa State Cooperative Handicrafts Corporation with adequate share capital so as to enable this Apex Organisation to procure handicrafts goods from the primary handicrafts societies to sell them within and outside the State. As per information available, production achieved through the handicrafts co-operatives during the Sixth Plan period is of the order of Rs. 1,400 lakhs providing employment to 56,000 persons. It is proposed to raise the production in the co-operative sector to Rs. 4,000 lakhs by the end of the Seventh Plan and to provide employment to one lakh persons. Target for 1985-86 is to achieve production of Rs. 500 lakhs employing 18,000 persons.

#### Coir Industries

24.52. Orissa is one of the major coconut producing States in the country. The total area under coconut cultivation in the State is 22,000 hectares. Substantial increase has been achieved under coconut plantation during the Sixth Plan period in the Coastal Districts of Cuttack, Puri, Ganjam and Balasore through implementation of Anti Poverty Programme. The strategy of the Government during the Seventh Plan to improve the quality of coir, maximise production of coir and coir products and arrange market of these products through Co-operative societies. The Coir Board of India have agreed to set up a Regional Coir Testing and Development Centre (RCTDC) in Orissa and steps are being taken to implement this scheme soon. The proposed outlay for Coir Industries during the Seventh Plan is Rs. 68.50 lakhs and in 1985-86 is Rs. 8.00 lakhs.

#### Salt Industries

24.53. Manufacturing of salt has been taken up in the Coastal Districts. Government encourage formation of Co-operative Societies of salt workers for this purpose. To strengthen the financial base of the societies, investment in the shape of equity capital, managerial grant, interest subsidy are necessary. During the Seventh Plan, an outlay of Rs. 42.50 lakhs have been suggested for this programme and for 1985-86 the outlay proposed is Rs. 5 lakhs.

#### Orissa Small Industries Corporation (O. S. I. C.)

24.54. The Orissa Small Industries Corporation continues to function as one of the promotional Agencies for development of Small Scale Industries in the State. The primary functions of the Corporation are to provide equity support to Small Scale Industrial Units taken up in Joint Sector, supply of raw materials to Small Scale Industries, arrange orders for the S. S. I. through a sub-contracting exchange.

24.55. Supply of raw materials to Small Scale Industries is done by the Orissa Small Industries Corporation through its raw material depots. The total number of SSIs in the State by the end of Sixth Plan would be more than 20,000. Further 21,000 units are proposed to be set up during the Seventh Plan period. The Corporation would therefore be called upon to procure and supply raw materials on a larger scale during the plan period. It has been proposed to provide Rs. 15 lakhs during 1985-86 and Rs. 100 lakhs during entire plan period to the Corporation to be used as its margin money in operating its raw material Bank. The Corporation also runs a sub-contracting exchange for providing marketing outlets to Small Industries. During 1983-84, the Corporation has achieved a turn-over Rs. 400 lakhs. It is proposed to provide Rs. 202 lakhs during the Seventh Plan period toward margin money and some capital expenditure for this activity. Due to shortage of funds, a modest sum of Rs. 15 lakhs only have been provided for 1985-86. The Corporation contributes equity in certain deserving sophisticated small scale projects, where the entrepreneur is not able to arrange the entire promoter's contribution of his own. This scheme has received wide appreciation and has resulted in the establishment of several good projects. It is proposed to provide Rs. 15 lakhs during 1985-86 and Rs. 100 lakhs during the entire plan period as share capital contributions to the Corporation for investment in the joint sector projects. The Corporation also acts as

an export house for products of small industries. A sum of Rs. 2 lakhs has been proposed for 1985-86 and Rs. 45 lakhs for the entire Seventh Plan period as share capital to the Corporation for this activity. It is also proposed to provide Rs. 1 lakh during 1985-86 for activating the Data Bank of the Corporation for monitoring demand and distribution of raw material and procurement and sale of products of the small industries.

24.56. According to the current Industrial Policy of the State Government, subsidy @ 15% is given to the industries set up in the districts which are not declared backward by the centre. Having regard to the claims that may spill over to the Seventh Plan and the demand that may be generated during the Plan period itself a sum of Rs. 2400 lakhs will be necessary under this scheme. Due to constraint of funds, an amount of Rs. 1,43 lakhs only has been proposed for 1985-86.

24.57. Disbursement of the Sales tax loan to Small Scale Industries is channelised through the O. S. I. C. It is estimated that a sum of Rs. 5.00 lakhs would be required to implement the scheme during the Seventh Plan period. Due to paucity of funds, a sum of Rs. 20 lakhs only has been proposed for 1985-86.

24.58. Carrying out project feasibility and techno-economic survey, identification and training of entrepreneurs and preparation of project reports are key to the successful implementation of the small industries programme. Government have emphasised on these schemes during the current plan period with excellent results and plans to continue the same emphasis during the Seventh Plan. The requirement under these three schemes, viz., techno-economic survey, E. D. P. training and preparation of Project reports during the Seventh Plan is estimated to be Rs. 50 lakhs, Rs. 35 lakhs and Rs. 1.00 lakhs, respectively. For 1985-86 amounts proposed for the above schemes are Rs. 10 lakhs, Rs. 7 lakhs and Rs. 5 lakhs, respectively.

24.59. Assistance to sick industries is another important factor of the Small Industries Programme. The Central Government have been implementing a scheme which is equally shared by the State and the Central Government. An outlay of Rs. 50 lakhs has been proposed as the State's share during the Seventh Plan period and Rs. 10 lakhs for 1985-86.

#### **Leather Corporation**

24.60. Promotion of Leather Industries through the Leather Corporation has a tremendous scope. It is estimated that over 20 lakhs pieces of hides are available annually. Most of the people who are engaged in hide collection belong to Scheduled Caste. It is, therefore, proposed to strengthen the Leather Corporation sufficiently so as to enable it to collect most of the hides, process them by setting up more Tanneries and also undertake manufacturing of leather goods by setting up manufacturing units. An outlay of Rs. 50 lakhs is proposed for the Seventh Plan for this purpose. A sum of Rs. 10 lakhs towards share capital investment and Rs. 2 lakhs as grant has been proposed during 1985-86.

#### **Industrial Co-operatives**

24.61. There are nearly 83 Rural Industrial Co-operatives (Panchayat Samiti Industries) currently engaged in light engineering, wooden joinery carpentry, oil seeds crushing and similar other activities. These units provide employment to over 2,000 persons. Many of these units require augmentation of funds for use as margin money for obtaining Bank loan for their raw material requirement. Therefore, an outlay of Rs. 1,50 lakhs has been proposed during the Seventh Plan for these units. Due to paucity of funds, an outlay of Rs. 10 lakhs only has been proposed for 1985-86.

#### **Ceramic Industries**

24.62. There is a Ceramic Pottery Development Centre (K. S. P. D. Centre) at Jharstuguda run by the Industries Department. The centre was provided to function as a pioneering unit in

the manufacture of potteries, ceramic wares, L. T. insulators, etc. The Centre is not able to run on commercial lines. It has been decided to transfer this unit to the OSIC with a view to making full use of the infrastructure and running it on commercial lines. A sum of Rs. 50 lakhs would be necessary to be invested for procuring balancing equipments and improving the existing facilities of the unit. Due to constraint of funds, a sum of Rs. 2 lakhs has been proposed during 1985-86.

#### **Staff quarters**

24.63. There is acute shortage of accommodation for the staff of the headquarters of the Directorate of Industries and the District Industries Centres. Out of 132 gazetted employees and 1,588 non-gazetted employees, quarters have been provided to only 42 persons. This has resulted in considerable hardship to the staff. A sum of Rs. 12 lakhs has been proposed during 1984-85 for construction of quarters. An outlay for 1985-86 has been proposed at Rs. 20 lakhs and for the entire plan period Rs. 1,00 lakhs has been proposed.

#### **Rent subsidy for sheds**

24.64. Under the current Industrial Policy, Government gives 20 per cent subsidy for outright purchase of Industrial sheds to the entrepreneurs. The requirement during the Seventh Plan for implementing this scheme is assessed at Rs. 4,00 lakhs. Due to paucity of funds, a sum of Rs. 1,00 lakhs has been proposed for Seventh Plan and Rs. 25 lakhs for Annual Plan, 1985-86.

#### **Khadi and Village Industries**

24.65. Khadi and Village Industries Board has set up Artisans Industrial Multi-purpose Co-operative Society (AIMCS) in each Block and Gramodyog Marketing Co-operative Society (GMCS) at the district headquarters. The AIMCS undertake both manufacturing schemes under the village industries programme and also marketing of the products of village industries, cottage industries and handicrafts. The GMCS functions as a federal co-operative body at the district level and it undertakes marketing of handicrafts, village and cottage industries products. It also supplies raw materials to craftsmen and artisans through the AIMCS. There are 13 GMCS and over 175 functioning AIMCS in the State. It is proposed to strengthen these GMCS and AIMCS in a phased manner through share capital contribution which would be used as margin for obtaining Bank loan for undertaking marketing activities on a much larger scale. It has also proposed to provide them grant for construction of godowns, purchase of delivery vans, furnishing of show rooms and meeting managerial cost for a period of three years. An outlay of Rs. 75 lakhs have been proposed under the scheme for the Seventh Plan period and Rs. 10 lakhs for 1985-86.

24.66. For popularisation of Khadi cloth the State Government have decided to continue the rebate scheme under plan side for which a sum of Rs. 25 lakhs will be required for the Seventh Plan period a sum of Rs. 5 lakhs during 1985-86. The usual grant to Khadi Board will continue for which a sum of Rs. 1,23 lakhs is proposed during the Seventh Plan and an amount of Rs. 15 lakhs for the Annual Plan.

#### **Orissa State Co-operative Handicrafts Corporation**

24.67. The Orissa State Co-operative Handicrafts Corporation acts as an Apex Federal body for supply of raw materials to the handicrafts artisans through the Primary Co-operatives. Procurement and marketing of the products of handicrafts artisan is made by the Corporation directly and through these Co-operatives. This Corporation is expected to achieve a turn over of Rs. 1,75 lakhs during 1984-85. It is proposed to strengthen this apex body through share capital which would be used as margin for drawing more bank finance. For enhancing marketing activities, a sum of Rs. 84 lakhs has been proposed for entire Plan period and Rs. 15.00 lakhs for 1985-86.

### District Industries Centre

24.68. District Industries Centres (Including Roukela and Berhampur) have been set up in the State. The D. I. Cs. have been restructured in pursuance of instructions of Government of India. Various programmes and trainings are monitored through this and the Central Government gives three lakhs for each centre the rest of the burden being borne by the State. This serves as a focal point and is in consonance with the single-window system. An amount of Rs. 3,00 lakhs have been proposed for the Seventh Plan and Rs. 60 lakhs for the year 1985-86.

### Handlooms

24.69. The Handloom Industry in Orissa has a long tradition of artistic excellence and super craftsmanship. It also occupies a place of prominence in the State in providing rural employment and income generation. It is estimated that the number of handlooms in the State has risen from 1.05 lakhs at the beginning of the Sixth Plan period to 1.50 lakhs by the end of the Sixth Plan period providing direct employment to 3.00 lakh persons and indirect employment to another 0.75 lakh persons.

24.70. During the Sixth Plan period, considerable emphasis was laid on the handloom development programmes in the State which formed a component of the 20-Point Programme. The number of looms in the organised sector was increased to 80,456 during the first 4 years against 39,214 looms at the beginning of the Plan. The production of handloom fabrics has reached a level of 6.67 lakh metres valued at Rs. 38.84 lakhs from the level of 1.94 lakh metres valued at Rs. 7.74 lakhs by the end of the Fifth Plan. Production is expected to reach a level of 7.60 lakh metres valued at Rs. 56.00 lakhs by the end of the Sixth Plan.

24.71. Modernisation of looms has been taken up in a big way. As against 6,106 looms modernised till the end of the Fifth Plan the modernised looms will number about 64,000 by the end of the Sixth Plan.

24.72. A study of the impact of different handloom development programmes on the income, employment generation and production levels brought out the following structure which goes to show the success achieved during the Sixth Plan period,

#### *Development Indicators in the Handloom Sector*

Sl. No.	Item	Level reached by the end of	
		Fifth Plan	Sixth Plan
(1)	(2)	(3)	(4)
1	Number of persons employed ..	0.78 lakhs	1.70 lakhs
2	Plan Expenditure ..	96.13 lakhs	6,53.00 lakhs
3	Per capita Expenditure ..	Rs. 123.00	Rs. 709.00
4	Total cloth productive—		
	(a) in metres ..	1,94.00 lakhs	8,50.00 lakhs
	(b) in value ..	7,74.00 lakhs	55,25.00 lakhs
5	Per capita productive of cloth in metres ..	2,48.00 metres	500.00 metres
6	Per capita cloth products ..	Rs. 992.00	Rs. 3,250.00
7	Per capita Plan expenditure production ratio ..	1 : 8	1 : 9

(1)	(2)	(3)	(4)
8	Wage earning of weavers	.. Rs. 150.00	Rs. 450.00
9	Productivity/ per loom/ per year	.. 500 metres	1,000 metres
10	Value of Handlooms Cloth per metre	. Rs. 4.00	Rs. 6.00
11	Expenditure on Infrastructural Development	.. Rs. 17.06 lakhs	Rs. 1,90.00 lakhs
12	Per capita Expenditure on Infrastructural Development.	. Rs. 22.00	Rs. 112.00
13	Number of looms modernised	.. 6,106	43,057
14	Cost of generation of one unit of employment in—		
	(i) Handloom Industry	.. ..	Rs. 4,000.00
	(ii) Small Scale Industry	.. ..	Rs. 9,302.00

24.73. In consonance with the guidelines received from the Development Commissioner (Handlooms) the main thrust of handloom development programme during the Seventh Plan period is on effective coverage of looms so as to step up substantial production of fabrics in the organised sector and improving the quality of life of handloom weavers by way of augmentation of their income and introduction of welfare schemes like housing facilities, Thrift Deposit Contribution Insurance coverage, etc. The thrust of the strategy during the Sixth Plan period was towards creation of an organisational infrastructure for production and marketing on co-operative lines which is basically of non-exploiting character. Toward this goal the objective of the Sixth Plan was to accelerate the pace of co-operativisation by providing a package of incentives to the weavers including share capital assistance for enrolling themselves as members of co-operative societies, liberal financial assistance for modernisation of looms for improving the wage earning capacity of the weavers and share capital assistance to Apex Societies for increasing their procurement from primaries. The progress of co-operativisation in Orissa has achieved commendable results as in States like Andhra Pradesh and Tamil Nadu.

24.74. The coverage of looms must correspond increase in the production of fabrics and flow of benefits to the weavers. Hence, the main thrust of the strategy for development of handlooms during the Seventh Plan period is at least 60 per cent effective coverage of looms in the organised sector which includes the co-operative as well as the corporation. Since the co-operatives as well as corporation has the same objective the pattern of financial assistance available to the weavers under both these organisations would be identical and these organisations will be treated on par in the matter of financial assistance from Government of India as well as Financing Institutions like NABARD, etc. The Handlooms are also to be technologically equipped to produce fabrics of superior quality in keeping with the prevailing trends in the market so as to face the stiff competition from the mill made fabrics even without support of rebate. In keeping with these main guidelines issued from the Development Commissioner for handlooms, the programmes for development of handlooms during the Seventh Plan has been formulated.

24.75. In consultation with the State Government Officers the Development Commissioner for handlooms has fixed a production target of 126.00 million metres of fabrics by the end of Seventh Plan on the basis of the performance achieved during the Sixth Plan period. It has been stipulated that out of 1.50 lakh looms now operating in the State about 1.20 lakh looms will be brought into the organised sector of which 95,000 will be covered under the Co-operatives and the remaining 25,000 will be taken care of by Handloom Development Corporation. About 100,000 looms will be made effective to cover more than 60 per cent of the total number of looms in the State. Of these, 80,000 looms will be taken in the Co-operative fold and the remaining 20,000 will work under the Handloom Development Corporation.

24-76. Against the All India average production of 1,650 metres of fabrics per loom, the average production per loom in the State will be 1,390 metres by the end of Seventh Plan taking into account the preponderance of tie and dye looms in the State. The average production of looms has to be stepped up from the present level of 900 metres to 1,390 metres by the end of the Seventh Plan in a phased manner through technological upgradation of the looms and accessories, better working environment by way of construction of spacious and electrified work-sheds and above all uninterrupted supply of working capital from the Financing Institutions like NABARD and inputs like yarn, etc. To increase the average production of looms additional 30,000 looms are to be modernised in the organised sector. As a result of this almost all the looms proposed to be covered effectively can be modernised by the end of the Seventh Plan.

24-77. The weavers are to be also imparted training in use of modern appliances like take up and let off motions, dobbies and Jacquared, etc. Which would not only go a long way to improve their productivity but also remove the drudgery of work. The pre and post-loom facilities like warping sheds, mini dye houses are to be provided at different places so that the weavers can have easy access to such devices for improving their productivity as well as the quality of the products.

24-78. The modern techniques of marketing through aggressive sales promotion measures, setting up of attractive Sales Emporia in large scale, participation in Expos and Exhibitions, popularisation of fabrics through different audio-visual devices are to be adopted to boost the sale of handloom fabrics in a highly competitive market. The two principal marketing organisation of the State, viz., Orissa State Handloom Weavers' Co-operative Society and the Orissa State Handloom Development Corporation, Ltd., who are responsible for marketing of the bulk of the products are to be suitably bolstered up through provision of adequate share capital investment by Government and also the Financial Assistance available from N. C. D. C. should be availed of for this purpose.

24-79. Since one of the main planks of handloom development strategy during the Seventh Plan period is to improve the quality of life of the weavers, special schemes like provision of Housing-cum-Workshed facilities, Thrift Deposit and Old-age Insurance, coverage are to be provided in a few selected clusters as it would not be possible to extend these facilities to all the weavers in a State on account of paucity of resources.

24-80. It is proposed to provide liberal financial assistance for Factory-cum-Housing purpose to 2,182 weavers. Similarly, it is proposed to cover 18,000 weavers under the Thrift Deposit Scheme. For efficient management of the Co-operative Societies on sound commercial lines managerial support in adequate measure has to be provided.

24-81. It is proposed to provide this assistance to 200 Primary societies during the Seventh Plan period. Equally importance is to have continuous Research and Development activity to introduce new and appealing designs and diversify to make most of the existing potential for handloom in the existing Textile market of the State. To achieve these broad objective the programmes projected for the Seventh Plan period are as under :-

24-82. In order to achieve the above broad objectives during the Seventh Plan period, schemes have been formulated with an outlay of Rs. 16.41-65 lakhs which includes Rs. 2,26.00 lakhs only for the Annual Plan, 1985-86

#### Powerloom

24-83. During the year 1959-60, eight Powerloom Weavers' Co-operative Societies having 100 Powerlooms each were organised in the State. These Powerloom units faced a lot of ups and downs due to lack of working capital and highly fluctuating trends in the Textiles Market. Out of 8 units, two units, namely, Baladevjew Powerloom W. C. S., Kendrapara and Ramanagar Powerloom W. C. S., Tora, Baragarh, District Sambalpur have been running well and have shown profits. Four units i. e., Madhunagar at Cuttack, Barunei at Khurda, Berhampur at

Berhampur and Takatpur at Baripada could not run on profit due to bad market condition and woefully inadequate working capital, etc. In addition to the above 800 Powerlooms in 8 Powerloom units, 4,250 Powerlooms were allotted by Government of India to the State during Fourth Five-Year Plan. Permits for 4,063 Powerlooms were issued. But, so far, 1,538 Powerlooms have been installed already and the date for revalidation of the permits has been extended up to 31st March 1985, as per the latest directive issued by the Department of Textiles, Government of India.

24.84. Besides the Fourth Five-Year Plan quota 2,000 more Powerloom permits have been allotted by Government of India for installation in the Handloom Weavers Co-operative Societies in the Sixth Plan period. Out of 2,000 Powerlooms 1,450 powerlooms in 11 powerloom projects and 550 Powerlooms in individual handloom W. C. S. are expected to be installed by the end of Sixth Plan period.

24.85. Though the Powerloom Industry as a whole has not been able to make much headway in the State there is excellent potential for development of Powerlooms. As per a study conducted in 1979, it was revealed that the Powerloom and mills made fabrics worth Rs. 51.6 crores sold annually in the State. Against this, the actual production of fabrics in the State in the Powerloom sector is worth Rs. 30.6 crores. Thus, there is scope to fill up the gap within the State. Given the required infrastructural facilities, financial support in adequate measures and the proper technological guidance to the Powerloom Entrepreneurs there is no doubt that the fledgling Powerloom Industry of the State will be able to catch up with the comparatively developed State like Maharashtra and Gujrat, etc. The growth of Powerlooms would not only go a long way to make the State self-sufficient in production of fabrics, it would also have spin off effects for rural industrialisation and creation of employment and income generation potential in the rural and semi-urban areas. Therefore, the State Government have accorded priority to the development of Powerloom during the Seventh Plan period. To accelerate the pace of growth of the Powerloom Industry it is imperative to improve working condition of the existing primary societies by providing adequate share capital assistance to avail of sufficient working capital loan from the financing institutions for full capacity utilisation in three shift working. Also the State Powerloom Society has to be adequately bolstered up financially as well as technologically to shoulder the responsibility for supplying raw materials and sized beams to the Powerloom in the Co-operative Sector for boosting their production and efficient marketing of the fabrics produced by them. Adequate technological know how has to be disseminated among the individual entrepreneurs as well as the Powerloom Co-operative Societies through proper research, development and training activities.

24.86. Adequate [number of sizing units should be established to meet the requirement of sized beams which is the primary input for production of Powerloom fabrics. It is expected that by the end of Seventh Plan period 4,800 Powerlooms will work in the State. To run these powerlooms smoothly, supply of sized beams to Powerloom co-operative societies and individual entrepreneurs is essential. At present six sizing units consisting of old model slasher sizing mechanics are working in the State including two owned by the Orissa State Powerloom S. C. S., Ltd. These six units can provide sized beams to 1,200 Powerlooms. For the balance 3,600 Powerlooms it is expected that the entrepreneurs will make their own arrangement for about 2,000 looms. During the Seventh Plan period, it is suggested to install two sizing units of modern equipments to provide sizing facilities for 1,000 looms.

24.87. When all the 4,800 Powerlooms will operate in the State, the annual production would to the extent be to the extent of 1,728 lakhs, mtrs. At present, all the Powerlooms are producing plain cotton fabrics of similar pattern and facing keen competition. To make the units more viable diversification of production to shirting, suitings, art silk and industrial fabrics are required. It is, therefore, suggested to open a product development cell in the Orissa State Powerloom S. C. S. for diversification of production.

24-88. The Orissa State Powerloom S. C. S. has already availed a loan of Rs. 135 lakhs as cash credit loan from NABARD Orissa State Co-operative Bank Ltd., and invested the same in the business of primary Societies as well as in its own marketing arrangement. The Orissa State Co-operative Bank Ltd., is charging interest @ 9 per cent per annum. To make the fabrics more competitive in the State as well as outside the State, it is suggested to reduce the interest burden of the Orissa State Powerloom S. C. S. by allowing 3 per cent interest subsidy on the loan as available to Handloom W. C. Societies during the Seventh Plan period.

24-89. As far as the establishment of new powerloom projects in the State is concerned, the powerloom projects are being implemented in the handloom weavers co-operative societies and it is necessary to provide them with share capital to the required extent to avail of block finance from the financing institutions for implementation of the projects. The main object of promoting these projects are to engage the skilled weavers for productive purpose and augment their income. These projects can cater to the cloth requirements of middle and lower class families. The medium scale industries of this nature will also go a long way in accelerating the pace of industrial growth and generating many socio-economic benefits in the State. These projects will also give scope for setting up of a number of ancillary industries like cloth processing, calendaring dyeing and printing units. These projects will provide employment mostly to the lower strata of the rural population and improve the lot of handloom weavers in the State.

24-90. In the powerloom industry, the trained weavers are to weave modern and artistic designs of fabrics on powerloom. In order to train up the worker to acquire the skills; a training institute is working at Jagatpur in the district of Cuttack, where necessary training facilities are being provided to the powerloom weavers. These weavers are to be provided with necessary stipend for the training period. Period of training covers a duration of 3 months so that in a year four batches are trained in the institute. Such training facilities are also being provided by the Orissa State Powerloom S. C. S. Ltd. Cuttack in its primary powerloom societies on stipendary basis. To provide suitable accommodation to the trainees in the Institute at Jagatpur provision has been suggested in the Seventh Plan.

### Sericulture

24-91. Orissa ranks among the major non-mulberry silk producing States, Since tasar silk-worm rearing is the major economic activity of a sizeable number of tribals in the State. Development of sericulture particularly tasar programme has been one of the important planks of the strategy for development of Scheduled Tribes in the State. However, during the State Plan period the State Government accorded special priority to the sericulture industry taking into account its potential for employment as a major agro-based industry and as a tool for Rural development and upliftment of the economically weaker section of the society. The priority accorded to the development of Sericulture can be gauged from the fact that against the 5th Plan outlay of Rs. 35.00 lakhs this enhanced to Rs. 2.50 crores during the sixth plan period. While different facets of the tasar development programme including cooperativisation of the rears; supply of disease free layings, plantation of Host Plants, marketing of cocoons as well as development of reeling facilities were given due emphasis, particular emphasis was laid on development of Technological base for tasar Industry and expansion of the area under Host plants like Arjun and Asan and establishment of new Training-cum-production Centre to increase the reeling capacity and improving the quality of the products. A special mention may be made of raising of Arjun and Asan Plantation in about 2,500 hectares under the Inter-State tasar Development project which accounts for about 40 per cent of the total achievement of the Country as a whole.

24-92. A new dimension was added to the sericulture programme by introduction of Mulberry sericulture; Taking into account the excellent potential existing in the State for development of Mulberry Sericulture particularly in the hilly tracts of Koraput, Ganjam, Phulbani and Kalahandi districts,



a special Mulberry Development Programme known as "Ramgiri Project" in Ganjam District was launched with a view to covering 400 hectares under Mulberry plantation and providing gainful employment to 2,000 beneficiaries. This programme has got off to an encouraging start. So far 300 hectares have been covered under plantation and about 1000 farmers have been benefitted in various ways.

24-93. Till end of 1983-84, 61 Primary Tribal Tassar Growers Co-operatives have been organised covering 31,715 rearers, out of which 24,916 belong to Scheduled Tribes, 3,580 Scheduled Castes and 3,219 other economically backward classes. The tassar cocoon production annually has registered 65,000 Kahans providing scope to produce 65,000 Kgs. of tassar silk yarn of different varieties. The yarn quality has also been improved to compete in the market adopting modern techniques of cocoon processing and reeling and spinning by improved reeling and spinning Charkas. With gradual increase in the production of tassar cocoon by the tribals the Primary Tassar Growers Co-operatives have also been able to collect tassar cocoons from the growers to the extent of 47,000 Kahans of Rs. 94.00 lakhs at fair price with the help of Apex Tassar and Silk Co-operative Society even though the Tassar Silk yarn market continues in a down-ward trend since import of Chinese tassar silk being allowed at lower price. 20 tassar silk worm egg production centres established in tassar growing areas have expanded their grainage activities at the level of Primary Tassar Growers' Societies producing 15.00 lakh layings annually meeting the need of 15,000 rearers. 15 Tribal Tassar Reeling and Spinning Centres established, have imparted training to 537 tribals to take up such work in addition to their usual work of tassar silk worm rearing for augmenting the income of these tribal families. 6,200 acres of Asan and Arjun plantation have been taken up under various State Plan programme as well as Inter State Tassar Project to provide the facility of tassar rearing in intensive patches to 5,000 tribal and harijan tassar rearers to increase their productivity of tassar cocoons substantially.

24-94. To continue Eri-silk production which is subsidiary source of occupation for poor agriculturists, two Seed Production Centres worked on production of 20,000 disease-free-layings annually, which is multiplied to 90,000 layings in different production centres to meet the seed requirement of 1,500 growers. Eri-rearing has been taken up by 500 tribals in the districts of Keonjhar, Sundergarh, Phulbani, Koraput and Kalahandi in 20 new centres established during the Sixth Plan. The Eri cocoon production by 1983-84 has reached the level of 12,000 Kgs. providing part-time employment to 1,500 families.

24-95. To popularise Mulberry plantation and silk worm rearing for production of cocoons and silk yarn as a lucrative economic avocation, motivation programme has been taken up in areas of suitable climate in the State. 723 farmers including 571 tribals, 108 Scheduled Caste and 114 other weaker sections have covered 688 acres under Mulberry Plantation in their field under various State Programme for silk worm rearing. Infrastructures like six Mulberry Demonstration Farms with 100 acres of Plantation, two Seed Production Units, four Chawki Rearing Centres, three Silkworm Rearers' Co-operatives, three Reeling Establishments and one Farmers' Training Centre have been established by end of 1983-84 to assist these farmers. One Intensive Mulberry Project for production of superior grade silk in Tribal areas of Ganjam District covering 1,000 acres under Mulberry Plantation has started operating from 1983-84 after obtaining approval of Planning Commission. This Project will operate for 4 years to produce 17,000 Kgs. silk per annum with 50:50 matching assistance basis from the Central Silk Board and the State Government to develop infrastructural facilities in the areas in provide lucrative income to 2,000 rearers, realers and other workers. The cocoon production by 1983-84 has gone up to 20,000 Kgs. providing income to 400 beneficiaries in this Sector.

24-96. The Sericulture Programme in the Seventh Plan, therefore, assumes greater significance in the context of providing gainful employment to tribals and Scheduled Castes in general as well as other small and marginal farmers. Keeping in view the National Guidelines and policy of the

State Government to promote sericulture for larger employment opportunities in the Rural Areas as well as improving the economic-status of the existing rearers, the State Seventh Plan outlay on Sericulture is proposed to be raised to Rs. 500 crores. Consequently, the annual silk production which is expected at 100 lakh Kg. by end of Sixth Plan will increase to a level of 250 lakh Kgs. generating additional 25,000 man-years gainful employment.

24-97 The main thrust of the strategy for development of sericulture comprising mulberry, tassar and eri is on (i) increasing the area under Food Plants like Mulberry, Asan and Arjun, Castor etc., (ii) ensuring production of Disease-free silkworm eggs in respective areas in Seed Farms and Grainage as per the demand of the rears, (iii) providing adequate training facilities to the field staff as well as farmers, on plantation silkworm rearing and silk-reeling and spinning, (iv) formation of new co-operatives in the Mulberry Sector to integrate various activities, (v) consolidation of activities in the existing tassar co-operatives, (vi) establishment of Grainage and Chawkiworm Centres for distribution of young-age mulberry silkworms to the growers besides eggs, (vii) establishment of development and Technical Service Centres to adequately cater the need of mulberry silkworm rearers, (viii) establishment of reeling-cum-twisting centres to process quality silk yarn and (ix) development of processing units for silk yarn and fabrics besides increasing the marketing activities both at Primary & Apex Silk Co-operative Society level for timely disposal of the silk cocoons and silk products

24-98. Accordingly, it is proposed to cover 10,000 acres mulberry, 2,500 acres Asan and Arjun and 10,000 acres castor plantation under State Sericulture Programme. Besides, it is envisaged to achieve additional coverage of 15,000 acres mulberry and 75,000 acres of Asan and Arjun plantation with infrastructural facilities being available under IRD/ITDP etc. separately. The silkworm eggs production is aimed at 100 lakhs disease free layings in the mulberry so also 30 lakhs in tassar and 200 lakhs in eri programmes. 5,000 rearers and 350 staff are proposed to be trained on various sericultural activities. 30 Mulberry Growers-cum-Reelers Co-operatives will be organised newly, with facilities for grainage, Chawki worm rearing and reeling of cocoons for catering the members to earn on production of cocoons and silk yarn. Nine Development-cum-Technical Service Centres will be established to extend all facilities to the mulberry growers as well as Co-operatives. 30 cottage basins of 12 basin capacity each and two Mini filatures of 50 basin capacity each will be established in the Co-operative Sector with proportionate twisting facilities to process mulberry cocoons to varieties of yarn. 40 Cocoon Market for Mulberry Sector will be organised by the Apex Tassar and Silk Marketing Society and Primary Mulberry Growers Co-operatives to take care of marketing of cocoons and yarn. Besides strengthening of organisation set-up in the Sericulture Sector, as a whole, is proposed for. Financial resources for the purpose is proposed to be met from State Plan provisions, Special Central Assistance for Tribal, and Harijan, Central Silk Board matching assistance, grant under IRD/ITDP/NREP/TRYSEM besides Institutional loan. N. C. D. C. assistance to the Co-operative Sector will also be availed according to norms decided from time to time.

24-99. To facilitate the launching of the mulberry programme in a big way in a non-traditional State like Orissa, it is essential to re-structure the organisational set-up for shouldering this additional work load. At present this programme is being implemented at the Directorate level. But, in the process, a lot of bottlenecks are experienced. Due to the cumbersome procedures regarding drawal of funds from the Government treasury and other difficulties, it would not be possible to push through the big programme with the desired speed, efficiency and vigour. A large scale mulberry programme is regarded a bankable proposition on the basis of certain stipulated techno-economic norms. Hence, it is necessary to adopt a project approach for smooth implementation of this programme. This is the prevailing practice now in leading mulberry producing States like Karnataka, Tamilnadu, Andhra Pradesh and U. P. etc. The whole programme has, therefore, to be conceived as an integrated project consisting of a number micro projects at the field level. It is, therefore, proposed to form an integrated project authority to ensure smooth implementation of the

mulberry development programme. The formation of such an autonomous body would also be quite helpful in attracting institutional finance from sources like OSFC, IDBI etc. This project will function under the Directorate and be manned by suitable officers having technological, managerial and marketing abilities to remain in charge of different components of the programme. The total outlay for the Seventh Plan has been calculated to be Rs. 500.00 lakhs, out of which the annual plan for 1985-86 is Rs. 50.00 lakhs only due to paucity of funds.

#### **Export Promotion and Marketing**

24.100. Directorate of Export Promotion and Marketing extends marketing support to Small Scale Industries and promotes export of their finished products abroad. In view of the rapid Industrialisation programme of the State, it is expected that a large number of medium and large industries in the public sector, private sector and joint sector will come up in the near future. They in their turn will provide scope for development of ancillary Small Scale Industrial units. This will call for considerably strengthening of the Directorate to provide adequate marketing assistance. The programmes like Quality Control and Inspection, Marketing support to Small Scale Industries, Export Promotion and Publicity, Research, Market Intelligence and Statistics etc. are proposed to be adequately enlarged with closer liaison with D. G. S. and D. to meet the anticipated additional services needed.

24.101. It is proposed to set up of an export development corporation to boost up the activities in the Seventh Plan, other programmes include undertaking an export promotion drive, setting up a trade centre which will act as the focal point where necessary technical and sales promotion guidance would flow to the Small Scale Industrial Units of the State, taking up budget analysis for guiding S. S. I. units in their production phasing and building up of the data base for market intelligence. It is estimated that for the objectives in view, a sum of Rs. 165.00 lakhs would be needed during the Seventh Plan period and Rs. 26.00 lakhs during 1985-86.

## CHAPTER - 25

## MINERAL DEVELOPMENT

25.1. The State is endowed with vast mineral resources and has the distinction of leading the country in production of several minerals like iron ore, chromite, lime stone and dolomite. Minerals are one of the important contributors to the State's economy. In the direction of achieving an accelerated economic growth, the main thrust during the Seventh Plan in the mineral development programmes will be on the following activities namely, (1) Application of modern techniques including remote sensing for exploration and assessment of the mineral resources of the State, with emphasis on proving of coal reserves (2) Exploration, assessment, development and utilisation of minor mineral resources with a view to augmenting the resources of the State as well as providing employment opportunities to weaker sections of the society. (3) Exploratory mining of small deposits in interior areas by labour intensive techniques to generate employment opportunities and thereby promote economic activity in tribal areas (4) Determination of geotechnical parameters required in connection with location of sites for industrial projects, dams, reservoirs etc. (5) Development of artesian aquifers for meeting the needs of drinking water, industry and agriculture (6) Continuing investigations for utilising low grade ore and minerals, recovery of valuable minerals from mine wastes and overburden and optimum utilisation of minerals ores extracted so as to optimise conservation of the scarce and finite resources, (7) Systematic study of the environmental problems in mining areas and the likely impact of increase in mining activities on environment and implementation of measures for harmonious mineral development activities, (8) study of geothermal energy potential of the ground water in artesian condition in Talcher Coalfield. (9) Determination of physical, chemical, mineralogical characteristics of minerals, ores, rocks and assessment of their industrial utilisation potential by instrumental methods, (10) Toning up of administration to check and prevent unauthorised mining, optimise collection of mining revenue, simplification of procedures for speedy disposal of mineral concession applications and (11) Training of personnel for different levels with emphasis on modern techniques.

25.2. The mineral sector is expected to contribute a sum of about Rs. 59 crores to the State exchequer during the Sixth Plan. The additional resources to be generated during the Seventh Plan are estimated to be of the order of Rs. 62 crores whereby the total revenue from this sector would be more than double during the Seventh Five Year-Plan.

25.3. Many important achievements have been recorded in the field of mineral development during the Sixth Plan period at the end of 1983-84. Under Mineral Exploration notable achievements are (i) proving of 165 million tonnes of coal in Ib valley coalfield and 951 million tonnes in Talcher coalfield, (ii) proving of 7.44 million tonnes of Chromite and 0.9 million tonnes of Nickeliferous Limonite (of average 1 per cent Ni) in Sukrangi block Sukinda Valley in Cuttack district, (iii) discovery of chromite deposit in Nilgiri subdivision of Balasore district, (iv) providing of 58 million tonnes of Cement and B. F. grade lime-stone in Malkangiri subdivision, 14 million tonnes of superior grade limestone in Sunki valley of Koraput district and 10 million tonnes cement grade lime stone in Khatkurbahal block of Sundargarh district (v) discovery of Lime stone deposits in parts of Balangir and Kalahandi districts (vi) proving of 226 tonnes Tin ore in Mundaguda area of Malkangiri Subdivision, Koraput district, (vii) proving of 2.4 million tonnes of Fireclay in Banki and Athagarh Subdivision of Cuttack district, (viii) delineation of graphite bearing areas in parts of Phulbani, Koraput and Dhenkanal districts, (ix) delineation of suitable blocks of minor minerals in different parts of the State for development and (x) establishment of artesian aquifer over an area of 20 sq. kms. in Talcher Coalfield.

25.4. Under Mineral exploitation and administration the achievements worth mentioning are (i) the total receipts from the mineral sector are expected to touch Rs. 59 crores during the 6th plan period as against Rs. 48.50 crores achieved during the preceding 15 years (ii) Following proving of

Tin ore deposits in Mundaguda area of Koraput district and delineation of areas containing precious stones in the districts of Balangir and Kalahandi, Orissa Mining Corporation Ltd., were entrusted to take up exploratory mining in these areas.

25.5. Under Mineral development, the important progress during the Sixth Plan are (i) for systematic administration and development of the vast minor mineral resources of State, steps were taken for assessment and develop of the resources. For the first time, a set of rules were framed and enforced for administration of minor minerals, (ii) Mineral potential survey was carried out in connection with establishment of rail links between Talcher and Sambalpur, Koraput and Rayagada (iii) Funds were provided for development of roads serving the chromite mining areas of the State, (iv) The Directorate was actively associated for promotion of export of ores and minerals, establishment of mineral-based industries including thermal power plant.

25.6. The investigations taken up by the Research Laboratory of the Directorate during the Sixth Plan were, (i) detailed studies on washability characteristics of chinaclay samples of Joshipur area, Mayurbhanj district, (ii) separation of tin ore (Cassiterite) from samples of heavy mineral concentrates of Mundaguda area, Koraput district (iii) determination of rare elements associated with pegmatites of Koraput district and (iv) assessment of rare elements in limestone and other rocks in Sunki valley, Koraput district.

#### **Seventh Plan Programmes**

25.7. For the Seventh Plan Programmes and outlay of Rs. 22.80 crores has been proposed which included an outlay of Rs. 4 crores for spill-over schemes. The spill over schemes include a payment of Rs. 2.80 crores towards the balance equity capital for the Charge chrome project of Orissa Mining Corporation and Rs. 1.20 crores for completing on-going building projects of the Directorate of Mining and Geology. For the schemes of the Directorate Rs. 12.00 crores has been proposed and Rs. 10.80 crores has been suggested for investment in the Orissa Mining Corporation for its Plan schemes. Schemewise details are shown in statement GN.-2.

25.8. The Directorate deploys a number of machineries, drilling rigs, vehicles for mineral investigation programmes. A number of Weighbridges have been installed in the mining areas of the State for the purpose of assessment of royalty and cess. Some of these have already become due for immediate replacement. In order to carry on activities at the current level and for implementation of the projects proposed to be taken up, the replacements have to be effected during the early part of the Seventh Plan Period. The total cost of replacements has been worked out at Rs. 1.14 crores. With this outlay, it is proposed to replace Drilling rigs 5 Nos., Jeep, Car and Pick-up Van 12 Nos., Trucks 3 Nos., Pumping sets - 14 Nos., Tractors-2 Nos., Weighbridges 5 Nos and Tankers, Trailors etc. 10 Nos. besides tentage, survey, camp and field equipments. Provision has been made for the above replacements under appropriate schemes.

#### **Integrated Mineral Resources Survey**

25.9. One of the important functions, objectives and responsibilities of the Directorate of Mining and Geology is comprehensive exploration and assessment of the mineral potential of the State, which constitutes the basis for mineral development. As a result of geological mapping undertaken by the G. S. I. and investigations carried out by the Directorate of Mining and Geology about 15,000 sq. Kms. of potential mineral bearing areas have been indentified in different parts of the State for exploration coverage in 1 : 25,000 and larger scales. Out of this, a total area of 9,500 sq. kms. would be covered during the Seventh Plan period. The programme in brief, includes, interpretation of satellite imageries and aerial photographs, stream sediment, geochemical, mineralogical and radiometric survey, preparation of geological and metallogenic map in 1 : 25,000 and larger scales, detailed exploration of selected target areas by means of drilling, trial excavation and exploratory mining.

25.10. The programme will also include specific mineral investigations on project scale, like, (1) Integrated programme of exploration and assessment of graphite resources of the State in collaboration with the Geological Survey of India, (2) Investigation for strategic minerals in different parts of the States, (3) Assessment of resources of fireclay in Cuttack, Puri, Dhenkanal, Sambalpur and Sundargarh districts, (4) Detailed assessment of limestone resources in the districts of Balangir, Kalahandi, Sundargarh and Koraput, (5) Detailed investigation for chromite in Dhenkanal and Keonjhar districts, (6) Investigation for base metals by geophysical and geochemical methods followed by trial excavation and drilling in parts of Sundargarh district, (7) Integrated programme of assessment of Asbestos resources in the State in collaboration with the G.S.I., (8) Investigation for gold and associated metals in Mayurbhanj and Koraput districts by means of geochemical survey, trial excavation and drilling, (9) Proving of reserves of iron ore of sponge iron grade in the district of Keonjhar, (10) Exploration for refractory and chemical grade bauxite, (11) Investigations for Ceramic, glass and refractory minerals and (12) Exploration of the beach sands for recovery of valuable mineral constituents.

25.11. In order to implement the programme outlined above, the survey units in the field and Zones have to be augmented, decentralized and re-organised for better output. The scheme will be headed by an Additional Director, who would be assisted at the field level by three Regional Joint Directors. The regional headquarters will be located at Keonjhar, Sambalpur and Koraput. The existing Zonal survey units will be augmented by three more zones to be located at Baripada, Sundargarh and Bhawanipatna. Each of the regions will be fully equipped to take up geological investigations and laboratory studies required for complete resources assessment. Provision has been made for replacement as well as for acquisition of new rigs and vehicles. The outlay includes one borehole logger and instruments for equipping a Remote Sensing Cell.

#### **Geotechnical Investigation**

25.12. Under this scheme investigations relating to, (a) Ground geophysical survey for graphite, chromite, base metals and ground-water, (b) Hydro-geological survey in parts of Talcher coalfield, (c) Geotechnical investigations in irrigation projects and Geomechanical studies in Sukinda chromite field will be undertaken. The investigations will involve drilling, aquifer performance tests, well-field construction, slope stability studies and laboratory investigations. It would be necessary to create a post of Senior Geophysicist, one Senior Geologist and drilling personnel for taking up the above investigations. Provision has been made for purchase of a Truck-mounted drilling rig suitable for ground-water survey and geophysical survey instruments.

#### **Exploration and Development of Coal Resources**

25.13. The approach to Seventh Plan gives considerable emphasis for development of coal resources in the context of augmenting generation of power. A step up in production from 152 million tonnes projected in 1984-85 to about 230 million tonnes in 1989-90 is envisaged. This will call for additional exploration efforts to explore and assess reserves of power grade coal within quarriable limits. In this context, it has been decided to take up detailed assessment of coal resources in both Talcher and Ib., valley coalfields on behalf of the Coal India Ltd. The programme will mainly comprise about 50,000 metres of drilling and analysis of 15,000 coal ore samples. The scheme will yield a revenue of about Rs. 2 crores during the Seventh Plan period.

25.14. Considering the magnitude and importance of the scheme, it is proposed to create a post of Joint Director who will remain in overall charge of the entire operations. He will be assisted by three Senior Geologists, a Deputy Drilling Engineer, six Geologists and other supporting technical personnel. Provision has been made for purchase of two additional drilling rigs and other equipment.

### **Environmental impact assessment in mining areas**

25.15. Mining operations cause pollution and degradation of environment to varying extent, depending on the nature of operations. The advance impact of mining on environment may be due to pollution of air and water, deforestation, despoliation of land, noise and vibration of the ground. Besides, mining operations at times lead to displacement of habitant. Mining can not be a threat to environment if the likely adverse impacts are assessed in advance and appropriate measures are taken for post-mining reclamation of land and aforesation. For implementing effective environmental safe-guards, if it necessary to undertake environmental impact assessment of the important mining areas of the State. The mining areas of the State which contribute to more than 80 per cent of the total production of minerals and ores comprise of Sukinda chromite belt, Talcher coalfield, Joda-Barbil-Koira Iron and manganese ore mining areas, Bramitrapur lime stone and dolomite mining area, Ib valley coal and fireclay, Boule-Noasahi chromite mining areas, Gorumahisani-Badamphar-Joshiapur Iron and chinaclay mining area. During the Seventh Plan period, environmental impact assessment will be carried out in respect of the chromite mining area in Sukinda, Talcher coalfield, Ib valley coalfield and Joda-Barbil-Koira iron and manganese ore mining area. The programme will be undertaken by two Senior Geologists and other technical personnel under a Joint Director in collaboration with the Department of Science, Technology and Environment.

### **Development and administration of minor minerals.**

25.16. A beginning has been made to survey and assess the minor mineral resources of the State. Preliminary examination of rock samples has indicated suitability for building and construction purpose and also for use as ornamental stones. There is good prospect for export of minor minerals and thereby earning valuable foreign exchange for the country. Rules have been framed for administration of moiror minerals, under overall technical supervision of the Directorate of Mining & Geology. The programme during the Seventh Plan will include delineation of blocks for quarry development, extraction, cutting and polishing of stones to different sizes and shapes. For this purpose, it would be necessary to establish experimental stone cutting and polishing unit. For assessment and collection of revenue from minor minerals, the set-up in the field and at headquarters has to be organised under a Joint Director. Necessary field personnel will be provided in different circles. The scheme will yield a revenue of about Rs. 5 crores during the Seventh Plan period. The estimated revenue from minor minerals during 1985-86 is expected to be of the order of Rs. 1 crore.

### **Strengthening of Mineral Administration**

25.17. This is the main revenue earning scheme of the Directorate. The thrust will be to tone up and streamling the existing administrative set up in the field level with a view to preventing unauthorised extraction and transportation of minerals and ores, updating assessment and optimising collection of mineral revenue including cess on royalty. For this purpose, it has been proposed to open a new Circle Office in Phulbani and to strengthen the existing mineral administrative units. Three mobile squads will be provided in important mining belts of the State to check unauthorised mining during the Seventh Plan period. Replacement of Five lorry weighbridges has been proposed.

### **Mineral Economics and Intelligence**

25.18. Mineral Economics play an important role in mineral development and planning. It is absolutely essential that this aspect forms apart of the overall activities of the Directorate of Mining & and Geology. The functions of the proposed Mineral Economics and Intelligence Cell will be as follows :—

- (a) For continuous acquisition of information about the resources and grade of mineral deposits in the State and country and also in other countries of the world it may be desirable to document the information commoditywise.

- (b) Availability of infrastructure facilities.
- (c) Feasibility of mining, nature of treatment, handling of the product, transportation, disposal of waste, feasibility of recovery of valuable minerals from the waste.
- (d) Costs involved for development of the mineral property and whether the product can be sold at a profit.
- (e) Demand indigenous and export.
- (f) Fiscal levies and mining legislation.
- (g) Elements of railway freight components of f.o.b.t. cost and c.i.f. cost as compared to those of competition suppliers.
- (h) Changes in technology necessitating change in specifications - consumption trends by the industries at home and abroad.
- (i) Prospects of utilising low grade ores.
- (j) Strategic considerations, stockpiling, restricting export of certain ores & minerals.
- (k) Comprehensive statistics about production, sale, cost of production, productivity of minerals and ores in the State, country and abroad.

The Cell will be headed by a Mineral Economist and he will be assisted by necessary supporting personnel. Provision has been made to procure a Desk Computer for compilation, storage and retrieval of information pertaining to mineral intelligence and statistics.

#### **Development of Infrastructure**

25.19. Development of infrastructure is an essential pre-requisite for mineral development. The Seventh Plan gives considerable emphasis for development of infrastructure facilities to improve productivity and for removing constraints in the way of free flow of minerals and ores to the consuming centres, ports and railheads. One of the urgent needs of the mining industry in the State is good roads. During the Seventh Plan period it is proposed to develop roads in some of the important mining areas of the State. The investment to be made for development of the roads can be recouped by imposition of toll. The scheme will be administered by a Deputy Director.

#### **Planning and Monitoring Cell**

25.20. The Planning Commission has insisted for adequate planning and monitoring by the development oriented organisation. Although the Directorate has been implementing plan programmes since the second Five-Year Plan, a planning & Monitoring Cell is yet to be provided in the Directorate. It has become absolutely necessary to create a Planning & Monitoring Cell in view of considerable increase in mineral development activities in the State and consequent involvement of the Directorate in all such mineral development processes right from the conceptual stage to the stage of commissioning. Besides, the Directorate will be taking up a large number of mineral investigation projects during the Seventh Plan period. Government have prescribed a number of returns and periodical reports which are required to be submitted at frequent intervals. All these call for urgent creation of a Planning and Monitoring Cell under the direct supervision of a Senior Officer of the rank of Joint Director. He will be assisted by required personnel.

#### **Strengthening of Headquarters Organisation**

25.21. Commensurate with the increase in mineral development activities and taking up of new development oriented, productive, science and technology schemes and programmes for environmental impact assessment, it would be necessary to strengthen the set up at headquarters of the Directorate



during the Seventh Plan period. Adequate provision has to be made for training of technical personnel in different disciplines. The Directorate will have larger interaction with number of departments and organisation of the Government of India with a view to promoting mineral development in the State. All these will call for suitable strengthening in the set-up of the Directorate at headquarters. The proposal involves creation of a post of Additional Director to remain in overall charge of the mineral administration in the State and to oversee the schemes of Mineral administration, Development and administration of minor minerals, Mineral economics and intelligence and development of infrastructure.

### **Mineral Research**

25-22. One of the important functions of the Directorate is to carry out investigations for utilising low grade ores and minerals, recovery of valuable minerals from mine waste and overburden, optimum utilisation of minerals and ores extracted so as to optimise conservation of our scarce and finite resources. It is proposed to take up studies for determination of physical, chemical and mineralogical characters of minerals, ores, rocks and assessment of their industrial utilisation potential. The Science and Technology programmes include study of geothermal energy potential of the ground water in artesian condition in Talcher coalfield. Other S. & T. programmes proposed to be taken up include— (a) examination of the possibility of utilising carbonaceous shales in brick making (b) utilisation of wad as colouring material for bricks and tiles, (c) recovery of germanium from coal ash and gallium from bauxite and (d) utilisation of calcareous shales extracted as overburden in the course of mining of limestone, as flooring wall and roofing material. Some of the schemes will generate employment opportunities as well as help in introducing new uses in our construction activities besides helping utilisation of waste products. The scheme will be under the charge of a Mineral Technologist who would be assisted by an Ore Microscopist, Scientific Officer and other complementary technical personnel. Provision has been made for purchase of equipment and instruments for instrumental analysis.

### **Control Laboratory**

25-23. The Directorate is having four chemical laboratories in different parts of the State for analysis of ores and minerals. To ensure accuracy in analytical results and standardization in analytical procedures, there is need to set up a Control Laboratory at headquarters. Besides, the control laboratory will have facilities for analysis of clay and refractory minerals and minerals used for manufacture of glass and ceramics for which facilities are not yet available. The control laboratory will be equipped with facilities for testing of physical properties of rocks required in connection with engineering geology investigations. The laboratory will be headed by a Chief Chemist who would be assisted by Chemist and Assistant Chemists. Provision has been made for purchase of instruments required for analysis of ores and minerals and also for determination of physical characters of rocks among others.

### **Building Programmes.**

25-24. During the Seventh Plan period it is proposed to provide housing accommodation to about 60 per cent of the field employees of the Directorate located in far-flung areas of the State. Besides, it would be necessary to provide a few essential office building. The total outlay proposed for building projects is Rs. 2.40 crores which include Rs. 1.20 crores required for completion of the on-going building projects.

### **Science and Technology Component**

25-25. An outlay of Rs. 12.00 lakhs has been proposed for the schemes of the Directorate of Mining & Geology during the Seventh Plan period. The Science and Technology component works out to Rs. 7.31

lakhs. The corresponding Science and Technology component during 1985-86 is Rs 1.40.25 lakhs out of the total provision of Rs.2.50 lakhs. The break-up is as follows :

Scheme	Outlay (Rs. in lakhs)	
	1985-90	1985-86
Integrated mineral resources survey	4.39.00	60.00
Geotechnical investigations	53.00	22.00
Exploration & development of coal resources.	1.62.00	46.00
Environmental impact assessment in mining areas.	13.00	2.75
Mineral Research	48.00	6.50
Control laboratory	16.00	3.00
Total:	7.31.00	1.40.25

25.26. The following is a summary of the targets proposed on important items of work during the Seventh Plan period and in 1985-86.

	Seventh Plan	1985-86
Satellite Imagery Analysis	50,000 Sq.kms	5,000 Sq.kms
Photogeological Interpretation	9,500 Sq.kms.	2,000 Sq.kms
Geological mapping	15,000 Sq.kms	1,500 Sq.kms.
Geochemical soil sampling	50,000 Nos.	8,000 Nos.
Drilling	95,000 metres	16,000 metres
Trial excavation	60,000 cu.m.	10,000 cu.m.
Analysis of coal & check samples	20,000 Nos.	2,800 Nos.
Processing of Mineral Concession applications	1,500 Nos.	300 Nos.
Mining Revenue	Rs.59.00 lakhs	Rs.7.62.00 lakhs
Drilling charges	Rs.2.00 lakhs	Rs.30.00 lakhs
Revenue from minor minerals	Rs.5.00 lakhs	Rs.1.00 00 lakhs
Revenue on account of cess on royalty	Rs.55.00 lakhs	Rs.6.50 00 lakhs

#### Schemes of the Orissa Mining Corporation Ltd. (OMC)

25.27. During the Sixth Plan period, a sum of Rs.6.52 crores was provided towards share capital contribution to the O. M.C. Ltd. for funding the Charge Chrome Project. The balance equity share of Rs 2.80 crores needed for completion of the Charge Chrome Project has been proposed to be provided during 1985-86 Annual Plan.

25.28. The Corporation has proposed to implement the following new projects during the Seventh Plan period—

Project	(Rs. in Crores)	
	Investment	Equity component
1. Development of Dimension Stones	1.00	0.34
2. Calcined Lime	3.70	1.24
3. Mini Cement	2.50	0.84
4. Beneficiation of Chrome ore	3.02	1.02
5. Establishment of Chinaclay washing plant	2.40	0.80
6. Processing of iron ore of khandbandh	1.83	0.62
7. Calcination of Bauxite	1.90	0.64
8. Graphite beneticiation	1.20	0.40
9. Electrolytic Manganese Metal & Dioxide	18.00	6.00
10. High Carbon Ferrochrome Project	18.00	6.00
<b>Total</b>	<b>53.55</b>	<b>17.90</b>

Out of the above, preliminary work has already been initiated by the Corporation for development of— (a) dimension stones, (b) beneficiation of chrome ore (c) establishment of a china clay washery and (d) processing of iron ore in khandbandh Mine for supply of sponge iron ore grade to IPITATA. Government of India have been moved to issue letter of intent for manufacture of 100 ton per day capacity cement plant, 3000 ton per year electrolytic manganese metal, 3000 tons per year EMD and 12,000 tones per year high carbon ferro-chrome. The total investment for all these projects during the Seventh Plan period will be of the order of Rs.53.55 crores. The equity component will be Rs 17.90 crores. O.M.C. Ltd. expects to generate internal resources to the extent of Rs. 9.90 crores. Proposition has been suggested for an outlay of Rs.8 crores towards the balance equity capital needed for funding the projects. A brief description of the projects are enumerated below.

#### Development of dimension Stones

25.29. The scheme is predominantly labour intensive and will be implemented in tribal areas of the State. The employment generation will be around 1,000 during the plan period. The investment comprises procurement and installation of cutting and processing equipment. The dimension stones are earmarked entirely for export.

#### Calcined Lime

25.30. It has been proposed to set up a 30,000 TPO lime calcination plant in Koraput district. The product will be sold entirely to NALCO for use in their Alumina Plant near Damanjodi. The total outlay will be of the order of Rs. 3.70 crores. The complex comprising mining and plant operations will provide employment to about 200 persons.

### **Mini Cement**

25.31. It is proposed to set up a 100 TPD cement plant in Koraput district based on the limestone deposits available in the leasehold areas of OMC. For this purpose, adequate reserves of limestone have already been provided and the block to be developed has been identified. The plant and the mining complex will provide employment to about 300 persons. The outlay is estimated to be Rs. 2.50 crores.

### **Beneficiation of Chrome ore**

25.32. Preliminary work has already been taken up setting up in a 500 tpd chrome ore beneficiation plant in Sukinda area in the district of Cuttack. The scheme envisages utilisation of lowgrade and sub-grade chrome ore for ultimate use in the industries and for export. The total investment will be of the order of Rs. 3.02 crores. The beneficiation plant complex will provide employment to about 150 persons, besides serving one of the important objectives of the Seventh plan i.e. conservation of scarce mineral resources.

### **Establishment of a Chinaclay Washing Plant**

25.33. OMC has already initiated steps to set up a Washing Plant to process about 50,000 tonne of Crude clay per year to produce ultimately about 20,000 tonnes of washed and refined clay. The latest technology available to produce quality clay conforming to the export specifications will be adopted for this plant. The scheme will generate employment to about 500 persons. The total investment will be of the order of Rs. 2.40 crores.

### **Processing of iron ore at Khandbandh Mine**

25.34. The programme involves processing of about 120,000 tonnes high grade iron ore to be produced in Khandbandh mine of OMC for supply to the Sponge Iron Plant of IPITATA. The outlay needed is Rs. 1.83 crores. The scheme will provide employment to about 400 persons.

### **Calcination of bauxite**

25.35. The scheme involves calcination of bauxite for export purpose. An investment of Rs. 1.90 crores has been proposed.

### **Beneficiation of graphite**

25.36. A scheme to beneficiate low grade graphite has been taken up. It is proposed to beneficiate materials containing as low as 10-12 per cent F. C. to over 90 per cent F. C. for utilisation in industries within the country and abroad. The investment is estimated to the order of Rs. 1.20 crores.

### **Electrolytic manganese metal and electrolytic manganese dioxide**

25.37. OMC has already approached Government of India for letter of intent for setting up 3,000 TPY EMM and 3,000 TPY EMD based on manganese ore produced by OMC from its own mines. The total outlay needed for establishment of the plants is Rs. 18 crores. The entire products will be exported.

### **High Carbon ferro-chrome**

25.38. It is proposed to set up facilities for production of high carbon ferro-chrome by the latest process involving energy savings. A sizeable portion of the production will be exported and some quantity will be utilised for stainless steel production in the country. An investment of the order of Rs. 18 crores has been envisaged.

## CHAPTER 26

## ROADS AND BRIDGES

**Road Development Programme ( R. D. P. )**

26.1. The All India average of surfaced roads is 20.0 Kms. per 100 Sq. Km. area. Against this Orissa has only 10.1 Kms of surfaced roads for 100 Sq. Km. of area. Orissa has only 60.9 Kms. of surfaced roads against the All India average of 98.2 Kms. per lakh of population. The deficiency has to be made good by stepping up of the activities under Road Development Programme.

26.2 The level of funding under the road sector from the Third Year Plan onwards is indicated below:—

Period	Plan allocation under R. D. P.
1961—66 (Third Plan)	Rs. 20.74 Crores
1969—74 (Fourth Plan)	Rs. 11.17 Crores
1974—78 (Fifth Plan)	Rs. 8.81 Crores
1980—85 (Sixth Plan)	Rs. 52.25 Crores

26.3. It may be seen from the above that during the Third Plan period the plan allocation was about Rs. 20 crores. It was contemplated that during the Fourth Plan period, the allocation will be doubled over the Third Plan. Accordingly a number of new projects were included in the Fourth Plan Programme and works started. But only 55 per cent of the allocation of the Third Plan was received during the Fourth Plan period and a number of projects remained incomplete at the end of Fourth Plan. Similarly, the Fifth Plan allocation was further reduced to about 70 per cent of the Fourth Plan allocation. The Sixth Plan allocation under R. D. P. is of the order of Rs. 52.25 crores. This provision of funds also under roads sector falls far short of the minimum requirement. The importance of road communication which is vital to the growth of the economy, needs further emphasis. However, it would be found that resource availability on road sector in our State has been rather low from the inception of the First Five Year Plan.

26.4. Considering the importance of the road communication sector, the State Government have formulated the Sixth Plan Programme to achieve the following objectives :

- (1) To complete the spill over works.
- (2) To connect the subdivisional Headquarters with their respective district Headquarters.
- (3) To connect Block and Tahasil Headquarters with their respective Subdivisional Headquarters.
- (4) To connect villages having population of 1500 and above and cluster of villages with all-weather roads.

26.5. Improvement of roads are being undertaken by the State Works Department with funds made available under Road Development Programme, Minimum Needs Programme and Special Central Assistance under the State Sector. During the first four years of the Sixth Plan (1980-81 to 1983-84), an amount of Rs. 2,591.78 lakhs was made available out of the Sixth Plan outlay of Rs. 5,225.00 lakhs under R. D. P., the yearwise break up of which is as follows :—

Year	Allotment made (Rs. in lakhs)
1980-81	496.76
1981-82	690.00
1982-83	670.00
1983-84	735.00

The balance outlay for the remaining one year of the Sixth Plan was Rs. 2,633.22 lakhs out of which only Rs. 1,000.00 lakhs has been provided as plan allocation under R. D. P. during 1984-85.

26.6. During the years 1980-81, 1981-82, 1982-83 and 1983-84 111, 141, 172 and 170 numbers of projects respectively were taken up. The target and achievements made during the said four years were as follows :—

Table 26.1

	1980-81		1981-82		1982-83		1983-84	
	Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement
1. Completion of bridge projects.	11 Nos.	8 Nos.	12 Nos.	7 Nos.	9 Nos.	7 Nos.	14 Nos.	14 Nos.
2. Bridge in progress	27 Nos.	22 Nos.	23 Nos.	21 Nos.	42 Nos.	34 Nos.	37 Nos.	37 Nos.
3. Completion of culverts.	21 Nos.	8 Nos.	18 Nos.	18 Nos.	6 Nos.	6 Nos.	..	..
4. Completion of causeway.	1 No.	1 No.	3 Nos.	1 No.	1 No.	..	..	..
5. Metalling of Roads.	49 Kms.	48 Kms.	52.50 Kms.	83.37 Kms.	66.50 Kms.	53.35 Kms.	14 Kms.	14 Kms.
6. Black topping.	55.25 Kms.	21 Kms.	67.60 Kms.	36.81 Kms.	43.50 Kms.	47.75 Kms.	35 Kms.	35 Kms.
7. Earth work on road formation.	10.60 Kms.	10 Kms.	54.60 Kms.	52.00 Kms.	33.50 Kms.	26.50 Kms.	..	..
8. Sub-base (completion)	..	..	..	..	..	..	1.20 Kms.	1.20 Kms.
9. I. B. (completion).	..	..	..	..	..	..	2 Nos.	2 Nos.

26.7. During the year 1984-85 the Plan allocation under R. D. P. is Rs. 1,000.00 lakhs out of which Rs. 65.00 lakhs has been provided for construction of bridges by the Orissa Bridge Construction Corporation Limited. 160 numbers of roads and Bridge Project have been included in the current year's programme with the balance outlay of Rs. 936.00 lakhs, out of which 156 numbers are spill over works of previous years, 3 new works and one project which was taken up under special central assistance during 1982-83. The physical target for the year 1984-85 and achievements by the end of September, 1984 is as follows:—

Table 26.2

	Target	Achievement by the end of September, 1984
1. Completion of bridge projects.	25 Nos.	Bridge completed - 11 Bridge in progress - 12
2. Bridge in progress	.. 32 Nos.	Bridge completed - 1 No. Bridge in progress - 13 Nos.
3. Metalling of roads	.. 21.50 Kms.	5.00 Kms.
4. Black topping	.. 20 Kms.	4 Kms.
5. Sub-base (completion)	.. 2.00 Km.	2 Kms.
6. I. B. (Completion)	.. 2 Nos.	1 No. completed.

26.8. The Plan allocation under R. D. P. during the Seventh Plan has been proposed for Rs. 12,000.00 lakhs, out of which 2,000.00 lakhs has been earmarked for 1985-86 which is the first year of the Seventh Plan. The break up of the allocation is as follows:—

Item	(Rs. in lakhs)
State Highway ..	341.50
District and other roads ..	1,224.50
Machinery and Equipment	20.00
Planning research ..	20.00
Survey and Investigation ..	20.00
Others ..	374.00
<b>Total ..</b>	<b>2,000.00</b>

26.9. The annual plan of 1985-86 is mainly bridge oriented and with the proposed outlay of Rs. 2,000.00 lakhs, it is proposed to be utilised as follows:—

Item	Rs. in lakhs
1. For completion of 30 Nos. bridges by March, 1985.	373.00
2. For completion of 14 Nos. of bridges by March, 1986	595.00
3. Bridge Projects to remain in progress 22 Nos.	548.00
4. Road Works ..	50.00
5. New Works ..	100.00
6. Orissa Bridge construction corporation Ltd.	200.00
7. Others ..	144.00
<b>Total ..</b>	<b>2,000.00</b>

However, the above targets may undergo revision depending on the availability of actual allocation.

#### Tribal Sub-plan

26.10. Out of the Sixth Plan outlay of Rs. 5,225.00 lakhs, the flow of funds to tribal sub-plan area was quantified as Rs. 1,552.04 lakhs. But actually Rs. 1,066.99 lakhs has been provided against the total likely expenditure of Rs. 3,591.78 lakhs, the yearwise break up of which is given below:—

1980-81	Rs. 93.09 lakhs
1981-82	Rs. 185.14 lakhs
1982-83	Rs. 150.40 lakhs
1983-84	Rs. 192.94 lakhs
1984-85	Rs. 445.42 lakhs
<b>Total ..</b>	<b>Rs. 1,066.99 lakhs</b>

26.11. The quantification of funds to Tribal Sub-Plan area during 1985-86 would be Rs. 467.00 lakhs which is 23.31% of the outlay of Rs. 2,000.00 lakhs.

#### Scheduled Caste Component Plan

26.12. The financial flow to scheduled caste component plan during 1985-86 will be Rs. 300.00 lakhs which forms 15% of the Plan outlay.

**Minimum Needs Programme (M. N. P.)**

26.13. Improvement of Rural Roads under M. N. P. figured prominently in the Fifth Five Year Plan. The objective was to link up villages (including cluster of villages) with a population of 1,500 and above with all weather roads. During the Fifth Plan period, 475 Nos. of rural roads were approved for improvement under M. N. P. out of which 256 roads were completed with a total expenditure of Rs. 1,649.45 lakhs by the end of 1979-80. With completion of these projects, 3,492 Kms. of roads were improved and 512 villages having population of 1,500 and above were connected with all-weather roads.

26.14. The Sixth Plan was launched with a backlog of 219 numbers of spill over M. N. P. roads. Besides this, 96 numbers of rural roads and bridges relating to erstwhile Rural Engineering Organisation were approved during the year, 1981-82 for execution. Out of Sixth Plan outlay under M. N. P., 219 numbers of spill over roads were taken up, of which 118 roads were completed during 1980-81 and 1981-82. The balance 101 K. N. P. roads and 72 roads of 96 approved rural roads were under execution during the year 1982-83. Out of which 101 M. N. P. roads and 19 rural roads have been completed by the end of 1982-83. During 1983-84, the balance 53 numbers of rural roads and 59 numbers of Arterial roads under M. N. P. were taken up for execution.

26.15. The Sixth Plan outlay under M. N. P. is Rs. 2,865.00 lakhs out of which a sum of Rs. 2,730.00 lakhs has been made available during 1980-81 to 1984-85, of the following order :—

( Rs. in lakhs )		
1980-81	..	500.00
1981-82	..	500.00
1982-83	..	530.00
1983-84	..	600.00
1984-85	..	600.00
<hr style="width: 10%; margin: 0 auto;"/>		
Total	..	2,730.00
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26.16. The year-wise target and achievement under M. N. P. roads are as follows :—

Year	Target	Achievement
1980-81	770 K. Ms.	840 K. Ms.
1981-82	705 K. Ms.	695 K. Ms.
1982-83	752 K. Ms.	752 K. Ms.
1983-84	125 K. Ms.	125 K. Ms.
1984-85	200 K. Ms.	..

26.17. All-weather communication to 205 villages in 1980-81 and further 205 Nos. of villages in 1981-82, 260 villages having population of 1,500 and above and 60 villages having population of 1,000 to 1,500 in the year 1982-83 were provided. During the year 1983-84, 150 Nos. of villages having population of 1,500 and above and 60 villages having population of 1,000 to 1,500 were provided with all-weather connection.

26.18. The Seventh Plan outlay proposed under M. N. P. is Rs. 3,000.00 lakhs. It has been proposed to provide Rs. 1,137.00 lakhs during the year 1985-86 which is the first year of the Seventh Plan. It has been programmed to complete 116 Nos. of spill over projects and 39 Nos. of new Projects. It has also been programmed to connect three G. P. Headquarters with Subdivisional/Block Headquarters during the year 1985-86.



### Tribal Sub-Plan and Schedule Caste Component Plan

26.19. Out of the Seventh Plan proposed outlay of Rs. 8000.00 lakhs, the flow of funds to Tribal Sub-Plan is Rs. 3228.47 lakhs from which an amount of Rs. 415.64 lakhs has been proposed during 1985-86. The quantification of funds to Tribal Sub-Plan area during 1985-86 is 36.55 per cent of the total outlay of Rs. 1137.00 lakhs.

26.20. The flow of funds to scheduled caste component plan is Rs. 1628.00 lakhs which is 30 % of the proposed Seventh Plan outlay of Rs. 8000.00 lakhs. During 1985-86, the quantification of funds to Scheduled Caste component plan is Rs. 227.40 lakhs, which forms 20% of the proposed outlay of Rs. 2237.00 lakhs.

### Municipal Roads

26.21. Under this Scheme, financial assistance in the shape of grants-in-aid is given to the Urban Local Bodies for construction and up-gradation of Municipal Roads subject to matching contribution of equivalent amount is provided by them out of their own resources. Against the Plan outlay of Rs. 150.09 Lakhs fixed for expenditure under the scheme during the Sixth Plan (1980-85), a total expenditure of Rs. 60 lakhs has been incurred during first four years of the Plan period ending with 1983-84. Besides, budget provision of Rs. 15 lakhs is available for expenditure under the scheme during the 1984-85. Against the physical target for developing 177 Kms. of surfaced and 48 Kms. of unsurfaced Municipal Roads during the Sixth Plan, 54 Kms. of surfaced and 26 Kms. of unsurfaced roads have been developed during first four years of the plan period ending with 1983-84. During the 1984-85, it is anticipated to develop further 14 Kms. of surfaced roads and 4 Kms. of unsurfaced roads.

26.22. It is proposed to develop 756 Kms. of surfaced roads (conversion of 580 Kms. of unsurfaced roads to surfaced roads and development of 176 Kms. surfaced roads), during the Seventh Plan period including 152 Kms. of surfaced roads (conversion of 116 Kms. of unsurfaced roads to surfaced roads and development of 36 Kms. existing surfaced roads) during the 1985-86. For this purpose, an outlay of Rs. 500.00 lakhs is proposed under the scheme for the Seventh Plan (1985-90) including Rs. 100.00 lakhs for Annual Plan 1985-86.

### Panchayat Samiti and Grama Panchayat Roads

26.23. There is a vast net work of Rural roads, most of which are in a bad condition. There is urgent need for their improvement by widening and improving and providing culverts and cross drainage to make them usable. The rural roads under the Community Development and Rural Reconstruction Department are of the following categories . . .

1. G. P. Roads	..	68,473 Kms.
2. P. S. Roads	..	25,596 Kms.
3. Other villages roads constructed out of Food for work, Test Relief, N. R. E. P. etc.		38,983 Kms.
		-----
	Total ..	1,33,052 Kms.
		-----

26.24. The estimated cost for maintenance of these rural roads is Rs. 850 per Km. and improvement and construction of rural roads is Rs. 20,000 per Km. This is considered as the minimum requirement. On this basis, it was estimated that the total requirement would be Rs. 6679.60 lakhs.

The working group constituted by the State Government considered this and recommended an outlay of Rs. 1,200.00 lakhs for the Seventh Plan period. However, considering the constraint of resources an outlay of Rs. 450.00 lakhs has been proposed for the Seventh Plan with the annual phasing as below :

Table 26.3

Year	Outlay ( Rs. in lakhs )	Target in Kms.
1985-86	200.00	1,000
1986-87	100.00	500
1987-88	50.00	250
1988-89	50.00	250
1989-90	50.00	250
Total	450.00	2,250

26.25. The agreed outlay for the Sixth Five-Year Plan (1980—85) was Rs. 600.00 lakhs. Against this the anticipated expenditure is Rs. 211.97 lakhs inclusive of Rs. 20.00 lakhs in 1984-85. As a result the target for the Sixth Five Year Plan which was proposed at 3,000 Kms. of rural roads could not be achieved. The shortfall was not only for reduction of agreed outlay but also owing to escalation of cost both in labour and materials. The achievement has been 1,475 Kms. including 270 Kms. of surfaced roads. Against the expenditure of Rs. 211.97 lakhs in the Sixth Plan, the flow of funds to the tribal Sub-Plan is Rs. 62.30 lakhs which is 29.4%. During the Seventh Plan period the proposed outlay being Rs. 450.00 lakhs the flow to Tribal Sub-Plan is estimated at Rs. 110.00 lakhs which is 25% of the total outlay. During the year 1985-86 the proposed outlay being Rs. 200.00 lakhs, the flow to Tribal Sub-Plan has been estimated at Rs. 50.00 lakhs.

## CHAPTER 27

## TRANSPORT

## (a) Road Transport

27.1. Keeping in view the guidelines for the Seventh Plan and the needs of the State, an outlay of Rs. 4875.00 lakhs for the Seventh Plan has been suggested for the Road Transport Sector. This includes Rs. 720.00 lakhs for the year 1985-86 as detailed below—

	Seventh Plan	Annual Plan, 1985-86 ( Rs. in lakhs )
1. Land Acquisition for Railways ..	130.00	35.00
2. Civil Aviation ..	474.00	33.00
3. Schemes of Transport Commissioner, Orissa		
(a) Staff Scheme ..	344.88	59.30
(b) Building Programme ..	325.00	42.50
4. (a) Share Capital contribution to O. S. R. T. C. ..	1900.00	250.00
(b) Share Capital contribution to O. R. T. Co. ..	1000.00	150.00
5. Creation of a post of Legal Assistant in Transport Department.	1.12	0.20
6. Construction of Bus stand building ..	700.00	150.00
	<hr/>	<hr/>
Total ..	4875.00	720.00
	<hr/>	<hr/>

## Land Acquisition cost for construction of Railway lines

27.2. The Ministry of Railways have taken up a project for construction of Rail link from Jakhapura to Bansapani covering a distance of 179 Kms. during the Sixth Plan period. Till the end of Sixth Plan period, construction of railway line from Jakhapura to Daitari covering a distance of 33 Kms. has been completed in the first phase. Land acquisition work for the Second phase of the project covering a distance of 95 Kms. from Daitari to Keonjhar is in progress and it will be completed during the Sixth Plan period. Acquisition of land for the third phase of the project covering a distance of 51 Kms. from Keonjhar to Bansapani will be taken up during the Seventh Plan period. Since the State Government have committed to provide land free of cost for the project a sum of Rs. 30.00 lakhs will be required during the Seventh Plan period which includes a provision of Rs. 15.00 lakhs for the year 1985-86.

27.3. Besides, the State Government have taken up with the Ministry of Railways for construction of various Rail links in the State. The Ministry of Railways have accepted the proposal for construction of Rail link between Khurda Road to Balangir on priority basis. An outlay of Rs. 100.00 lakhs is proposed to be provided during the Seventh Plan period for land acquisition of this project and other railway projects. Provision suggested for 1985-86 is Rs. 20.00 lakhs.

#### **Civil Aviation**

##### **Construction of new Air strips**

27.4. Orissa being a diverse State, emergency flights are required to be made particularly in rainy season to provide relief to the flood and cyclone affected victims. In view of this, it is proposed to construct new airstrips at Talcher, Paradeep and Similipal for which a sum of Rs. 50.00 lakhs will be required during the Seventh Plan period which will be spent from 1987 onwards.

##### **Improvement/Black topping of Tusra, Hirakud and Rairangpur Airstrips and widening of Jaypore Airstrips**

27.5. The majority of the existing airstrips developed in Orissa are not black topped, as a result of which the airstrips can not always be used during the rainy season. Some of these airstrips have therefore to be black topped for better operational efficiency. Some basic needs like construction of crew rest sheds and tube wells etc., are to be provided. With a view to remove these difficulties in these areas it is proposed to provide Rs. 1,44.00 lakhs during the Seventh Plan period for improvement of Airstrips at Tusra, Hirakud and Rairangpur and widening of the airstrip at Jaypore. Projected expenditure for this purpose during the Annual Plan 1985-86 is Rs. 20.00 lakhs.

##### **Replacement of Trainer-Aircraft**

27.6. It has been proposed to replace the existing two trainer aircraft for which a sum of Rs. 30.00 lakhs will be required during first two years of the Seventh Plan period towards replacement cost. A sum of Rs. 13.00 lakhs has been proposed for the Annual Plan 1985-86.

##### **Replacement of B-58 Aircraft to that of 200 Aircraft**

27.7. It has been proposed to replace the existing B-58 aircraft. The replacement cost has been estimated at Rs. 250.00 lakhs. This expenditure is proposed to be provided during the Seventh Plan period. No expenditure on this account is proposed for the year 1985-86.

#### **Staff Schemes of Transport Commissioner, Orissa**

##### **Strengthening of Enforcement Units and creation of new Units**

##### **Continuance of existing 3 enforcement Units**

27.8. The increase in the vehicle population and introduction of Zonal and National permit system in the State has multiplied the work of the existing R. T. Os. and they are not able to cope up with the enforcement work in the field to check evasion of taxes and other motor vehicle offences. To assist the R. T. Os. in the above work 8 enforcement units have been created in districts of Cuttack, Puri, Balasore, Sambalpur, Ganjam, Rourkela, Koraput and Baripada. For continuance of 3 units which are within 3 years, a sum of Rs. 28.92 lakhs has been proposed for the Seventh Plan period out of which a sum of Rs. 4.60 lakhs has been proposed for the Annual Plan 1985-86.

##### **Creation of posts for new check-gates**

27.9. With the opening of more inter-State routes, it has become necessary to provide more check-gates at the boarder. During the Seventh Plan period it was decided to open six such check-gates at Kanakpota in Sambalpur district, near Zonk bridge on Khartar-Raipur road in Kalahandi district, at Panda Choncha on Baripada-Gopiballava Road, Amili Atha on Jaleswar Chandeneswar road in Balasore district, Jareikolla on Rourkela Chakradharpur road, Chitrakunda on Bali-Chitrakunda road. Besides an inter-state route with Andhra Pradesh on National Highway No. 5 a check-gate will be opened at Sabardipeta to inter-State vehicles coming from South and doing business within, Orissa, enclave. The expenditure

proposed to be incurred for these check-gates will be amply compensated by way of additional Revenue. So it is proposed to create posts of 22 Jr. M. V. Is., 7 clerks, 17 Class IV employees and 12 Constables for these check-gates. The constables have been proposed at Sabardeipeta and Jareikela where no immediate police help may be available. Of these above check-gates during the first year, check-gates will be opened at Sabardeipeta, Kanaktora, Amilli Atha and Chitrakunla and during the second year the check-gates will be opened at Zonk and Jareikela and Panuachenchha. The total expenditure on staff and contingency for the entire Seventh Plan is Rs. 34.15 lakhs of which the requirement for the year 1985-86 is Rs. 4.30 lakhs.

#### **Establishment of internal check-gates at Paradeep and National Highway No. 6**

27-10. There is heavy traffic in Cuttack-Bhubaneswar road and incidence of vehicles plying without payment tax and permit and without observing the provisions of M. V. Act is rampant on this road. It is considered necessary to establish a permanent check-gate near Palasuni near Bhubaneswar to check all types of vehicles for the purpose of checking of tax evasion as well as for infringement of provisions of M. V. Law and irregularity like writing a number plates, and plying without valid license. Another check-gate will be established in the Sambalpur district after consultation with the Chief Engineer, National Highway on N. H. 6.

27-11. It is seen that the goods vehicles engaged in carrying iron ore and other minerals to Paradeep are carrying load much in excess of prescribed R. L. W. Substantial revenue can be collected in shape of penalty from these vehicles carrying materials. Such carriage of iron ore to Paradeep is a continuous process and it is proposed to post some officers to check such over loading and tax evasion case. Moreover Paradeep being a sea port there are also vehicles engaged in other business. So it is considered necessary to open a check-gate there. Such check-gate can not function without adequate police support. So it is proposed to man the check-gates with Jr. M. V. Is., Peon and adequate number of police force for which it is estimated that an amount of Rs. 32.79 lakhs will be required for the entire Seventh Plan period and Rs. 5.25 lakhs for 1985-86. It is proposed to create 17 Jr. M. V. Is., 11 Class IV staff and 21 Constables for managing the proposed check-gates at Paradeep, Palasuni and National Highway No. 6.

#### **Strengthening of existing check-gates**

27-12. Of all the bordering check-gates the income of Jamsola is maximum and it is expected that by end of the current financial year, the income would touch rupees one crore. Similarly Rs. 50 lakhs is expected to be collected from check-gates like Sohela and Girisola. So it is contemplated to augment the staff of these check-gates to get additional revenue. It is proposed to create two posts of Additional R. T. Os. for the two important check-gates at Jamsola and Girisola. It is also proposed to create 12 posts of Jr. M. V. Is., 6 clerks and 9 weighers for the weigh bridge, and six Class IV staff for these check-gates. At Jamsola, a second weigh bridge is going to be installed during the current year. So the additional staff proposed will also man the second weigh bridge. Similarly, it is proposed to instal second weigh bridge in the Seventh Plan at Girisola to check extra load. The total requirement for this purpose during the Seventh Plan period has been calculated at Rs. 20.88 lakhs and in the first year of Seventh Plan the expenditure will be Rs. 2.00 lakhs. Of the posts proposed 50% will be filled up during the first year and the balance will be filled up during the second year of Seventh Plan.

#### **Creation of posts of Traffic Inspectors and Constables for enforcement work at important Subdivisional Headquarters**

27-13. Creation of posts of Traffic Inspectors and Constables for enforcement work at important Subdivisional Headquarters and other places. In this Department the enforcement staff are located at District Headquarters and these staff are required to tour throughout the district for enforcement work.

Experience shows that in this process they are not able to uniformly look after the entire district. So it is proposed to create posts of one Traffic Inspector and two Constables each for the 18 important places in the State for better administration and enforcement of M. V. Laws. These places are, Angul, Balugaon, Barbil, Boudh, Bhadrak, Bhanjanagar, Deogarh, Gunupur, Jajpur Town, Kendrapara, Karanjia, Malkangiri, Nayagarh, Nuapada, Pallahara, Parlakhemundi, Rayagada and Rairangpur. This will be a major item for strengthening enforcement measures which will help augmenting revenue of the State and to check clandestine operation of vehicle. These Officers, besides looking to enforcement work, can also effectively check off-road position. For this purpose Rs. 19.97 lakhs is proposed during the Seventh Plan period and in the year 1985-86 the expenditure will be Rs. 1.30 lakhs. The posts will be filled up in a phased manner.

**Purchase of 4 new vehicles and replacement of 8 old vehicles engaged in enforcement work including staff and contingency for new vehicles**

27-14. In order to strengthen the enforcement work it is proposed to purchase four new vehicles and to replace eight old vehicles engaged in existing enforcement work during the Seventh Plan period for which a sum of Rs. 12.00 lakhs will be required during the Seventh Plan period and Rs. 3.00 lakhs in the first year. Besides, Rs. 5.01 lakhs is proposed during Seventh Plan period for staff and contingency for new vehicles for enforcement work out of which Rs. 0.40 lakh is proposed to be spent during the year 1985-86.

**Traffic Potential Survey Unit (New Creation)**

27-15. Transport planning involves an accurate survey of traffic potential. Four traffic potential survey units have therefore been created during the Sixth Plan period out of which two units are functioning now. The units have performed well and provided the licensing authorities with valuable information regarding goods and passenger vehicles required to be operated in specific areas. Since the existing units are not equipped to complete the survey work in the entire State, it is proposed to take up the work through some autonomous organisations to undertake the survey of the entire State. For this purpose it is proposed to spend Rs. 10.00 lakhs during the Seventh Plan period. The proposed outlay for 1985-86 is Rs. 1.64 lakhs.

**Upgradation of Driving Training School**

27-16. A proposal for upgradation of the existing Driving Training School has been given not only to provide fresh training to produce a set of good drivers but also to equip it to impart in-service training to the drivers of O. S. R. T. Co. and O. R. T. Co. and other Government organisations and Departments. Such training will go a long way in minimising road accidents and make them conscious about road safety. The upgradation proposal includes creation of one post of Vice-Principal, five Instructors, two Senior Clerks, one Junior Clerk and one Orderly Peon. For this purpose a sum of Rs. 10.99 lakhs is proposed during the Seventh Plan period out of which a sum of Rs. 2.99 lakhs will be required to meet the establishment cost and Rs. 2.00 lakhs for purpose of equipment and Rs. 6.00 lakhs for purchase of two vehicles for the trainees. The expenditure proposed under this Scheme for the Annual Plan 1985-86, is Rs. 3.80 lakhs.

**Creation of one post of Deputy Commissioner (Transport) at T. C.'s Office**

27-17. During the past decade, there has been tremendous increase in transport activities in the State. The vehicle population has increased fourfold and the revenue collection by eight times. The number of officers at district level has also increased from 15 to 31. It is not possible to manage all these works by the existing Deputy Commissioner (Transport). To co-ordinate the activities of all these offices to run the Transport Administration in a more systematic manner, there is necessity for creation of another Senior Officer under the Transport Commissioner to look after the work. Therefore it is proposed to create one post of Deputy Commissioner (Transport) with supporting staff and one vehicle for which a total expenditure to the tune of Rs. 4.54 lakhs has been proposed in Seventh Plan. The expenditure for the Annual Plan, 1985-86 for this purpose will be Rs. 1.60 lakhs.

### **Continuance of the post of Assistant R. T. O**

27-18. The R. T. Os who are in charge of important regions are over burdened with day to day work in the matter of registration of motor vehicles collection of taxes and issue of tax tokens, permits, driving licences in addition to their administrative works. In order to assist the R. T. Os five posts of Assistant R. T. Os have been created for the regions at Sambalpur, Koraput, Sundargarh, Mayurbhanj and Bhubaneswar. For continuance of these five posts a sum of Rs. 6.55 lakhs has been proposed for the Seventh Plan period and the projected outlay for the Annual Plan 1985-86 is Rs. 1.10 lakhs.

### **Creation of five posts of Additional R. T. Os**

17-19. Five new posts of Additional R. T. Os are required to be created to assist the R. T. Os in the important regions such as Rourkela, Sambalpur, Cuttack, Bhubaneswar and Koraput. A sum of Rs. 7.30 lakhs has been proposed to be spent during the Seventh Plan period. The outlay suggested for the Annual Plan 1985-86 is Rs. 1.20 lakhs.

### **Creation of 20 posts of Cashiers for the office of Transport Commissioner, Orissa and R. T. O. Offices**

27-20. With the introduction of cash collections system in all offices including Transport Commissioner's Office, there is need to appoint Cashier at the rate of one for each office. So far creation of 20 posts of Cashiers, a sum of Rs. 7.90 lakhs is proposed during the Seventh Plan period. The requirement of funds for this purpose for 1985-86 is Rs. 1.32 lakhs.

### **Bi-furcation of Cuttack-Dhenkanal R. T. O. Office and Upgradation of Bargarh Additional R. T. O Office.**

27-21. The work-load in the R. T. O. Office, Cuttack is the heaviest of all. As it is not possible to manage the affairs in one office, there is necessity to bi-furcate the R. T. O. Office, Cuttack with the establishment of another R. T. O. Office (Cuttack-II) at a suitable location. After the establishment of NALCO town at Angul, the vehicle population of Dhenkanal district has substantially gone up. In order to manage the affairs systematically, one R. T. O. Sub-office at Angul is felt absolutely necessary. Similarly considering the work-load, it is also necessary to bi-furcate the R. T. O. Office at Koraput and locate it at Rayagada to cater to the needs of the public of Gunupur and Rayagada Subdivisions. For creation of three R. T. Os for R. T. A. Offices at the aforesaid places namely, Cuttack, Angul and Rayagada without supporting staff a sum of Rs. 29.18 lakhs has been proposed to be spent during the Seventh Plan period. The requirement of funds for the Annual Plan 1985-86 is Rs. 5.65 lakhs.

### **Creation of 20 posts of Statistical Assistants**

27-22. There are posts of computers for compilation of Statistical work in the regions like Cuttack, Sambalpur, Ganjam, Koraput and Bhubaneswar. But the activities in the R. T. O. offices have increased and it is therefore necessary to post statistical assistants in each of the Regional Transport Officers Offices in the State. It is proposed to create 20 post of statistical assistants for the Regional Transport Officers Offices for which a sum of Rs. 7.90 lakhs will be required during the Seventh Plan period to meet the expenditure of the above staff towards establishment cost. The proposed outlay for the year 1985-86 is Rs. 1.32 lakhs.

### **Upgradation and strengthening the administration of Transport Commissioner's Office**

27-23, For efficient functioning of the Transport Commissioner's Office with the increased volume of work, it is felt necessary to strengthen and streamline the administration at Headquarters. It is therefore proposed to create a legal cell and an audit cell, strengthening of permit section and to purchase machinery and equipment. The rapid increase in vehicle population has given rise to the numerous types of legal complications in the field of administration for which it is necessary to keep the laws concerning motor vehicles up to-date and to take follow up action on

various types of litigations pending different courts. It is therefore proposed to create one legal cell which includes one Law Officer, one Section Officer, two Legal Assistant, two Junior Assistant, one Senior Typist, one Junior Typist, one Peon and one Orderly Peon.

27-24. With the increase in the vehicle population and collection in M. V. Tax and passenger Tax it is not possible to cope up with the present magnitude of the audit work with the existing audit parties. Unless effective audit work is undertaken at regular intervals there is every likelihood of misappropriation and defalcation taking place causing loss of revenue. Hence it is absolutely necessary in the interest of Government to strengthen the present audit activities by creating an audit cell consisting of one Audit Superintendent, one Section Officer, four Auditors, three Audit Assistants, three Junior Assistants, one Senior Typist and four Peons.

27-25. With the introduction of National, Zonal and Countersignature of permits, the present skeleton of permit section is over burdened as a result of which timely follow up action in these cases can not be taken up for want of adequate arrangement in T. C's Office. Therefore it has been proposed to create one post of Section Officer, four posts of Senior Assistants, two posts of Junior Assistants one post of Senior Typist, one post of Junior Typist and one post of Peon.

27-26. For efficient functioning of the Transport Commissioner Office, it is proposed to purchase Typewriters, one frarking machine, some new furnitures for replacement purposes and one water cooler for providing drinking water to the staff working under T. C's Office. In all Rs. 16.07 lakhs will be required during the Seventh Plan period for strengthening of the headquarters and Rs. 3.33 lakhs for the Annual Plan 1985-86.

#### Creation of one post of Legal Assistant for Transport Department

27-27. To deal with the legal matters relating to the motor vehicle offences pending in the Transport Department it is felt necessary to create one post of Legal Assistant in Transport Department for which a sum of Rs. 1.12 lakhs is propose for the entire Seventh Plan period and Rs. 0.20 lakhs is proposed for the Annual Plan 1985-86.

#### Purchase of weigh bridge machines

27-28. Government of India have revised the R. L. W. of goods vehicles with the amendment of M. V. Act in 1982. But experience shows that the goods vehicles have a tendency to carry more load than what is admissible. To check evasion of taxes by way of overload and to check leakage of revenue of the State it is absolutely necessary to instal the weigh bridges in the bordering check-gates at Laxmannath, Korada, Kanakpora, Boriguma, Nalda, Champua and Bahalda and also putting additional weigh bridges at important check-gates. So it has been proposed to purchase weigh bridge machines for the above check-gates for which a sum of Rs. 70.00 lakhs will be required during the Seventh Plan period. The proposed outlay for the year 1985-86 is Rs. 15.00 lakhs.

#### Repair and maintenance cost of the weigh bridges

27-29. To meet the repairs and maintenance cost of the existing weigh bridges and the weigh bridges to be acquired a sum of Rs. 19.50 lakhs is proposed to be utilised during the Seventh Plan period which included an outlay of Rs. 2.50 lakhs for the Annual Plan 1985-86.

#### Building Construction Programme

27-30. The office of the Transport Commissioner-cum-Chairman, S.T.A., Orissa is located in the Old Secretariat Building at Cuttack with inadequate accommodation. This has caused lot of inconvenience to the staff and the officers. Therefore, it is proposed to construct a new office building for the Transport Commissioner-cum-Chairman, State Transport Authority either at Cuttack or at



Bhubaneswar during the Seventh Plan period. Many of the R. T. A. Offices also are functioning in a small portion of the Collectorate building in an unsatisfactory condition, causing much inconvenience to the public as well as to the staff. Therefore, it has been proposed to construct office buildings for the R.T.A. Office at Cuttack and for the newly proposed R.T.A. Offices at Cuttack-II, Rayagada and Angul. Driving Training School is at present functioning in one of the old garages of the O.S.R.T.C. at Bhubaneswar. A new building for this training school is proposed to be constructed during the Seventh Plan period. Provision is also to be made for completion of the incomplete R.T.A. Office buildings at Balangir, Baragarh and Puri. Installation of weigh bridges also required civil construction in the check-gates. Besides, staff quarters for the staff of the S.T.A. and the R.T.As. are required to be provided at different places. Further, check-gates located at far away places also required staff quarters. For these buildings, a sum of Rs. 3,25.00 lakhs is required during the Seventh Plan period and Rs. 42.50 lakhs is proposed for the Annual Plan 1985-86 as detailed below—

(Rs. in lakhs)			
Name of the Building		Outlay of Seventh Plan	Outlay of Annual Plan 1985-86
(1)		(2)	(3)
Transport Commissioner's Office	..	90.00	15.00
R.T.A. Office building at Cuttack	..	15.00	..
Driving Training School	..	15.00	3.00
R.T.A. Office building at Cuttack-II, Rayagada and Angul	..	35.00	13
Completion of incomplete R.T.A. Offices at Balangir, Baragarh and Puri.		11.97	5.50
Installation of weigh bridges (new and existing)	..	89.00	10.00
Staff quarters for staff of S.T.A. and different R.T.As.	..	50.00	4.00
Completion of incomplete check-gate staff quarter	..	7.03	5.00
New staff quarters for check-gate staff	..	12.00	..
Total	..	325.00	42.50

#### Schemes of Orissa State Road Transport Corporation.

27-31. Orissa State Road Transport Corporation is a statutory Corporation constituted under the R. T. C. Act, 1950 in the year 1974. It operates its services in 10 districts of the State. At the end of the Sixth Plan period the fleet strength of the Corporation is stood at 724 vehicles. At the end of the Seventh Plan period the total number of vehicles at the fleet of the Corporation has been projected at 1,200 out of which 578 vehicles will require replacement on account of completion of prescribed life. It has been proposed to replace all 578 superannuated vehicles during the Seventh Plan period. In addition to this provision for purchase of 476 new vehicles has been proposed to meet the need of normal expansion of services out of which 50 vehicles are proposed to run as Deluxe Services on new routes.

27.32. On account of purchase of vehicles, lands and buildings, tools and plants, the need for Capital Expenditure has been estimated at Rs. 68,32.20 lakhs as indicated below:—

		Rs. in lakhs
(i) Purchase of vehicles	..	38,23.80
(ii) Lands and Buildings	..	11,79.00
(iii) Tools and Plants	..	1,80.00
(iv) Repayment of loans	..	16,49.40
		-----
Total	..	68,32.20
		-----

27.33. It has been proposed to meet the above requirement of Capital Expenditure during the Seventh Plan period from the following sources.—

*A—Capital contribution*

		Rs. in lakhs
(i) By State Government	..	19,00.00
(ii) By Central Government	..	9,50.00
<i>(B) Loans &amp; Borrowings</i>		
(i) From L. I. C. of India	..	12,50.00
(ii) From I. D. B. I.	..	15,00.00
		-----
Total	..	56,00.00
		-----

27.34. The existing fare structure which is effective from July, 1981 being uneconomic, the difference between the rate of income and rate of expenditure is showing an increasing gap from year to year with the increasing cost of operation. The fare structure in Orissa is one of the lowest in the country. Due to the lowest fare structure, the internal resources of the Corporation is showing a heavy deficit and does not provide any support to the Capital outlay. In order to enable the Corporation to run on Commercial lines it is considered essential to revise the present fare structure with effect from 1st July 1985, i. e., from the beginning of the 1st year of the Seventh Plan period with the weighted average of Re. 0.09 paise per Km. in the following order:—

*Revision of fare suggested from 1st July 1985*

(i) Ordinary	..	8 paise per Km.
(ii) Express	..	9 paise per Km.
(iii) Superfast Express	.	11 paise per Km.
(iv) Deluxe	..	14 paise per Km.

27.35. With the revision of fare in the above rates, the Corporation is expected to generate an internal resources with provision for Depreciation Reserve Fund to the tune of Rs. 64.20 lakhs during the Seventh Plan period from its own operation without provision for interest on Capital, i. e., Rs. 18,87.22 lakhs. Therefore, it has been proposed to levy a surcharge at the rate of 10 per cent on the revised fare every year to take care of price like of fuel oils and other consumables of the Transport Industries.

27-36. In order to enable the Corporation to run on Commercial Lines, it is necessary to provide State Government Capital Contribution to the extent of Rs. 1,900.00 lakhs and Central Government matching contribution of Rs. 950.00 lakhs during the Seventh Plan period. Out of which capital contribution to the extent of Rs. 250.00 lakhs is proposed for the year 1985-86 out of the State Plan.

**Schemes of Orissa Road Transport Company (To be replaced as a new Corporation)**

27-37. The Orissa Road Transport Company was incorporated as a Joint Stock Company under the Companies Act in the year 1950 with the participation of State Government, Central Government and Private Share holders. It commenced its business from the 1st January 1951 with a paid-up capital of Rs. 11.09 lakhs against the authorised share of Rs. 35.00 lakhs. At present the paid-up capital of the Company is Rs. 148.03 lakhs against the authorised share capital of Rs. 300.00 lakhs. The Company is operating its services in the districts of Puri, Ganjam, Phulbani and part of Cuttack district. For operation of daily schedule services the requirement of buses with 20 per cent spare is 309 against of which only 178 Nos. of life vehicles are available with the Company. The number of superannuated buses with the Company at the end of the Sixth Plan period is 131 which will go up to 318 by the end of the Seventh Plan period. The Company have proposed to purchase 667 numbers of new vehicles during the Seventh Plan period out of which 480 for new routes and 187 for replacement purposes. The plan programme drawn up by the company for the Seventh Plan period is indicated below:—

	Rupees in lakhs
1. Cost of 667 Nos. of Chassis	2,393.00
2. Land and Buildings	390.00
3. Tools and Plants	65.40
4. Repayment of loans	1,089.39
	<hr/>
Total ..	3,937.79
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27-38. The Company has proposed to meet the above Capital expenditure from the following sources:—

	Rupees in lakhs
<i>1. Share Capital</i>	
(a) State Government	1,000.00
(b) Central Government	615.00
<i>2. Loans and borrowings</i>	
(a) From L. I. C.	750.00
(b) From I. D. B. I.	476.65
(c) From Commercial Banks	250.00
	<hr/>
Total ..	3,091.65
	<hr/>

27-39. The Company has proposed to revise the existing fare structure with the weighted average of 9 paise per Km. during the Seventh Plan period with effect from the 1st July 1985. With this increase the Company is expected to generate its internal resources with permission for Depreciation Reserve Fund to the tune of Rs. 148.09 lakhs without provision for payment of interest, i. e., Rs. 904.32 lakhs. To meet the increased cost of fuel and spare parts due to escalation in prices, the Company has proposed

to levy a surcharge at the rate of 10 per cent every year with cumulative effect. With a levy of 10 per cent cumulative surcharge, the net result would be a surplus of Rs. 52.12 lakhs with full provision of interest and D. R. F. during the Seventh Plan period. The Company has assumed to utilise its fleet at 85 per cent vehicle utilisation at the rate of 270 K. Ms. per vehicle per day and pay load to the extent of 85 per cent during the Seventh Plan.

27.40. Although the State Government have suggested to bring the O. R. T. Co. under the ambit of the State Plan, the same has not been agreed to by the Central Government as the company is not a statutory Corporation under the R. T. C. Act. Therefore, steps are being taken to replace the O. R. T. Co. by a separate corporation to be established under the R. T. C. Act. in order to make it eligible for getting plan assistance and assistance from the Central Government for implementation of its plan programmes. Therefore, an outlay of Rs. 1,000.00 lakhs is proposed to be kept for investment as share capital in the new Corporation to be established to replace the O. R. T. Co. during the Seventh Plan period of which Rs. 150.00 lakhs has been proposed for the year 1985-86.

#### Construction of Bus Stands

27.41. A Fund styled as passenger Amenities Fund has been created in the public account out of 2% of Motor Vehicle Tax collected from the State and contract carriages annually to provide amenities to the travelling passengers such as rest sheds, Urinals, Lavatories, Canteens and drinking water facilities etc. at important bus stops throughout the State. Only Rs. 3.00 lakhs each could be provided during 1979-80 and 1982-83 from non-plan side to the passenger Amenities Fund.

27.42. As the above fund is created for construction of passenger rest-sheds only and is inadequate to meet the expenditure on construction and maintenance of bus stands at various places of the State, it has been decided to establish a separate fund for the purpose. Accordingly, for construction of new bus stands and maintenance of existing bus stands a sum of Rs. 7,00.00 lakhs will be required during the Seventh Plan period which includes a sum of Rs. 1,50.00 lakhs for the year 1985-86.

#### (b) Inland Water Transport

##### Provision of Passenger Launch Service etc. in Chandbali Sector

27.43. The areas around Chandbali, Dhamara, Rajkanika, Rajnagar etc. are very thickly populated and are practically cut off from road and rail facilities. The State Government are now running two new launches on the Chandbali-Rajnagar route. Two old launches that are plying on the Chandbali-Aradi route require to be replaced. The areas are prone to severe cyclones and are subjected to strong tides. Small crafts which are put into use can not lie safely in the river tide alongside the bank. Adequate shore facilities like wet docks have to be provided in some of the places like Chandbali, Rajnagar etc. Jetties and Passenger waiting halls are required to be constructed at Talchua, Nalitapatia. The amount required during the Seventh Plan works out to Rs. 20.00 lakhs as detailed below, of which a sum of Rs. 10 lakhs will be required for utilisation during 1985-86.

	Rupees in lakhs
1. Replacement of two old launches plying on the Chandbali-Aradi route at Rs. 5.00 lakhs each.	10.00
Provision of two wet basins one at Chandbali and another at Rajnagar with bank protection works at Rs. 1 lakh each.	2.00
3. Construction of two jetties at Talchua and Nalitapatia at Rs. 2.50 lakhs each.	5.00
4. Construction of two Nos. passenger waiting halls one at Talchua and another at Nalitapatia at Rs. 1.50 lakhs each.	3.00
Total for Chandbali Sector	20.00

**Provision of Passenger Launch services etc. in Devi.**

27-44. On the banks of the river Devi lie several densely populated villages like Machagaon, Astarang etc. which are not properly connected by roads. The shortest distance between Astarang and Machagaon is only 8 Kms. by the water route where as by road the distance is around 80 Kms. At Astarang (Nuagarh) a fishing harbour is being developed. Even though no facilities exist, at present more than 100 fishing trawlers operate through the river mouth. There is considerable traffic between Astarang and Machagaon not only for fishing but also in Passengers and other cargo like salt, building materials, fertilisers etc. A jetty and a passenger waiting hall are proposed to be constructed on the North bank of Devi of Machagaon and to run Passenger launch services between Machagaon and Astarang. To start the services a minimum of three launches would be required.

27-45. The estimated cost of the work in this sector work out to Rs. 6.00 lakhs as detailed below, of which a sum of Rs. 2 lakhs will be utilised during 1985-86.

1. Provision of 1 new launches of 50 seated capacity at Rs. 5 lakhs each.	..	Rs. 5.00 lakhs
2. Construction of a jetty at Machagaon.	..	Rs. 1.00 lakhs
		<hr/>
	Total ..	Rs. 6.00 lakhs
		<hr/>

**Provision of Passenger launch services and other infrastructural facilities in Chilika lake.**

27-46. Inside Chilika lake Water Transport is the only means of communication. Nearly 60,000 peoples live scattered in various islands cut off from the main land. During the Sixth Plan period shore facilities at Balugaon on the mainland and a jetty at Kalijai island have been provided. Due to local demands, the State Government has put in four old launches by shift arrangement for running the passenger services. These launches have to be renewed.

27-47. The lake does not maintain good depths and hence it has not been possible to put conventional passenger launches on such routes like Balugaon-Satpara Rambha Malud, Kespur-Malud etc. On these routes it is proposed to introduce long tail boats with carrying capacities of 35 passenger each.

27-48. The shore facilities provided so far are absolutely inadequate. Passengers have to wait long hours exposed to sun, rains, wind & weather waiting for the arrivals and departures of launches. The provision of passenger waiting halls in places like Satpara, Nuapara, Kalijai, Rambha, Kespur and Malud are absolutely essential. The amount required during the Seventh Plan works out to Rs. 13.00 lakhs as detailed below of which a sum of Rs. 10.80 lakhs will be utilised during 1985-86.

1. Replacement of one launch plying in lake Chilika by new one.	..	Rs. 5.00 lakhs
2. Construction of two passenger waiting halls, at Rs. 1.50 lakhs each.	..	Rs. 3.00 lakhs
3. Acquisition of 2 long tail boats for plying on Balugaon-Satpara, Balugaon-Nuapara, Kespur-Malud, Rambha-Malud at Rs 2.50 lakhs each.	..	Rs. 5.00 lakhs
		<hr/>
	Total for Chilika Sector ..	Rs. 13.00 lakhs
		<hr/>

### **Provision of Passenger Launch services in Balimela Reservoir**

27-49. The construction of a dam at Chitrakonda has dislocated a number of villages where mostly tribal people reside. The villages are surrounded by high mountain ranges on all the sides and therefore the only approach is by water route. Around twenty thousand people live scattered over a number of villages. The reservoir is very deep with submerged hillocks etc. which pose navigational problems. Special boats have to be built up with adequate reserve buoyancy for the safety of the passengers. There has been a lot of agitation by the tribal people and unless adequate transport facilities are provided during the Seventh plan period, the situation will be difficult to tackle. To start with two launches will be put in operation during the Seventh Plan. The launches will be very small with adequate reserve buoyancy capable of carrying around 20 to 25 passengers only. A sum of Rs. 6.00 lakhs is required to meet the cost of the boats during the Seventh Plan of which a sum of Rs. 3 lakhs will be utilised during 1985-86 to purchase one launch.

### **Operation and maintenance of Launch service**

27-50. The operation of launch services in lake Chilika, Chandbali-Rajnagar and other routes which are proposed to be introduced in the Seventh Plan period will have to be operated and maintained in the State Plan. For the P. O. L. charges repair and maintenance and other operational expenses for existing and new launch service, a sum of Rs. 27.00 lakhs will be required in the Seventh Plan and Rs. 8.00 lakhs has been suggested for the year 1985-86.

### **Training and Research**

27-51. An Institute is functioning at Chandbali for training personnel in handling motor boats, fishing trawlers etc. The scope of training which was hitherto restricted to train crew staff is proposed to be expanded so that new courses like boat building and repairs, naval architecture etc. can be imparted. A sea going motor launch is also proposed to be acquired for imparting practical training not only in smooth waters but also in smooth and partially smooth tidal waters. A sum of Rs. 20.00 lakhs is required to meet the expenditure during the Seventh Plan of which a sum of Rs. 4 lakhs will be required for utilisation during 1985-86.

### **Housing and maintenance facilities**

27-52. Housing is an acute problem not only in urban areas but in rural areas also. In order to implement the various schemes it is absolutely essential to provide residential quarters to all the employees. A sum of Rs. 6.00 lakhs is required to provide the minimum residential facilities at Chandbali and Balugaon during the Seventh Plan, of which a sum of Rs. 2.20 lakhs will be utilised in 1985-86.

### **Centrally Sponsored Scheme**

#### **Navigation in River Mahanadi from Dholpur to Cuttack**

27-53. The scheme aims at removing the obstructions across the river Mahanadi near Munduli by providing a separate navigation channel so as to facilitate movement of traffic in the river Mahanadi. The scheme was being implemented as a Centrally sponsored scheme and was originally sanctioned for Rs. 50.18 lakhs. Due to delay in the finalisation of the design for a chamber lock gate at Munduli, the scheme has not implemented so far. The chamber lock gate design had to be modified as a result of which the original estimate has been revised to the level of Rs. 200.00 lakhs. Expenditure on this account is to be borne between the centre and the State Government in the ratio of 1:1 as per the prevailing financing pattern. The extra requirement of Rs. 90.00 lakhs has, thus, to be shared between the centre and State Government @ Rs. 45.00 lakhs each. An outlay of Rs. 45.00 lakhs has therefore, been included in the Seventh Plan on this account, of which Rs. 10.00 lakhs is proposed for 1985-86.

**(c) Minor Ports**

27.54. Orissa with its extensive coast line can provide convenient outlets to the sea for commercial products. Development of Minor ports along the Orissa Coast will not only help in providing a cheaper and more convenient outlets to the sea, but will also reduce congestion in nearby ports. With this end in view, one Minor port at Gopalpur is developed during Sixth Plan period. One Fishing Harbour at Dhamara is also developed during Sixth Plan to accommodate Commercial shipping. Moreover, estuaries of tidal rivers in Balasore, Cuttack and Puri districts provide natural navigational outlets to mechanised crafts for economic fishing. The State Fisheries Department is taking steps to develop number of fishing bases during the Seventh Plan period. Commerce and Transport (Port) Department is required to provide certain extra facilities to declare those places as Minor Ports under the provisions of Indian Ports Act

**Gopalpur Port**

27.55. The Construction of Gopalpur port project falls under this category. This minor port was taken up during the sixth plan under State plan. Actual construction of the port has started in 1980 and is scheduled to be completed in September, 1986 in order to provide export facilities to the mineral sands of the Indian Rare Earths Ltd. Due to paucity of funds, it has been very much difficult to speed up the construction. Till now, a sum of Rs. 767.83 lakhs has been spent. An amount of Rs. 15.63.00 lakhs will be required in the Seventh Plan to complete the Project. Unless the construction work is expedited, the port will lose the revenue and the investment made will remain idle. During 1985-86 a sum of Rs. 1325.00 lakhs is proposed to be utilised in the following manner: —

Name of work	Amount proposed for expenditure in 1985-86 (Rs. in lakhs)
1. Sand Pump Assembly	550.00
2. Extension of trestle	40.00
3. Final Payment of SPT. and IREL.	50.00
4. Stacking Area and Pitching	15.00
5. Colony, Roads & permanent Water-Supply Schemes including distribution system	20.00
6. Payment to IREL.	10.00
7. Dredging II stage	250.00
8. Slipway	80.00
9. Payment for Barges, Dredger, Cranes and other port equipments against Bank Guarantee	260.00
10. Purchase of T & P and maintenance	10.00
11. Establishment	20.00
12. Consultancy & Preliminary	20.00

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Rs. 1325.00 lakhs

### Expansion of Existing facilities to Dhamara Fishing Harbour

27-56. In 1978 a modern fishing harbour has been constructed at Dhamara at a cost of Rs. 102.00 lakhs. It provides berthing facilities to about 60 fishing trawler at present. This fishing harbour has been declared as a minor port under Indian Ports Act, 1908. A sum of Rs. 15.00 lakhs has been spent during the Sixth Plan period for providing some essential facilities like wet basin, housing accommodation, weather warning signal stations, internal roads, etc. But facilities provided so far are inadequate for operation of the port to its optimum capacity of 100 mechanised fishing crafts. It is therefore, very much essential that another wet basin, improvement to slipway and workshop, construction of port boundary, provision of quarters for staff and other essential services like bank, post office, hospital, policestation, school, fuel station, etc. are provided there. Reclamation of further area is also necessary. For all this, a sum of Rs. 83.00 lakhs is proposed in the Seventh Five Year Plan. Out of this, Rs. 50.00 lakhs is proposed to be utilised during 1985-86.

### Improvement to the existing fishing harbours

27-57. Another modern fishing harbour at Rs. 6.00 crores is being constructed at Astarang in Puri district. After its completion, Indian Ports Act will be extended to it. The present construction is limited to the requirements of normal fishing harbour such as quay wall, auction hall and slipway and workshop. But other facilities essential for a minor port such as weather warning signal station, hydrographic survey, demarcation of navigational channel, construction of port administrative building, provision of wet basin, etc. are to be provided by port organisation. Besides this, improvement to the proposed facilities of the present construction is required to be taken up in respect of slipway and workshop, stabilisation of banks, extension of market area, provision of fishermen's gear store, provision of compound wall, open stacking yards etc. For this purpose an outlay of Rs. 52.00 lakhs has been included in the Seventh Plan.

### Development of New Minor Ports

27-58. The present construction of Gopalpur Port on the south coast and the existing fishing harbour at Dhamara on the north are only the two minor ports in the entire 400 K. Ms. of coast line in the State of Orissa. Though there are adequate potential to develop other minor ports, the planning and execution have not been taken up due to paucity of funds. The new port which can be developed are Kasaphal and Chandipur in the district of Balasore, Nuanai in Puri district, Hansual in Cuttack district, Chilika mouth near Satpara in Puri district, Sorolo, Samandi and Nandianala in Ganjam district. But on priority, the development of Kasaphal now being proposed for inclusion in Seventh Five Year Plan. This port on the north coast commands a very rich and densely populated hinterland covering Balasore, Mayurbhanj and Keonjhar districts. The proposal has been submitted to Government of India in August, 1984 in response to their offer for meeting 50 per cent of the expenditure for development of such minor ports which included an outlay of Rs. 10.94.00 lakhs for Kasaphal. The requirement of Rs. 10.84.00 lakhs for Kasaphal has thus to be shared between the Central and State Government at the rate of Rs. 5.47 lakhs each. State's share of Rs. 5.47 lakhs for this port, has therefore, been included in the Seventh Plan, of which a sum of Rs. 76.00 lakhs will be utilised for this port during 1985-86.

### Provision of Safety and Navigational facilities at the existing fish landing centres

27-59. Taking advantage of good fishing grounds an easy outlet into the sea, fish landing centres have been developed at various places. Necessary installation for navigational requirements are to be provided in those places. In addition to this minimum infrastructural facilities such as electricity, water-



supply, approach road, sheds, etc. are also proposed. The location of the fish landing centres and outlays proposed against each are given below:—

( Rs. in lakhs)			
Serial No.	Location	Outlay proposed for Seventh Plan	1985-86
(1)	(2)	(3)	(4)
1	Chandipur in Balasore district	35.00	..
2	Chudamani in Balasore district (about 500 fishing boats operate there.)	75.00	15.00
3	Adhuan in Balasore district (about 100 boats operate)	28.00	6.00
4	Talasara in Balasore district (about 160 boats operate)	25.00	4.00
5	Kirtania in Balasore district (about 100 boats operate)	33.00	8.00
Total ..		1,96.00	33.00

**Investigation, Planning and preparation of project reports for minor ports to be taken up in future**

27.60. For future development of minor ports in subsequent plans, some potential sites require survey and investigation. Unless these works are taken up and completed during the Seventh Plan period it will not be possible to take up their execution during the next Plan. It is, therefore, proposed that provision for survey and investigation works on potential sites like Nuanai in Puri district, Hansua in Cuttack district, Chilika mouth near Satpara in Puri district, Sorolo, Sumandi and Nandianala in Ganjam district are to be made at the rate of Rs. 6.00 lakhs each totalling to Rs. 30.00 lakhs of which a sum of Rs.16 lakhs will be utilised during 1985-86.

27.61. To sum up, the total requirement of funds during the Seventh Plan period for development of minor ports would be of the order of Rs. 24.71.00 lakhs as below:—

		(Rs. in lakhs)
1.	Gopalpur Port Project	15,63.00
2.	Expansion of existing facilities to Dhamara Fishing Harbour	83.00
3.	Improvement to the existing Fishing Harbour at Astarang	52.00
4.	Development of new minor port at Kasaphal (only 50 per cent share of State Government.)	547.00
5.	Provision of safety and navigational facilities at the existing fish landing centres	196.00
6.	Investigation, planning and preparation of project report for minor ports etc., to be taken up in subsequent plans.	30.00
Total ..		<u>2,471.00</u>

## CHAPTER 28

## TOURISM

28.1. Recent Years have witnessed a growing realisation of the importance of tourism. Today it is reckoned to be the number two industry in the world and is likely to become the leading industry within a few years. While world tourism has increased at a phenomenal pace, India's share of international tourist traffic still remains almost negligible, accounting for a mere 0.6%. Similarly, though the number of international tourist arrivals in India has registered a marked increase in absolute terms, the foreign tourists visiting the State of Orissa account for a little over 3% of the total number of international tourists visiting the country. The benefits of tourism are by now well recognised. International tourism promotes a better understanding among peoples of different nations, whereas domestic tourism helps people of different parts of the country to know each other better. Tourism thus helps in fostering international understanding and in promoting national integration.

28.2. From the economic point of view, apart from the earning of foreign exchange, many benefits flow from the tourism. Investment in tourism is comparatively small and yields quick returns. Expenditure by a tourists has a multiplier effect. Thus, it is estimated that every time a tourist spends money it has a chain reaction of 13 to 14 transactions in the State's economy. Of these, 5 to 6 transactions take place in the first 12 months after the tourist spends his money. It is generally agreed that the multiplier effect may be taken as 3.2. Since tourism is basically a service industry, the employment multiplier in tourism is also very high. Surveys have shown that the employment multiplier is as high as 2.82 for foreign tourism (which is more capital intensive) and even higher at 4.00 for domestic tourism (which is more labour intensive). Apart from the direct benefits to the economy in terms of increased income and employment opportunities, tourism also promotes development of backward areas by way of opening up tourist destinations in such areas and thereby helps in removing regional economic imbalances. Moreover, tourism also helps in preserving and encouraging traditional festivals, arts, handicrafts and wild life.

28.3. The Sixth plan period witnessed significant developments in the tourist industry in Orissa. Particularly the policy decision of the State Government to treat hotels as industry and extend to the hotel Projects similar benefits as given to industry stimulated a healthy growth of quality hotels, especially in Bhubaneswar, Puri and Cuttack. The opening of the marine drive from Konark to Puri has not only shortend the distance between these two places but has also opened up a long stretch of beach which offers enormous potential for tourism development. Steps were also taken to open up new destinations in interior areas by providing necessary infrastructure facilities. The fact that the investment in the tourism sector in the past has paid dividends is amply borne out by the statistical figures regarding the tourist arrivals in the State. Thus, the number of international tourists visiting the State at the start of the Sixth Plan Period i. e. during the year 1979-80 was 19,916 and this figure is likely to rise to 28,514 by the end of the Sixth Plan Period. Similarly, the number of domestic tourist visiting the State at the beginning of the Sixth Plan period was 1,40,159 which is likely to go upto 7,62,651 by the end of the Sixth Plan Period.

#### Seventh Plan Objectives

28.4. While much development has taken place in the tourism sector during the Six Plan period, the State still remains, by and large, an area of unrealised tourist potential. Orissa has so far been known primarily as a cultural tourist destination identified mainly with Puri, Konark and Bhubaneswar. However, the State is not only enormously rich in its cultural heritage and monuments, but is also endowed with fine beaches, rich forests and beautiful lakes. A large tribal population which includes 62 separate tribes with distinct customs and traditions of their own gives the State a unique flavour. These other areas of tourist interest have till now remained largely undeveloped because of inadequate publicity and also lack of infrastructural facilities such accommodation and transport.

28.5. During the Seventh Plan, therefore, the main effort will be to diversify tourism in the State on a selective basis into other areas, such as wildlife tourism, beach tourism, resort tourism, youth tourism

and so on. Cultural tourism will continue to remain the main stay, but even this field there are new areas to be developed. Particular mention must be made here of the Budhistic triangle of Lalitgiri, Ratnagiri and Udayagiri. The distinct advantage that Orissa enjoys is that it can offer cultural attractions as well as wildlife and recreational attractions in close proximity with one another. Tourists coming to the State will, therefore, be able to enjoy an ideal mix of the different aspects of the tourist attractions of Orissa. Diversification will not only help to increase the number of tourist arrivals but also provide incentive to the tourist to increase the duration of his stay in State.

28.6. As mentioned earlier, the number of tourist arrivals in the State by the end of the Sixth Plan period is likely to be about 0.29 lakhs (international) and 7.60 lakhs (domestic) which will mean a growth rate during the Sixth Plan period of about 7 per cent and 53 per cent respectively. The Government of India anticipate a growth rate of 15 per cent for the Seventh Plan period so far as international tourists are concerned. This growth rate may, therefore, be adopted as the target for the Seventh Plan period for the State in respect of both international and domestic tourists. At this rate of growth international tourists visiting the State will number 0.60 lakhs and domestic tourists 15.50 lakhs by the end of the Seventh Plan period. Surveys have shown that the average duration of the State of an international tourist is 3 days and of the domestic tourist 2 days in the State. With the steps to be taken to diversify tourism it is expected that the average duration of the stay of international as well as domestic tourists will increase by at least two days during the Seventh Plan period. The average spending of the international tourist in the State is estimated at Rs. 170/- per day and that of the domestic tourist at Rs. 65/- per day. The increase in the number of tourist arrivals alongwith the increase in the average duration of their stay will, therefore result in raising the quantum of tourist spending from Rs. 10.00 crores during 1984-85 to Rs. 57.74 crores during 1989-90.

28.7. The achievement of the targets indicated above will call for sustained and coordinated effort on the part of the State Department of Tourism, the Orissa Tourism Development Corporation and also the private sector. In order to involve the private sector in this effort. It is expected that the incentive offered to the total Industry during the Sixth Plan period will continue. Extension of incentives to the other tourism related sectors, such as transport, may also be considered. While the activities of the private sector and also the Orissa Tourism Development Corporation will be concentrated in the commercially viable areas, the Department of Tourism will have to take the brunt of the effort to promote new Tourist destinations where the facilities created will not be immediately commercially viable.

#### STRATEGY FOR THE SEVENTH PLAN

28.8. To achieve the targets fixed for the Seventh Five-Year Plan should not be too difficult. Orissa is a State with vast tourist potential which has so far remained to a great extent unrealised. Hitherto, Orissa was known in other parts of India and abroad mainly for its temple architecture including the Sun Temple at Konark and the Jagannath Temple at Puri which is an ancient seat of Hindu religion and culture. The enormous potential that the State offers for recreational Tourism in the shape of beach resorts, water sports and wild-life has so far not been adequately exploited. While cultural tourism will continue to remain its forte, efforts will be made to diversify tourism in Orissa into other avenues of recreational tourism. The great advantage that Orissa has is that the attractions of cultural tourism and recreational tourism can be offered in close proximity to each other and every tourist to the State can have an ideal mix of the two. To sum up, the strategy for achievement of the Seventh Plan targets will be as follows:—

- (i) To project a proper image of the State as an ideal place not only for cultural tourism, but also for recreational tourism such as beach tourism, wild-life tourism etc.
- (ii) To strengthen and expand the existing facilities for tourists in the well established tourist destinations, mainly in and around the golden triangle of Puri, Konark and Bhubaneswar.
- (iii) To open up new destinations of recreational tourism, including beach tourism, water sports and wild-life.

28-9. The total investment proposed to be made for development of tourism during the Seventh Five-Year Plan is Rs. 15 crores. The outlay in the Sixth Five-Year Plan was Rs. 325 lakhs against Rs. 57 lakhs during the Five Years preceding the Sixth Plan which represented a six fold increase. A significant increase is also envisaged during the Seventh Plan and the outlay proposed is considered the minimum investment required to carry forward fruitfully the initiative taken in the Sixth Plan period to realise to a substantial degree the enormous tourist potential of the State.

28-10. The outlay for the year 1985-86 has been tentatively fixed at Rs. 150 lakhs. According to the directive issued by the Planning Commission, the spill over liabilities of the previous plan period will be the first charge in the Seventh Five-Year Plan. The liabilities of the previous plan period as estimated now is of the order of Rs. 65 lakhs. The manner in which the remaining Rs. 85 lakhs will be utilised as discussed in the following paragraph:

#### **Tourist Accommodation**

28-11. As indicated earlier, one of the major areas of tourism to be developed during the Seventh Plan period in the wildlife tourism. Already some steps have been taken during the Sixth Plan period for the development of Similipal National Park where a Forest Lodge has been taken up with central assistance. The other areas proposed for development of wildlife tourism during the Seventh Plan period include Tumulibandha in the district of Phulbani and Tikarapara in the district of Dhenkanal. It is proposed to construct a 20 room forest lodge at each of these two places which would cost around Rs. 70 lakhs. The forest lodge at Tumulibandha would not only provide access to the Belghar sanctuary but also enable the tourists to acquaint themselves with the customs and traditions of the tribal communities of the area.

28-12. The year 1985 has been identified as the International Youth Year. For the promotion of Youth Tourism, proposals have been submitted to the Government of India for construction of six additional Youth Hostels during the Seventh Plan period besides the existing one at Puri. Provision has been made in the State Plan for construction of three Youth Hostels at Bhubaneswar, Koraput and Kalarapat (Kalahandi district) at a total cost of Rs. 50 lakhs. The Youth Hostels at Koraput and Kalarapat will provide a base for young tourists to make trekking excursions into some good forest and tribal areas of the State. It is now recognised that Youth tourism helps to popularise new destinations.

28-13. Orissa has a large number of important religious centres. Many of these religious centres are also places of scenic beauty and attract a number of pilgrims both from within and outside the State. To facilitate the visits of such tourists, it is proposed to construct Dharmasalas at Puri, Harishankar in Balangir district, Patelganga in Kalahandi district and Bhatarika in Cuttack district. An amount of Rs. 55 lakhs has been provided for this purpose. Assistance of the Bharatiya Yatri Avas Vikas Samiti will also be sought in the construction of Dharmasalas.

28-14. An aspect that has generally been overlooked is proper land-scaping around accommodation facilities created for tourists. Such land-scaping greatly enhances the attractiveness of such facilities. An amount Rs. 29 lakhs has been provided for taking up land-scaping around existing tourist bungalows and also their further development and expansion where necessary.

28-15. The efforts of the State Department of Tourism to diversify tourism in the State into wild-life tourism and recreational tourism will be supplemented by the Orissa Tourism Development Corporation. This will involve construction of new tourist bungalows by the Corporation at selected wildlife and recreational centres and also expansion and renovation of its existing units. An amount of Rs. 410 lakhs has been provided for additional equity to the Corporation for this purpose.

28-16. From time to time the Central Government provides assistance for accommodation projects, such as the forest lodge in Similipal, which also have a substantial element of State participation. Maintenance of these facilities is the responsibility of the State. A bulk provision of Rs. 40 lakhs has been kept to enable the State to participate in such Central Projects.

28-17. To sum up, the total rooms likely to be ready by the end of the Sixth Plan period will be of the order of about 6, 000. Keeping the targetted growth rate of tourist arrivals in view, it is anticipated that another 3,000 rooms would be required by the end of the Seventh Plan period. Construction of about 436 additional rooms will be taken up through the Department of Tourism and the Orissa Tourism Development Corporation. It is hoped that the balance requirement will be met by the private sector. The total investment proposed to be made for creation of additional accommodation facilities during the Seventh Plan period is Rs. 710 lakhs which includes an amount of Rs. 56 lakhs for clearance of the spill-over liabilities.

28-18. By the commencement of the Sixth Five-Year Plan 11 Tourist Bungalows of Panthanivas category had been constructed in the State, the establishment of the Orissa Tourism Development Corporation, all these Tourist Bungalows were transferred to said Corporation for operation and management during the Sixth Five-Year Plan. Two of these Tourist Bungalows are at Bhubaneswar and Puri. Immediately after taking over the two bungalows, the Orissa Tourism Development Corporation took up their expansion. In addition, construction of Tourist Bungalow was also taken up by the Corporation at Rourkela. All these three projects have spilled over to Seventh Five-Year Plan. The year in which the aforesaid three projects are scheduled for completion is 1985-86. Apart from these projects, the Orissa Tourism Development Corporation is also putting up a hotel at Puri in collaboration with the India Tourism Development Corporation. This project too is scheduled for completion during the year 1985-86. To ensure completion of these projects in time, the Corporation will require equity support of Rs. 30 lakhs. An outlay of Rs. 30 lakhs is proposed to be earmarked for the purpose to enable Corporation to meet its spill-over liability.

28-19. Among the Projects that the Orissa Tourism Development Corporation has proposed to take up during the Seventh Plan period is the construction of a 20-roomed tourist bungalow with 4 cottages at Jashipur on National Highway No. 6 which is the entry point to Similipal National Park from the western side. This is already an extremely popular entry point to Similipal for tourists coming from Bihar and West Bengal. However, as there are hardly any accommodation facilities at present at Jashipur, tourists are put to a lot of inconvenience. The construction of a Panthanivas at Jashipur is therefore of considerable importance for promoting wild-life tourism. The Corporation has also proposed to take up the improvement and expansion of the Tourist Bungalow at Chandipur on sea in the district of Balasore as this can also be convenient to be visited by tourists coming to Similipal. The estimated cost of both these projects comes to Rs. 130 lakhs of which Rs. 78 lakhs will be raised in the shape of institutional finance. The Orissa Tourism Development Corporation will therefore need an equity support of Rs. 52 lakhs for raising the institutional finance of Rs. 72 lakhs. It is, therefore, proposed to provide a tie up equity of Rs. 12 lakhs to the O. T. D. C. in order to enable it to take up construction of the first phase of the aforesaid two projects during the year 1985-86.

28-20. Four new projects are proposed to be taken up for creation of accommodation facilities for the tourists during the year 1985-86. They are (i) Construction of a Youth Hostel at Bhubaneswar, (ii) Construction of a Panthasala at Patalaganga, (iii) Improvement of the Tourist Complex at Taptapani, and (iv) Construction of Compound wall for the Panthanivas at Barkul. As a part of celebration of the Youth Year, it is proposed to take up construction of a Youth Hostel at Bhubaneswar during the year 1985-86. The estimated cost of this project is Rs. 16 lakhs, the capital component of which is Rs. 14 lakhs. It is proposed to complete its construction in three years. Accordingly an outlay of Rs. 4 lakhs is proposed to be set apart for the purpose during the year 1985-86.

28-21. As has been indicated earlier the traditional image of the State has so far been primarily cultural. Though efforts are being made to project other facets of the State's tourism potential cultural tourism will continue to remain the main attraction. One of the centres of pilgrimage which attracts a sizeable number of tourists from the neighbouring State of Madhya Pradesh is Patalaganga in the district of Kalahandi. Unfortunately, however, there are at present practically no accommodation facilities there for the tourists. It is, therefore, proposed to fill this gap by establishing a tourist bungalow (Panthasala) at Patalaganga during the Sixth Five-Year Plan period. The estimated cost of this project is Rs. 15 lakhs, the capital component

of which is Rs. 12 lakhs. As the time-frame envisaged for the project is 3 years, it is proposed to provide the capital component during the first two years to ensure construction of the building. The remaining Rs. 3 lakhs, which constitutes the revenue component, will be provided during the third year of the Plan so as to make the project operational during that year. An outlay of Rs. 4 lakhs is, therefore, proposed to be earmarked for the project during the year 1985-86.

28.22. Barkul is another tourist complex on Chilka Lake. A Tourist Bungalow is already in operation there. For its development as a tourist complex, it has been decided to acquire other private lands adjacent to it in phases. The first phase of acquisition has already been completed during the Sixth Five-Year Plan. There is now need to enclose the area with a compound wall and also landscape properly. An outlay of Rs. 3.91 lakhs is also proposed to be earmarked for the purpose during the year 1985-86, i. e., Rs. 2.91 lakhs for the compound wall and Rs. 1.00 lakh for landscaping.

28.23. The four projects discussed above under the scheme 'Tourist Accommodation' are proposed to be taken up in the State sector of the plan. But there are more other projects which are taken up jointly with the Centre. Only one such Project is currently under execution in the State, the wild-life lodge at Lulung in Similipal. Sanctioned by the Union Ministry of Tourism during the year 1983-84 the project is in the process of execution now. The participation of the State in the said project extends over provision of land for the project, provision of water and electric at the project site, and provision of staff quarters and compound wall around the project site with a suitable gate. The cost of participation in this project has been estimated at Rs. 37.13 lakhs. As the project is scheduled for completion during the year 1985-86, provision for meeting the cost of participation of the State in the project has to be made during that year. An outlay of Rs. 37.13 lakhs is, therefore, proposed to be earmarked for the purpose for meeting this liability.

#### **Tourist Centres:**

28.24. Besides accommodation, facilities have also be created for the entertainment and recreation of tourists. As mentioned earlier, Orissa has a great deal of potential for recreational tourism. The projects proposed to be taken up during the Seventh Plan period are as follows;

(1) Land-scaping and development of Hirakud Sports at Chilka Lake	Rs. 15 lakhs
(2) Establishment of an Institute of Water-Sports at Chilka Lake	Rs. 15 lakhs
(3) Development of Water-Sports facilities on Chilka Lake	Rs. 50 lakhs
(4) Expansion of the existing Jetty at Barkul	Rs. 5 lakhs
(5) Construction of an Open-air Auditorium at Konark	Rs. 10 lakhs
(6) Establishment of a Deer Park at Konark	Rs. 10 lakhs
(7) Establishment of a Beach Recreation Complex	Rs. 40 lakhs
(8) To provide infrastructural facilities for Fairs and Festivals	Rs. 10 lakhs
(9) Illumination of three selected Archaeological Monuments	Rs. 30 lakhs
(10) Establishment of Tourist Reception Centres at three important tourist destinations.	Rs. 28 lakhs
(11) Land-scaping of Tourist Centres	Rs. 15 lakhs
(12) Construction of Tourist Shopping Complex	Rs. 10 lakhs
(13) Development of way-side amenities including snack-bars, wash rooms and toilet facilities.	Rs. 10 lakhs

28.25. As in the case of accommodation, the Central Government, from time to time, also assist in recreational projects which have an element of State participation. To enable the State to participate in such projects, a sum of Rs. 25.80 lakhs has been provided. Thus, the total investment for building up entertainment and recreational facilities for tourists is proposed to be of the order of Rs. 280 lakhs which includes an amount of Rs. 6.20 lakhs for meeting the spill-over liabilities.

28-26. Four projects were taken up during the Sixth Five-Year for provision of recreational facilities in different tourist centres namely, (i) Bathing Complex at Atri in the district of Puri, (ii) Basic amenities for the tourists at Furljharan in the district of Kalahandi and (iii) Two jetties one each at Barkul and Raubha on Chilka Lake for providing facilities for cruising, which is one of the modes of recreation there. All these projects will be completed by the end of the Sixth Five-Year Plan as scheduled.

28-27. No new project under the scheme 'Tourist Centre' is proposed to be taken up during 1985-86 in the State sector. However, under the scheme 'Tourist Centre, there are also projects financed jointly by both Centre and the State. There are three such projects which have been taken up for execution in the Central sector. These are (i) Toilet block near the Sun Temple at Konark, (ii) Purchase of fibre-glass boats for organisation of water-skill courses at Barkul on Chilka Lake, (iii) Flood-lighting of the Khandagiri and Udayagiri hills. While the first two projects were sanctioned by the Union Ministry of Tourism during the year 1983-84, the third was sanctioned during the year 1984-85. According to the financing pattern evolved by the Union Ministry, the provision for capital expenditure on the first two projects would be made by the Centre and the revenue expenditure would be met by the State. In addition, maintenance of these projects would also constitute the responsibility of the State. This has made it imperative for the State to make specific provision for the purpose during the year 1985-86 when both the said projects are scheduled to be made operational. So far as the remaining project is concerned, the participation of the State is not limited to its maintenance alone, the State is also expected to share the capital expenditure. The cost of participation of the State in all the said three projects has been estimated to be of the order of Rs. 6.96 lakhs. An outlay of Rs. 6.96 lakhs is, therefore, proposed to be earmarked during the year 1985-86 for participation in the Central projects currently under execution in the State under the scheme 'Tourist Centre'.

#### **Tourist Transport.**

28-28. At present transport services for tourists are being provided by the Orissa Tourism Development Corporation and the private sector. As earlier mentioned, the State Department of Tourism will be taking up construction of tourist bungalows in new destinations which will be more in the nature of promotional ventures. Since the operation of transport services in such areas may not be immediately viable from the commercial point of view, the Department will have to provide some transport facilities for the convenience of tourists visiting such areas. A sum of Rs. 45 lakhs has been earmarked for providing transport services at such tourist destinations. Besides, an amount of Rs. 50 lakhs has also been kept for provision as equity to the Orissa Tourism Development Corporation for expanding its existing transport services. It is hoped that the private sector will also play a significant role in building up the required transport services for tourists.

#### **Tourist Information and Publicity**

28-29. A concerned and imaginative publicity campaign has to occupy an important places in the activities of the Department during the Seventh Plan period if the wealth and diversity of Orissa's tourist attractions are to be adequately projected. Such a campaign will include production of tourism literature and audio-visuals, advertisements through the media including periodicals, newspapers and TV and display of hoardings, visits of travel writers and agents and others connected with the travel trade. The minimum requirement to take up such activities in a meaningful manner is estimated at Rs. 250 lakhs.

28-30. The Chilka Boat Race has become more or less an annual feature. Organisation of such events and also participation in tourism fairs and exhibitions outside the State will be an important element in the projection of the tourist image of the State. An amount of Rs. 30 lakhs has been provided for this purpose.

28-31. As part of the publicity effort, additional number of tourist offices will have to be opened outside the State. At present offices outside the State have been sanctioned only at New Delhi, Calcutta, Madras and Bombay. While tourist offices are functioning at New Delhi and Calcutta, the latter two are still to be opened. Provision has been made for opening of tourist

offices in at least three more cities outside the State during the Seventh Plan period. An amount of Rs. 15 lakhs has also been provided for upgrading the existing tourist offices by providing additional posts and vehicles where necessary in order to meet the additional workload. Thus the total investment proposed to be made under the scheme "Tourist Information and Publicity" is Rs. 320 lakhs which includes an amount of Rs. 10 lakhs for clearance of spill-over liabilities.

28.32. Efforts have therefore to be made not only for enriching the tourism literature so far brought out also to produce more audio visual materials on the tourist attractions of the State. The production of such publicity material will have to go hand in hand with other measures. The details of such measures proposed to be taken up during the year 1985-86 are summarised as below:

- (i) Display of hoardings on important Highways and Railway stations in the State and in important cities outside the State.
- (ii) Installation of Translide box in important Railway stations for visual presentation of tourism potentials of the State.
- (iii) Organisation of fairs and festivals and participation therein.
- (iv) Production of tourism literature/film, etc.
- (v) Utilisation of various media for advertising tourist destinations and the facilities available for the tourists.
- (vi) Utilisation of the services of Travel Writers/Agents/Photographers by inviting them to the State and extending hospitality.
- (vii) Participation in tourism conventions and seminars outside the State to project the tourism potential of the State.

28.33. Such activities were also undertaken during the Sixth Five-Year Plan. But the liabilities on account of these activities could not be cleared during the said Plan period due to constraint on resources. The liabilities that have spilled over to the Seventh Five-Year Plan for clearance have been estimated to be of the order of Rs. 10 lakhs. So the clearance of these liabilities has to be treated as the first charge in the Annual Plan for the year 1985-86.

28.34. The launching of both intensive and extensive publicity campaign will call for strengthening of the existing machinery both in the headquarters and in the field. The machinery to be available in the field by the end of the Sixth Five-Year Plan will consist of 20 Tourist Offices and 17 Tourist Counters. Out of these, seven Tourist Offices and 8 Tourist Counters are being maintained in the Plan side. It is, however, presumed that with the end of the Sixth Five-Year Plan, the provision for maintaining the existing machinery in the Plan side will be transferred to the non-plan side with effect from the year 1985-86 for further maintenance. In the Plan side, two new Tourist Offices are proposed to be opened during the year 1985-86. These Tourist Offices will be opened as a part of the State's endeavour to open Tourist Offices in all the neighbouring States. The neighbouring States with which the State has the common border are four in number, namely, West Bengal, Bihar, Madhya Pradesh and Andhra Pradesh. By the end of the Sixth Five-Year Plan only one of the States, namely, West Bengal will have a Tourist Office. There will still remain three neighbouring States without Tourist Offices. The States in which the Tourist Offices are proposed to be opened during the year 1985-86 are Andhra Pradesh and Madhya Pradesh. In addition, a Tourist Office is also proposed to be opened in Varanasi in Uttar Pradesh because of its strategic location in the air and tourist map of India. The expenditure on opening of three Tourist Offices outside the State is likely to be of the order of Rs. 2 lakhs during the year 1985-90. An outlay of Rs. 2 lakhs is, therefore, proposed to be earmarked for the purpose during the year 1985-86.

#### Survey and Statistics

28.35. The need for collection of reliable tourist statistics on which future policies and projects can be based cannot be overemphasised. A Research and Statistics Cell created in the State Department of Tourism during the Fifth Plan period. It would be necessary to strengthen this cell and also to equip it with modern aids for processing of tourism statistics. An amount of Rs. 5 lakhs has been provided for the purpose. Planned development of tourist destination Centres requires preparation of proper land-use Plans. An amount of Rs. 15 lakhs has been provided to enable the Department to undertake the preparation of such land-use plans for development of selected destinations. Central assistance will also be sought for this purpose wherever possible. The total amount provided under the scheme "Survey and Statistics" is, therefore, of the order of Rs. 20 lakhs.



### **Direction and Administration**

28.36. The setting up of publicity activities and the growing participation in tourism fairs and festivals require the setting up of a cell in the Department which can be specially equipped for taking up such activities in an organised and systematic manner. An amount of Rs. 5 lakhs has been kept for this purpose. Besides, Rs. 5 lakhs has also been provided for the training of tourism department personnel and also guide training programme. A sum of Rs. 40 lakhs has been provided as equity for the Orissa Tourism Development Corporation for construction of its office building. A site has already been selected for the purpose. The building proposed to be constructed will not only house the office of the Corporation but also the Department of Tourism and other organisations connected with the tourism trade. The total requirement thus estimated under "Direction and Administration" is Rs. 75 lakhs which includes an amount of Rs. 25 lakhs for meeting spill-over liabilities.

28.37. Tourism has become one of the activities of the State Government since the Second Five-Year Plan. Initially the tourism activities in the State were not of such a scale as to justify creation of a Department. But with the passage of time, the tourism activities in the State increased manifold and, as a result, a separate Department was created by the State Government. The functioning of which almost synchronised with the commencement of the Fifth Five Year Plan. Though several years have passed since the creation of the Department, no permanent building for housing the Department has so far been constructed. A beginning was made during the Sixth Five-Year Plan period by making a paltry provision of Rs. 3.54 lakh for the purpose. This provision has not helped the actual construction of the building. As a result, the project has spilled over to the Seventh Five-Year Plan. The amount required for completion of this spill-over project is of the order of Rs. 25 lakhs. In view of the urgent need of such a building, it is proposed to provide the entire amount during the first year of the Seventh Five-Year Plan so that the Department gets a building for its permanent accommodation for smooth discharge of the responsibilities assigned to it. For clearance of the said spill-over liability, it is therefore proposed to earmarked an outlay of Rs. 25 lakhs during the year 1985-86.

## CHAPTER 29

## SCIENTIFIC SERVICES AND RESEARCH

**(a) Science and Technology Development Programme**

29.1. In Orissa, a State Council on Science, Technology and Environment consisting of experts has been established and in its first meeting the Council has given a direction regarding the Science and Technology Programmes to be followed in the State in future. The programmes approved can be broadly classified as : (a) promotion of science and technology through the funding of mainly application oriented research, development of appropriate rural technology and its transfer ; (b) establishment of close co-ordination among the activities of Universities and Research institutions inside the State with a view to optimizing their out put and establishment of effective linkage between industries and research institutions including Universities as regards R. & D. activities ; (c) strengthening of scientific temper in the students community ; and (d) popularisation of science and technology among the people and development of entrepreneurship among Science and Technology personnel.

29.2. The out-lay proposed for the Seventh plan for development of Science and Technology is Rs. 975.00 lakhs as shown below :—

	(Rs. in lakhs)
(a) Science and Technology promotion ..	735.00
(b) Science and Technology Co-ordination ..	40.00
(c) Science and Technology promotion among students ..	135.00
(d) Science and Technology promotion among people in general ..	15.00
(e) Entrepreneurship development programmes ..	10.00
(f) Science and Technology Secretariat expenses ..	40.00
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Total ..	975.00
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**Science & Technology Promotion**

29.3. In order to encourage application oriented research in the State, the State Council on Science, Technology and Environment established under the Department of Science, Technology and Environment would provide research grants. These grants would be given with the following objectives in view :—

- (a) to encourage primarily applied research on Science and Technology and direct relevance to the achievement of the country's economic goals,
- (b) to encourage technologies which will result in efficient use of non-renewable sources of energy ; development of their substitutes and promotion of renewable energy technologies.
- (c) for promotion of projects aimed at,
  - (i) rural and urban settlement improvement,
  - (ii) scientific and efficient land and water management,
  - (iii) preservation of flora and fauna,
  - (iv) pollution control,
  - (v) environmental awareness promotion and education,
  - (vi) fertility control and preventive health care ; and
  - (vii) food preservation.

During 1984-85, Rs. 2.00 lakhs has been provided in the State Plan for grants-in-aid to the State Council for funding such research. In the Seventh plan, it is proposed to provide Rs. 25 lakhs for this purpose and the annual allocation for the year 1985-86 is proposed at Rs. 5.00 lakhs.

29.4. In order to recognise and encourage high quality research among scientists, it has been decided to institute an annual award to be named as Samanta Chandrasekhar award after the famous Astronomer scientist of eminence of the State. A committee consisting of recognised scientists would examine the recommendations received from different institutions and select a scientist for the award. The award is for Rs. 20,000 in cash along with a citation. It is proposed to provide Rs. 3.00 lakhs in the Seventh Plan for this purpose including organisational expenses that would be required for the purpose. For the year 1985-86 a sum of Rs. 60,000 has been proposed.

29.5. Orissa is rich in mineral resources. She possesses about 95 per cent of the country's reserves of Chromite, 60 per cent of the Bauxite reserves of the country, about 30 per cent of the country's iron and manganese ore etc. The State has also many important industries utilising these mineral resources. With a view to improving the properties of the materials produced out of these resources, it is proposed to establish an Institute of Material Science in the State. This institute would also afford qualitative and sophisticated research facilities to scientists in the State conducting experiments on any aspect of material sciences including polymers, fibres ceramics, rare earths, silica etc. During the Seventh Plan period, it is proposed to spend Rs. 202.00 lakhs for the establishment and growth of this institute out of which Rs. 25.00 lakhs will be spent in 1985-86. Similar contribution from the Department of Science and Technology, Government of India, is anticipated since support to research on frontier areas is one of their programmes as enunciated in their annual Report 1983-84 saying "The Department has been catalytic and instrumental in identifying, formulating, and implementing a large number of programmes with the help of the expertise available within the country and abroad in front line emerging areas such as bio-technology, genetic engineering, materialise, plasma physics etc. These programmes will have a longer gestation period but will ultimately result in very useful findings of direct relevance to national development".

29.6. It is also proposed to establish an Institute of Life Sciences where multi disciplinary research would be carried on frontier areas of biology, bio-physics, bio-chemistry and bio-engineering genetics and genetic-engineering would get priority. The State Council on Science, Technology and Environment in its first meeting approved the establishment of this and the institute of material sciences and during the Seventh Plan period, it is hoped that the two institutes would start functioning. For the institute of life sciences, it is proposed to spend Rs. 202.00 lakhs anticipating an equal contribution from the Department of Science and Technology and assistance from the Department of Environment, Government of India. This includes a provision of Rs. 25.00 lakhs for the first year, 1985-86.

29.7. The State Council on Science, Technology and Environment has also approved establishment of a computer application centre in the State. The Computer Application Centre (CAC) would initially assist in introduction computerisation in different Departments of the State Government and Public sector units to increase operational efficiency. Thereafter the CAC would not only provide expertise in the use of computers in the State Government but will also dovetail some of its programmes into the activities of the remote sensing application centre of the Department. An effort will be made to establish a Regional Computer Centre at Bhubaneswar with the help of Department of Electronics, Government of India to serve as a sophisticated computer facility for the whole State. During the Seventh Plan, Rs. 61.00 lakhs has been provided for this centre which includes the expenditure on infrastructure, equipment and personnel. The provision proposed for the year 1985-86 for this scheme is Rs. 2.00 lakhs.

29.8. Remote Sensing is a modern tool in the hands of research scientists, planners and decision makers for quick and accurate acquisition of data through satellite imagery and aerial photography for weather forecasting, soil conservation, mineral exploration, forestry and hydrology. A modest beginning

has been made and the Orissa Remote Sensing Application Centre (ORSAC) has already been established in the State. Programmes to survey the land use pattern of the State, condition of watersheds, ground water potential etc. are on the anvil. There is likelihood of collaboration with Space Application Centre, Ahmedabad for three projects in the State. The ORSAC has acquired a few manual interpretation equipment and this has to be increased in order to perform all its functions. Accordingly, during the Seventh Plan period, a provision of Rs. 171.00 lakhs has been proposed essentially for the establishment of this centre including acquisition of land, construction of a secure building which would house classified documents and soft ware, photo interpretation and photographic equipment. For the year 1985-86, it is proposed to spend Rs. 25.00 lakhs for this purpose.

29.9. Identification of appropriate rural technology and its dissemination to the agriculturists and small scale industrialists, is an important programme of the Department of Science, Technology and Environment. Development of science and technology for women and scheduled castes/scheduled tribes/other weaker sections essentially through appropriate rural technology is also an important programme of the Department of Science and Technology, Government of India. In order to promote the development of appropriate rural technology and at the same time ensure its transfer to the agriculturists and artisans, women, scheduled castes, scheduled tribes and weaker sections of the society, it is proposed to establish a centre for appropriate rural technology (CART). During the Seventh Plan, it is proposed to spend Rs. 46.00 lakhs for this purpose including Rs. 4.00 lakhs in the year 1985-86. The money would be spent on research, purchase of equipment, establishing a workshop, for subsidising technology in the initial stages, salary etc.

29.10. An autonomous body registered under the Societies Registration Act to promote scientific temper and scientific studies in the State is proposed to be encouraged by strengthening the existing Orissa Vigyan Academy for this purpose. The Vigyan Academy will not only suggest ways and means of the promotion and development of Science and Technology in the State for consideration of the State Council on Science, Technology and Environment but will also have the organisation to implement some of the approved programmes of the State Council. To encourage such activities, it is proposed to give grants-in-aid to the Orissa Vigyan Academy to the tune of Rs. 15 lakhs during the Seventh Plan period including Rs. 3 lakhs during 1985-86.

#### Co-ordination

29.11. In order to establish an useful linkage between all the research activities being undertaken in the State and organisations/agencies/bodies/individuals who are in a position to make use of the result of such research, it is proposed to compile a directory of all resource personnel together with the work they are doing; and the research facilities that are existing in various institutions. With this information it would not only be possible to obviate duplication of activities but also to give direction to research in a way so as to make the research purposeful for the requirements of the State and its people. This programme will also have a close link with the documentation centre being proposed so that the information collected can be retrieved quickly for the purpose of co-ordinating research and development activities. During the Seventh Plan period, it is proposed to spend Rs. 3.50 lakhs only for this purpose of which Rs. 50,000 is proposed to be spent in 1985-86.

29.12. It is essential for the State Department of Science, Technology and Environment to establish a documentation centre-cum-library. Books, Journals, films and other information on science and technology would be collected, classified and disseminated. It is also proposed to introduce a news letter on science and technology. During the Seventh Plan period, Rs. 36.50 lakhs has been proposed for the manpower required for this centre, for purchase of books, journals, films, etc. and for acquiring essential equipment like copiers and micro computers. The allocation suggested for this purpose in 1985-86 is Rs. 1.50 lakhs.

### **Strengthening of scientific temper among students**

29.13. The Department of Science, Technology, Government of India has been increasingly giving attention to involving a large section of the society in science and technology related activities. This will help promotion of scientific interest in youth. "The State Council for Science and Technology, set up by various States are also encouraged to promote scientific interest in the youth". The student community has been identified for special attention for generating in them scientific temper. They are being encouraged to organise themselves into groups for various scientific activities like organisation of seminars, science fairs, exhibitions, organising talks by eminent scientists, organising scientific exhibits and visits to centres of excellence, etc. The Department proposes to fund such activities and for this a sum of Rs. 10 lakhs for the Seventh Plan period is being proposed. An outlay of Rs. 1.00 lakh has been kept for 1985-86 for this purpose.

29.14. The Central Government are establishing a District Science Centre in Bhubaneswar. This will be a place where working models on science and technology would be demonstrated and students encouraged to participate and learn from these. To include models showing various environmental problems and solutions, renewable energy technologies, etc., it is proposed to support this District Science Centre with a grant of Rs. 20.00 lakhs from this Department Budget during the Seventh Five-Year Plan period, which includes Rs. 2.00 lakhs for 1985-86.

29.15. In addition to the above, the Department of Science, Technology and Environment proposes to establish to smaller size Science Centres in two interior tribal districts of the State. The activities of these two District Science Centres would be more rudimentary with emphasis on the methodology of science related to concepts which the tribals have been acquainted with traditionally. During the Seventh Plan period, it is proposed to spend Rs. 60.00 lakhs for establishing these two District Science Centres. An allocation of Rs. 8.00 lakhs has been suggested for the Annual Plan, 1985-86.

29.16. The National Talent Search Awards cannot cater to the full requirement of every State and hence it is proposed to introduce State Science Awards to students, in order of merit, out of the list sent for consideration by the National Award Scheme but not considered by them for funding. Every year two students will be considered for this purpose and during the Seventh Plan period Rs. 3.00 lakhs is being proposed. 10 students in total will be encouraged this way. The scheme will be implemented from the second year of the Seventh Plan.

29.17. There is likelihood of collaboration with the British Council for establishing centres for training of Science teachers in the State in the latest training techniques, teaching aids, etc. British Council is likely to meet the entire non-recurring expenditure and this Department propose to meet the expenditure in connection with the pay of the institute staff, some T. A. and D. A. for the teachers, miscellaneous expenses, etc. During the Seventh Plan period Rs. 22.00 lakhs has been proposed and Rs. 2.00 lakhs is proposed to be spent in 1985-86.

29.18. There are approximately 3,500 High Schools in the State. These High Schools generally lack the basic laboratory equipment needed for imparting proper science teaching. The Education Department of the State Government are proposing to spend about Rs. 1.500 lakhs for providing science kits pertaining to education syllabi and this Department proposes to supplement this with other related but essential laboratory equipment. It is proposed to spend Rs. 1.000 lakhs during the Seventh Plan for this purpose, with a proposed outlay of Rs. 3.00 lakhs for the year 1985-86.

### **General Science Popularisation Programme**

29.19. The Department plans to popularise science in general among the people through grant-in-aid for workshop, seminars, etc. and for this purpose Rs. 5.00 lakhs only has been proposed during the Seventh Plan period and Rs. 1.00 lakh for the Annual Plan, 1985-86.

29-20. In such places where such workshops are being organised or in separate situations the Department also proposes to scientifically educate the people through films, posters, etc. For this purpose a mobile audio-visual unit is being proposed. An expenditure of Rs. 9.00 lakhs during the Seventh Plan period will be made on the mobile unit, equipment, films, etc. For this purpose an outlay of 2.00 lakhs has been proposed for the year 1985-86.

29-21. A small award/awards are proposed to be given to any individual or institution which has done the best work in science popularisation in any financial year. For this a small provision of Rs. 1.00 lakh during the entire Five Year Plan period is being proposed with a provision of Rs. 20,000 for the year 1985-86.

29-22. A Planetarium is proposed to be established in the State with a provision of Rs. 15.00 lakhs in the Seventh Plan. To start the work, an allocation of Rs. 3.00 lakhs has been proposed for the year 1985-86.

#### **Science Entrepreneurship Development Programme (SCDP)**

29-23. This is a programme being promoted by the Department of Science & Technology, Government of India and for essentially linking scientific man-power and credit institutions for the establishment of industries and other self-employment programmes. The expenditure that would be required for organising training programmes workshops, information units and centre has been estimated to be Rs. 10.00 lakhs during the Seventh Plan period of which, Rs. 1.00 lakh is proposed to be spent in 1985-86.

#### **Secretariat of the State Council on Science, Technology & Environment**

29-24. The Department of Science, Technology and Environment is acting as the Secretariat of the State Council on Science, Technology and Environment. For all activities relating to the staff support, for organising meetings of the council, sectoral panels, for establishing a documentation centre, for training staff and scientists, etc., the Secretarial need during the Seventh Plan period has been estimated to be Rs. 40.00 lakhs. Accordingly Rs. 10.00 lakhs has been proposed for the year 1985-86. This Secretarial expenditure is absolutely essential for performing all the functions and for implementing all the policy decisions of the State Council on Science, Technology and Environment.

#### **(b) Renewable Energy Development Programme**

29-25. The State Department of Science, Technology and Environment proposes to initiate and continue action on the items relating to (a) encouraging the efficient use of non-renewable sources of energy, development of their substitutes; and (b) promotion of renewable energy technologies. An outlay of Rs. 1677.60 lakhs has been proposed to be spent during the Seventh Five-Year Plan for the programmes of developing non-conventional energy sources. The details of schemes proposed to be included in the Seventh Plan are briefly described in the following paragraphs.

29-26. Surveying the energy need of the State is important for the purpose of planning. Some studies regarding fuel wood position are available but a total picture of the energy needs of the State will have to be painted. For this purpose a dialogue with the Planning Commission has already been initiated and during 1984-85 itself a pilot integrated rural energy programme will be started. In this programme the State will provide the funds and the Planning Commission will provide the technical assistance. The survey will be at a block level and would involve the preparation of an approach paper for the State, detail survey report on the energy use pattern, the gap between demand and supply over a time horizon, and programmes meet the gap. It is understood that a centrally sponsored scheme will be in operation for a few selected States who have already initiated this programme. It is, therefore, proposed to cover three coastal blocks and three hilly/tribal blocks of the State under this programme @ Rs. 10 lakhs per block. The matching contribution anticipated from the Planning Commission is Rs. 30 lakhs. A sum of Rs. 40 lakhs is proposed in the State Plan towards State Government share for installation and

maintenance during the Seventh Plan period of which Rs. 10.00 lakhs is proposed for 1985-86. An exercise to introduce energy audit in various Organisations will also be started. It is proposed to provide Rs. 2.50 lakhs for the Seventh Plan and Rs. 20,000 is set apart for 1985-86.

#### Bio-Energy Programme

29.27. The National Project for Biogas Development (N. P. B. D.) was sanctioned in November, 1982 and has been implemented in the State since then. The performance under this programme for the construction of biogas plants of the family type is indicated below :

Year		No. of plants constructed
1981-82	..	280
1982-83	..	1,062
1983-84	..	1,322

This is a Central Sector Project and Government of India provides subsidies, incentives, turnkey fees and some staff support for the same. The N. P. B. D. conveys an additional support by each State Government for the programme and accordingly during the Seventh Plan it has proposed to spend Rs. 55.50 lakhs including Rs. 10.00 lakhs for the year 1985-86 essentially for supplementing the administrative and infrastructural position, for ensuring quicker repairs of plants already constructed, for purchase of cement etc. The number of plants proposed to be constructed during the Seventh Plan period is indicated below :

Year		No. of plants proposed to be constructed
1985-86	..	3,500
1986-87	..	5,000
1987-88	..	7,000
1988-89	..	10,000
1989-90	..	14,000
Total	..	39,500

29.28. The Department of Non-conventional Energy Sources is also promoting the construction of community and institutional biogas plants. Community type biogas plant (C.T.B.P) have been defined as plants with a minimum capacity of 45 Cum. per day biogas generation and should meet the fuel needs of at least 25 families. For institutional biogas plants (I.B.P) no size limit has been fixed as the capacity of the plant would depend on the availability of wastes at the institution. Community Biogas Plants are comparatively difficult to set up, essentially because of the administrative problems in involving a community for regular feeding, maintenance of the plants and distribution of the gas and fuel.

The size limitation of 45 Cum. is also the bottle-neck in the implementation of the programme. Hence during the Seventh Plan period it is proposed to construct 125 plants mainly of the institutional type. The year-wise break up is indicated below:—

Year	Plants to be constructed
1985-86	15
1986-87	20
1987-88	25
1988-89	30
1989-90	35
<b>Total</b>	<b>125</b>

A sum of Rs. 2.60 lakhs is proposed for the Seventh Plan Period for this programme taking an average cost of Rs. 20,000 per institutional plant and as per the present subsidy scheme.

29.29. Conversion of sewerage waste and other urban waste into gas is a technology which is quite popular in the western world and is also catching up in India. One pilot plant in Puri generating 40 Cum. of gas out of nightsoil is in operation. This programme has been funded entirely by D.N.E.S. In addition to this, it is proposed to construct 10 more urban biogas plants utilising urban wastes during the Seventh Plan period. Anticipating a subsidy of 75 per cent from Government of India for this programme, a lump sum of Rs. 50 lakhs has been proposed with a suggested allocation of Rs. 8.00 lakhs for the year 1985-86.

#### Solar Energy

29.30. Solar cookers of the family type are becoming very popular in the State. Two or three models have been approved by the Department of Non-Conventional Energy Sources and are being manufactured by Small-scale Units in the State. In addition to the Government of India subsidy of Rs. 150 per cooker, the Department of Science, Technology & Environment has also been subsidising to the same extent. The manufacturing cost of each chulla including marketing is Rs. 660. During the Seventh Plan period it is proposed to construct 9,000 solar cookers and subsidise their sale. The year-wise programme is indicated below:—

Year	Manufacture and sale programme
1985-86	4,000
1986-87	3,000
1987-88	2,000
1988-89	Nil
1989-90	Nil

It is hoped that by the year 1987-88 the cookers would have become very popular and thereafter it is proposed to do away with the subsidy. The initial requirement for the Seventh Plan period for subsidising out of State Plan funds, the sale of solar cookers is Rs. 13.50 lakhs. This has been programmed anticipating that the present subsidy scheme on D.N.E.S. will continue. For the year 1985-86 an outlay of Rs. 3.00 lakhs has been proposed under State Plan.

29.31. Community solar cookers are being manufactured in the State capable of cooking food for 30 to 40 persons at a time. During the year 1984-85, there is a programme to manufacture more than 100 such cookers and distribute them among all residential tribal schools so that the school feeding programme can continue smoothly. 80 per cent funding from D. N. E. S. is being provided for the first batch of 50 such cookers. During the Seventh Plan period, it is proposed to manufacture and



distribute 500 such cookers and the funds required will be Rs. 250 lakhs inclusive of Rs. 100 lakh for the year 1985-86. The Harijan & Tribal Welfare Department and the C. D. & R. R. Department will also be encouraged to provide funds for manufacture of more number of community solar cookers.

29.32. A number of solar thermal systems are proposed to be taken up during the Seventh Plan period since solar thermal technology is an accepted cost effective technology. During 1984-85 a number of proposals for installation of solar water heating systems in co-operative milk federations and for desalination are being proposed. During the Seventh Plan period, it is proposed to spend Rs. 175.00 lakhs for installation of solar thermal systems relating to water, air, and solar refrigeration. There is likelihood that more funds would be required for this after the details of the schemes are worked out. To start with, Rs. 14.00 lakhs has been proposed for the year 1985-86.

29.33. During 1984-85, 10 photo voltaic irrigation systems producing about 30 KW of energy each are being distributed at a subsidised cost to 10 progressive farmers of the State. Although photo voltaic technology has not yet become cost effective, it is hoped that within a short time, the manufacturing price of such systems will go down sufficiently so as to make the system widely acceptable. However, it is necessary to demonstrate such systems and accordingly during the Seventh Plan period, it is proposed to spend Rs. 21.00 lakhs for the installation of 85 photo voltaic pumps anticipating the present subsidy pattern of Government of India will continue. During the year 1985-86, three such units are proposed to be installed with a provision of Rs. 1.00 lakh in the State Plan.

#### Wind Energy

29.34 Under a demonstration programme from the Department on Non-conventional Energy Sources (DNES), wind-mills are being installed at various institutions in the State in order to evaluate the performance and popularise them. More than 30 wind-mills have already been installed under this programme and 20 more are awaiting installation. During the Seventh Plan period, a new pilot extension programme of D. N. E. S. involving a subsidy element of about 75 per cent for individuals is likely to be announced, and accordingly 600 wind-mills are proposed to be promoted. The programme is expected to pick up slowly during the first two years of the plan, since the present model being popularised needs further modifications before it is accepted. A sum of Rs. 4.00 lakhs is proposed to be spent out of State Plan with the provision suggested for 1985-86 is Rs. 50,000 only to further subsidise the sale of wind-mills to individuals. Since Orissa is a State which has one of the highest wind velocity in the country, there is every reason to believe that this technology will prove very popular in the near future.

29.35. In order to utilise the State's wind energy resource to the fullest extent, it is proposed to install wind electricity generators or wind energy conversion systems all along the Orissa coast. The ultimate idea is that a long chain of aerogenerators all along the coast will supplement the power in the State Grid.

29.36. During 1984-85, two aerogenerators one of 1-2 KW and the other of 40 KW capacity are being installed in Konark and Puri respectively. Global tenders are being floated for selecting the best system. This is being funded to a large extent by DNES and the State Government will meet the installation and ancillary costs. During the Seventh Plan period, it is proposed to generate 14 MW of electricity using wind power and to spend Rs. 29.00 lakhs for this purpose. The allocation proposed for 1985-86 is Rs. 3.50 lakhs.

#### Mini/Micro Hydel Projects

29.37. Development of mini/micro hydel projects is being recommended by Government of India Planning Commission and Rural Electrification Corporation. A lot of work on mini/micro hydel projects in the country has also been undertaken. In the State of Orissa a large number of drops on

canals and perennial streams have been identified, and a number of project reports have also been prepared. During the year 1984-85, it is hoped to start installing at least two such systems. During the Seventh Plan period, however, a lot of stress will be given to this programme and it is proposed to spend Rs. 800.00 lakhs for this programme. During the year 1985-86 an outlay of Rs. 57.00 lakhs has been proposed.

#### **Other Sources of energy**

29.38. The national project for the demonstration of improved chulhas is in operation in the State. This programme is funded 100 per cent by Government of India, but it seems some supplementary funds would be required to strengthen the administrative structure and to conduct more research on better and more efficient wood burning chulhas. Simultaneously R & D on chulhas using other fuels like sawdust, agricultural wastes etc. would be undertaken. For this a small provision of Rs. 2.50 lakhs for popularising and distributing 2.2 lakhs chulhas during the Seventh Plan period is being proposed. For the year 1985-86 it is proposed to provide Rs. 0.20 lakh only.

29.39. There are a number of appropriate technologies which can be easily demonstrated, popularised, and utilised in the field for generating energy or conserving energy. Improved water lifting devices, water wheels, etc. are proposed to be taken up as an R. & D. activity under the energy sector. An allocation of Rs. 25.00 lakhs is proposed to be spent in the Seventh Plan period inclusive of Rs. 2.50 lakhs for 1985-86 for such appropriate technology development and popularisation, and for this purpose the facilities are being built up under the Science & Technology sector of the Department and the Centre for Appropriate Rural Technology (CART) would be utilised.

29.40. Various social forestry programmes are being taken up in the State for meeting the requirement of villages. Specifically, a programme to meet the fuel wood crisis of the State is proposed to be piloted by this Department as an "energy plantation programme". This programme is proposed to be initiated in the four districts of the State which are not covered under the social forestry programme and for this purpose during the Seventh Plan period, Rs. 19.50 lakhs is proposed to be spent. In the first two years the programme would be demonstrated and thereafter individual farmers would be encouraged to take up such energy plantations. Care will be taken to see that the fuel wood requirement of villagers are met first and thereafter, the fuel wood requirement of industries. For the annual plan 1985-86, a sum of Rs. 4.00 lakhs has been suggested for this purpose.

29.41. Research and development of other renewable energy technologies are proposed to be undertaken in order to be able to be in the forefront of renewable energy development in the country. For this purpose demonstration units and pilot programmes on bioenergy conversion systems, tidal energy conversion systems, ocean thermal energy conversion systems, geothermal energy systems, etc. are proposed to be taken up during the Seventh Plan period and for this a provision of Rs. 105.00 lakhs has been proposed, of which Rs. 5.00 lakhs is proposed to be spent in 1985-86. These programmes will be taken up either by the Orissa Renewable Energy Development Agency or through the Engineering Institutions of the State.

#### **Orissa Renewable Energy Development Agency**

29.42. The Orissa Renewable Energy Development Agency a registered society under the administrative control of the Department of Science, Technology and Environment has been entrusted with the execution of all renewable energy technologies. In order to strengthen this agency to perform the functions proposed under the Seventh Plan including establishment cost, workshop cost, equipment cost, research and development cost, training cost, a documentation centre cost, publicity cost, etc., it is proposed to provide Rs. 330.00 lakhs during the Seventh Plan period and Rs. 30.00 lakhs for the year 1985-86. This infrastructure is absolutely essential for undertaking all the programmes enumerated.

### (c) Environmental Conservation and Protection Programme

29.43. The State Council on Science, Technology and Environment in its first meeting approved the environmental conservation programme of this Department relating broadly to the aspects of (a) environmental awareness promotion and education, (b) environmental conservation, protection and improvements, (c) prevention and control of pollution and (d) land and water management. During the Seventh Five-Year Plan, programmes on these lines are proposed to be strengthened and accordingly it is proposed to spend Rs. 13,40.00 lakhs for this purpose. The details are indicated below.

#### Environment Awareness Promotion and Education

29.44. The Committee for recommending legislative measures and Administrative Machinery for ensuring environmental protection (The N. D. Tiwari Committee Report, 1980) was "aware of the severe shortage of properly trained manpower in subject areas connected with environmental protection ranging from environmental impact analysis to wildlife management". The Committee has, therefore, recommended that "facilities for training a cadre of environmental managers must be developed". The Department of Environment, Government of India, has also in its draft Seventh Plan document emphasised the creation of capabilities and manpower needs.

29.45. In order to create the manpower that would be needed to effectively take up environmental management work in the State, it is proposed to establish a centre for Environmental Education and Training during the Seventh Plan period. It is proposed to spend Rs. 67.00 lakhs for this purpose and this will cover administrative costs, field visits, etc. The institute can either be a part of the Institute of Life Science being proposed under the Science and Technology sector or included within a suitable existing institute for the present. For the year 1985-86, it is proposed to provide Rs. 7.00 lakhs for this purpose.

29.46. In addition to the creation of a centre for environmental education and training it is proposed to support existing institutions for manpower development. The manpower trained on environmental problems would be ideally suited to handle environmental impact assessments, pollution control systems, research on forestry, land management, etc. During the Seventh Plan period Rs. 25.00 lakhs is proposed to be given as grant-in-aid to various institutions for this purpose. An allocation of Rs. 2.00 lakhs has been suggested for 1985-86.

29.47. In the field of environmental awareness promotion and education it is realised that governmental action itself will be inadequate, and the people have to be involved from the very beginning in the process. Fortunately, this programme has already shown substantial results and the response from people at all levels, especially at the village level is very encouraging. To continue encouraging villagers and individuals to not only promote environmental conservation measures within their immediate surroundings, but also elsewhere, it is proposed to award fellowships/scholarships/cash prizes to villagers, individuals etc. who show the best work annually in the field of environmental protection including health and sanitation. The award can either be in the form of cash or in the form of study and travel grants depending on the situation and convenience of the beneficiaries. During the Seventh Plan period it is proposed to spend Rs. 10.00 lakhs for this purpose with a provision of Rs. 1.00 lakh only for the year 1985-86.

29.48. A sound, well informed interest in nature among our people needs to be cultivated. Nature education at all levels of education and public communication, must be efficiently organised especially in our Schools" (N. D. Tiwari Report, 1980). In order to involve all sections of the society in positive action oriented environmental conservation programmes, it is proposed to support the organisation of workshops, seminars, eco-development camps, gram yatras, etc. During the Seventh Plan period Rs. 40.00 lakhs including Rs. 3.00 lakhs for the year 1985-86 has been proposed as grant-in-aid for such purposes.

29.49. A number of National and International workshops, seminars etc. are now taking place where it is felt necessary to send environmental managers and focal groups for generating others' greater involvement and interest in them. Experts in the line can also be invited to give talks. For such

purposes Rs. 10.00 lakhs has been proposed during the Seventh Plan period for National/International. Travel grants and encouragement for participation in seminars, workshops, etc. would be met interaction out of this amount. In the first year of the Seventh Plan 1985-86 a sum of Rs. 1.00 lakh only has been proposed.

29.50. An audio-visual publicity unit has been created during the year 1984-85 and during the Seventh Plan period this is proposed to be strengthened. Films, Video tapes and other publicity items would be collected for exhibition. During the Seventh Plan period Rs. 12.00 lakhs for this purpose has been projected which includes Rs. 1.00 lakh for the year 1985-86.

29.51. Inclusion and improvement of environmental education in the curricula of Schools and Colleges is proposed to be achieved through periodic discussions, workshops, etc. Projects to bring about improved teaching aids, books, etc. are also proposed to be taken up. During the Seventh Plan period Rs. 14.00 lakhs has been proposed to be spent for this purpose. A sum of Rs. 2.00 lakhs has been proposed for the year 1985-86.

29.52. In order to make the society aware of the natural resources of the State both for information and planning purposes it is proposed to conduct surveys on the State's flora and fauna and publish status reports on the same. The expenditure for conducting surveys and connected establishment and infrastructural costs have been projected to be Rs. 5.00 lakhs during the Seventh Plan period with an outlay of Rs. 1.70 lakhs for the year 1985-86.

#### **Environmental Conservation, Protection & Development**

29.53. "The natural environment with its numerous living and non-living resources is man's most precious heritage. The basic goal of environmental conservation is the management of human use of these natural resources, so that they may yield the greatest sustainable benefits to the present generations while maintaining their potential to meet the needs and aspirations of future generations. . . . . At the present inadequate level of scientific knowledge in our country, we do not know how many species of flora and fauna are threatened, endangered or extinct, but it may be considerable considering the very rapid shrinkage of all natural forest and other eco-systems through out the sub-continent in recent years. It is, therefore, evident that the diversity of biological organisation is a vital resource which needs to be carefully protected in natural eco-systems if we are not to close many possible revolutionary actions for benefiting future generations." —(N. D. Tiwari Committee Report, 1980).

29.54. Work on Plant Resource Centre, named "Ekamrakanan" was started during the year 1983-84 within 5 kms. of Bhubaneswar. The area consisting of about 465 acres is being developed "to introduce, conserve and upgrade genetically plants of non-agricultural importance to mankind and generate information on reproductive physiology and ecology and on the technique of propagation including tissue culture, maintenance and protection." "The plant species are being grouped and located in different sectors according to their use. Beside these, Ekamrakanan is expected to provide to the citizens of Bhubaneswar, a place of quiet recreation, rest and study of nature while acting as the lungs of the city."

29.55. The estimated cost of the project (non-recurring) is Rs. 1,16.00 lakhs and during the Seventh plan it is proposed to spend Rs. 1,27.00 lakhs. Government of India in the Department of Environment may make provisions for funding such research-cum-eco-development project and it is expected that upto 50 % of the non-recurring cost may be met by them. Anticipating this, it is proposed to spend Rs. 1,27.00 lakhs out of State plan funds during the Seventh Five-Year Plan period and Rs. 15.00 lakhs in 1985-86.

29.56. Simultaneously with the establishment of a Plant Resource Centre in Bhubaneswar, it is proposed to start four similar centres in four different areas of the State costing approximately Rs. 25.00 lakhs each. During the Seventh Five-Year Plan period Rs. 100 lakhs is proposed with an allocation of Rs. 7.00 lakhs only for 1985-86. The expenditure would be on area development, plantation, protection and minimal supervisory and protection staff.

29-57. The Tiwari Committee has also recommended the protection of certain endangered eco-systems like marine eco-systems, the coastal mangroves, etc. During the Seventh Five-Year Plan, a number of such endangered eco-systems are proposed to be identified and protected and for this purpose Rs. 95.00 lakhs has been proposed. In the initial year Rs. 3.00 lakhs is suggested for 1985-86. The first two eco-systems to be protected are the coastal mangroves eco-system and the Chilka eco-system. Similpal in Mayurbhanj district of the State is also a unique eco-system needing total protection.

29-58. Due to various reasons there is undue pressure on urbanisation. Unfortunately, urban centres are growing up with scant regard to the environmental needs and aesthetic beauty. It is, therefore, proposed to develop green belt/parks in major urban centres and one in each major urban area in each district. During the Seventh Five-Year Plan, Rs. 50.00 lakhs is proposed to be spent for this purposes. A sum of Rs. 6.50 lakhs has been proposed for the annual plan, 1985-86.

29-59. An Elephant Sanctuary called the Chandaka Elephant Sanctuary is already being developed very near to Bhubaneswar over 189 sq. kms. This vast area is now being protected with an elephant proof trenching. 55 existing elephants are being protected through habitat improvement and other work items as per a scheme drawn up for Rs. 5,08.00 lakhs (non-recurring). During the Seventh Plan period, it is proposed to spend Rs. 2,50.00 lakhs including Rs. 25.00 lakhs for the year 1985-86 out of State Plan resources and similar amount is expected from Government of India in the Department of Environment. During 1983-84 and 1984-85, expenditure on this sanctuary work to the tune of Rs. 34.00 lakhs would have been incurred. The Department of Environment who are supporting establishment of sanctuaries as a plan programme and also protection of natural resources are expected to release funds accordingly.

29-60. As an experimental measure, some wild life farming is proposed to be initiated. There are instances of such wildlife farms being very popular in Australia and Sweden, and apparently rabbit farming in the Himachal Pradesh and snake farming in Tamilnadu have also drawn favourable response. Similar experiments to demonstrate rabbit and deer farming to supplement the protein intake of the people is proposed to be undertaken with Rs. 35.00 lakhs during the Seventh Plan period, of which Rs. 3.00 lakhs will be spent during 1985-86.

29-61. Two bodies at the central level have been constituted to bring about land and water management in the country. The State land use Board is being activated to act as a counterpart of the Central Land Board and Commission and undertake land and water management policy and programmes including checking of soil erosion, controlling and eradicating the practice of shifting cultivation. Reclamation of water logged land, controlling salinity and alkalinity, Reclamation of Saline and alkaline lands, control on the diversion of agricultural lands for non-agricultural use, protection of land from grazing through pasture development, stall feeding, etc. During the Seventh Plan period, Rs. 60.00 lakhs has been proposed for administration of the Land Use Board for survey and for actual programmes on land and water management. An outlay of Rs. 3.00 lakhs has been suggested for 1985-86.

29-62. The Department of Environment has been insisting that certain special locations like sea beaches be taken up for environmental protection measures. In addition to this, it is proposed to spend Rs. 70.00 lakhs during the Seventh Plan period for the eco-development of tourist centres, mining areas, industrial areas, etc. For the first year, a sum of Rs. 3.00 lakhs has been suggested in 1985-86.

29-63. The Department of Environment has also initiated a programme for the eco-development of the Eastern ghat region. Projects are being identified for implementation and a Task Force has been prescribed for over seeing the entire work. For meeting the staff and connected requirement of this Task Force, it is proposed to spend Rs. 20.00 lakhs during the Seventh Plan period and Rs. 1.00 lakh only in 1985-86. The programmes will be funded by the Department of Environment.

29.64. Poverty has been described as the greatest pollutant, and recently population has also been included as an item under environmental problems. In order to support projects on human settlement improvement, pollution control health, hygiene, sanitation and preventive medicines, it is proposed to spend Rs. 25.00 lakhs during the Seventh Plan period and Rs. 3.00 lakhs in 1985-86. The money will be utilised to start research and development activities on these fields; for initiating proper survey and planning; and for educating the people on these aspects.

29.65. The Department of Environment in its draft Seventh Plan document expects the State Governments to initiate environment impact assessment of development of projects. Environmental impact assessment has not been formalised as an exercise in the country but its need is not questioned. In order to initiate action on this through the creation of competent cells in Government Departments, in development institutions, industries and for generally monitoring the environmental impact developmental projects, it is proposed to spend Rs. 25.00 lakhs essentially on manpower and administrative expenses. To start with a sum of Rs. 3.00 lakhs has been suggested for 1985-86.

29.66. For undertaking all the activities mentioned in the foregoing graphs, it is necessary to strengthen the environmental cell of Department of Science, Technology and Environment and also to place environmental officers in the field. A Directorate of Environment is also being considered for this purpose. District Environmental Officers, Research Officers with supporting staff will have to be created to carry on the activities. During the Seventh Five-year Plan, Rs. 95.00 lakhs has been proposed with a provision of Rs. 10.00 lakhs for 1985-86 essentially on staff expenditure, establishment of a documentation and information centre, and a small legal cell for scrutinising existing legislation from the environmental point of view and modifying the same. Since most activities under environmental awareness promotion are motivation oriented, this administrative infrastructure is of utmost importance.

29.67. A State Prevention and Control of Pollution Board is in existence in Orissa for implementing the Central Air and Water (Prevention and Control of Pollution) Acts. This Board needs land, buildings, detection and analysis equipment and trained personnel for all its activities. During the Seventh Five-Year Plan, Rs. 200.00 lakhs has been proposed for this alongwith a provision of Rs. 24.00 lakhs for 1985-86 and the expenditure indicated is as per the recommendations of the Central Pollution Control Board. It is absolutely essential that pollution from our industries, both into water and air, are immediately detected for corrective measures; and for this purpose a competent Board Laboratory and a Regional Laboratory at a predominantly industrial location has to be established.

## CHAPTER—30

## GENERAL EDUCATION

30.1. While significant progress has been achieved in the field of general education during the successive plans, much still needs to be done. Evaluated by Criteria of literacy and enrolment rates provision of basic facilities, drop out and stagnation rates, the achievement so far remains unacceptably low. Overwhelming emphasis on expansion has tended to relegate the qualitative aspects to the background. The statistics of performance speak for themselves.

30.2. Primary and Middle schools grew from 43206 in 1980 to 43621 in 1984. According to the Report of the Fourth Educational Survey 11740 habitations did not have a primary school within the national norm of 1 K. M. and 1911 habitations with a population of over 500 did not have a middle school. It has not been possible, largely owing to constraints of resources, to provide adequate number of schools to cover the entire target group during the Sixth Plan.

30.3. Enrolment at the primary levels increased from 27.50 lakhs to 30.41 lakhs between 1980 and 1984 and is likely to reach 32.06 lakhs by the end of the Sixth Plan. The corresponding figures for the middle schools were 5.85 and 7.05 lakhs with an anticipated achievement of 7.78 lakhs by the end of 1984-85. The achievement till date represents a coverage of 94.16 per cent of children within the age group of 6-11 and 39.45 per cent coverage within the age group 11-14. Considerable intrastate regional disparity in enrolment still remains as also disparities in rates of enrolment of boys and girls and Scheduled Castes and Scheduled Tribes and the general population. Moreover, the figures of enrolment do not reflect commensurate progress towards universalisation of elementary education as the drop out rates continue to be high. According to the Fourth Educational Survey, the drop out rate in 1978 was 59.95 per cent at the primary i.e. Class-V level. Retention rates sharply declined to 17.68 per cent at the Class-VIII level. Even though no detailed survey has been conducted after 1978, there are indications that there has not been a significant improvement in the retention rate during the years after 1978. In regard to retention too, there was wide variation between the districts. To illustrate, according to the Fourth Education Survey, retention at Class-V level in Cuttack District was nearly 70% whereas the corresponding figure for Koraput district was around 18%.

30.4. The literacy rate of the State rose from 21.66 per cent in 1961 to 26.18 per cent in 1971 and to 34.12 per cent in 1981. The literacy rate of the State has not only remain consistently below the literacy rate of the country as a whole during each succeeding census, thereby indicating a widening gap between the literacy level of this State and that of educationally more advanced States, the growth in the rate of literacy from decade to decade has remained significantly below the average rate of growth of population during the preceding five years, resulting in an over increasing absolute number of illiterates. Disparity in literacy rates as between districts has also been significant. For example, whereas the literacy rate of Puri District in 1981 was 45.71 per cent, the literacy rate of Koraput district was only 15.83 per cent. Disparities in literacy rates of boys as compared to that of girls and of Scheduled Castes and Scheduled Tribes as compared to that of the general population also continued to be significant. Achievement of the Sixth Plan in regard to removal of such disparities has not been enough.

30.5. In the primary sector teachers salaries consumed nearly 92.16 per cent of the total public expenditure leaving little for innovation of for qualitative and infrastructural improvement. Consequently the elementary sector continues to suffer from several infrastructural and materials deficiencies. To illustrate as many as 4,704 primary schools are without buildings. Deficiencies in furniture, teaching aids etc. are even more glaring. Although a good beginning has been made innovations in curriculum have largely remained experimental.

30.6. In the High Schools stage there was a significant lateral expansion during the Sixth Plan period. The number of High Schools increased from 2,260 in 1980 to 3,346 in 1984 with enrolment raising from

2.81 lakhs to 6.1 lakhs during that period. The secondary sector suffers from nearly all the deficiencies and qualitative shortcomings already noted in connection with primary sector. Owing to constraints of resources and emphasis on expansion of enrolment facilities, it has not been possible to devote adequate resources to removal of deficiencies in regard to buildings, libraries, laboratory equipments and teachings aids and these deficiencies have now acquired critical dimensions. The disparities between different districts with regard to access to High School education continues to be critical and as many as seven districts are below the State average in the matter of access to High School education for a unit of population. Disparities with regard to enrolment of boys and girls, enrolment in urban and rural areas, of children belonging to Scheduled Castes and Scheduled Tribes on one hand and other children on the other are also significant.

30.7. Between the years 1980 and 1984, the number of general colleges including colleges granted concurrence for conducting plus two courses rose from 138 to 296 and enrolment in the colleges rose by 43,193 during that period. Even the most perfunctory backward glance reveals that proliferation of new colleges has been in response to pressures which are not directly related to planning objectives. Moreover, this expansion was mostly restricted to particular regions of the State which have been traditionally educationally advanced, resulting in gross imbalance between different districts in the matter of access to higher education. In the sphere of college education also, socially and economically backward communities have lagged behind other communities. A major problem confronting higher education is a lack of balance between different courses of studies with over-emphasis on humanities and proliferation of institutions imparting education in fields which have co-relation with the manpower needs of the State or of the economy. With large proportion of scarce resources having been devoted to expansion schemes meant for qualitative improvement, consolidation, upgradation, and removal of basic infra-structural deficiencies have suffered.

30.8. Rapid expansion of education has also given rise to problems internal to the systems which relate essentially to structure of governance, management and finance.

### OBJECTIVES, PRIORITIES AND STRATEGIES

30.9. During the Seventh Five Year Plan overriding priority would be accorded to Universalisation of elementary education for children in the age group of 6—11 and based on the achievement in this sphere, on 100% enrolment of children within the age group 11—14 years. While such a target has tremendous budgetary implication in terms of providing adequate facilities, upgrading the existing facilities provision of new teachers, upgrading of the skills of existing teachers, provision of basic accommodation, equipment and amenities at the Schools, recruitment and training of teachers for the non-formal stream, assuring quality education through curriculum reform and improved teaching methodologies, etc., expansion and qualitative improvement in the elementary education would be the first charge on the resources available for development of general education in the State. The outlay proposed for the elementary sector is unavoidable if the national target of universalisation of elementary education is to be achieved by 1990 and the existing gap between the literacy and educational levels of this State and educationally advanced States is not to be allowed to widen further. Overriding importance proposed to be assigned to elementary education is also justified on considerations of beneficial impact of higher literacy and educational levels on development of the State in other sectors. Education is essential, in some form, to every basic service be it health, nutrition or clean drinking water. At the same time education stands alone as the most important input that will enhance physical quality of life.

30.10. Since the resource constraints would not permit coverage of all children belonging to the age group 6-14 under a formal system, (nor would such an approach be feasible except at a high cost and high wastage) both full and part time systems and formal and non-formal methods are proposed to be adopted with emphasis shifting from more enrolment to retention of children after enrolment. Major share of the additional enrolment capacity proposed to be created during the Seventh Plan period would



be assigned to the non-formal system. The problems of low enrolment and retention are proposed to be tackled through (i) expansion of the formal schooling facilities, (ii) provision of required infra-structural and other amenities which are critical determinants of the motivation for enrolment and retention, (iii) significant expansion of non-formal education so that children engaged in or assisting the parents in earning livelihood and drop outs from the formal stream may also have access to education, (iv) adoption of flexible and cost effective non-formal models, (v) integration of the non-formal stream with the formal stream at the post primary stage, (vi) improving the relevance of the curriculum to the perceived needs of the community and (vii) by provision of incentives on a graded scale in areas with literacy levels substantially below the State average with a view to overcoming social and economic impediment to enrolment and retention. It is proposed to adopt a flexible approach, at the initial stages on experimental basis, with regard to timings of vacations, hours of the day when instructions will be imparted and other arrangements with a view to facilitating attendance of children in schools without having to give up other pursuits. Emphasis would also be given to social preparation of children for school through Adult Education for women.

30.11 In conformity with the national priorities, efforts will be made to cover all adult illiterates within the age group of 15 to 35 by appropriate literacy programmes during the Seventh Five-Year Plan. The programme would give priority to women, Scheduled Castes and Scheduled Tribes. The curriculum for adult literacy programmes would be reviewed and re-designed not only to impart skills in literacy and numberacy so that further self-learning might take place, but also to foster occupational and personal social skills and to enable the learners to get the basic understanding of social, physical and political environment in which they live. The programme would be designed to be flexible regarding duration, time, location and instructional arrangement. In particular, the programme designed for women would focus on "what" and "how" for improvement of child survival, and home and food management, social preparation of children for school and related matters. Assistance of voluntary agencies, Nehru Yuvak Kendras the student and academic committees would be taken for sustaining the programme.

30.12. In view of the wide disparity in the matter of access to secondary education as between the different districts of the State, expansion of facilities for secondary education commensurate with the output at the M.E. stage in districts where such facilities are below the State average is unavoidable. Such a programme would require substantial public investment as private initiative and public contribution for expansion of schooling facilities has not been forthcoming in the required measure from these districts. It would also require liberalisation of grant-in-aid principles with a view to encouraging establishment of viable educational institutions in the private sector. In the comparatively more advanced districts, emphasis will be on normal growth, consolidation of existing facilities and qualitative improvement rather than on quantitative expansion. Curricular changes in the recent past and such changes as are planned for the future require changes in methods of instructions, processes of learning, instructional materials and evaluation. This requires a large scale inservice teacher-education programme so that the teachers can be orientated towards the new curriculum. This need has been particularly felt in the areas of mathematics and science teaching. It is proposed to undertake an extensive teachers training programme during the Seventh Five-Year Plan as a necessary adjunct to programmes for qualitative improvement.

30.13. Owing to constraints of resource, the plus two courses have remained largely academic orientated and uni-track. There is an urgent need to introduce vocational courses at the plus two stage and to correct the over-emphasis on humanity streams. With a view to making vocational courses attractive, qualifications and training obtained at the plus two stage in vocational streams will need to be linked to jobs and self-employment opportunities. The vocational courses to be introduced at the plus two stage should not only include the traditional vocational streams (such as agriculture, animal husbandry, Secretariat practice etc.) but also courses designed to meet the need of emerging areas of manpower requirements (e.g. computers communication, technology etc.). At the initial stages both vocational and academic streams would need to be effectively linked with higher academic, technical and professional education.

30.14 In the sphere of higher education, the main emphasis will be on consolidation of existing facilities, removal of basic infrastructural deficiencies and deficiencies in Laboratories, libraries etc., improvement of standards, restructuring the curriculum and meeting the additional manpower needs in the context of introduction of three years degree courses from the first year of the Seventh Plan, quantitative expansion on any significant scale is not envisaged except in backward districts where facilities for higher education fall significantly below the anticipated number of high school learners who might seek admission in colleges. Efforts will also be made to correct the unplanned over-emphasis on courses in humanities and to bring about a balance between seats available in courses for Arts, Science and Commerce. Universities would be encouraged to restructure curriculum at the undergraduate and post-graduate levels go as to increase the component of learning from real life situation through participation in socially relevant activities and to sensitise the students community to problems of poverty, illiteracy and environmental degradation through organised participation in poverty reduction and environmental improvement programmes. Extension work should be integrated with the curriculum in order that it may have beneficial impact on course content on the one hand and on the value system expected to be promoted by the academic programmes on the other. Greater emphasis would be given to post-graduate level research into practical problems associated with development with a view to establishing a beneficial linkage between the education and economics planning. Efforts will also be made to promote establishment and growth of selected institutions of academic excellence in the field of basic science and humanities.

#### Programme for the Seventh Plan

30.15 The schemes of the Seventh Plan have been drawn up consistent with the objectives and priorities indicated above. The total out-lay on programmes of general education is Rs. 388.89 crores and the out-lay for 1985-86 is Rs. 81.34 crores. So far as provision towards the State share of the Central-sponsored schemes are concerned, calculations have been made according to the existing sharing basis between the Centre and the State in different schemes. The sector-wise break up is given below :

Sub-Sector	Seventh Plan outlay	Outlay for 85-86
	(Rs. in crores)	(Rs. in crores)
1. Elementary Education (including Teacher Education) ..	179.03	21.20
2. Adults Education ..	33.62	5.33
3. Secondary Education ..	75.28	11.77
4. University Education ..	98.98	12.98
5. Physical Education and Youth Services Programmes ..	1.98	0.30
<b>Total ..</b>	<b>388.89</b>	<b>51.58</b>

30.16 Some spill over schemes of Sixth Plan mainly grants to Non-Government institutions and on-going building projects have to be taken up on priority basis in the Seventh Plan. According to current estimates, the incomplete buildings would require Rs. 399.00 lakhs and it is proposed to provide this amount in the first year of the Seventh Plan. In view of this, efforts have been made not to include new building projects in 1985-86 as far as practicable. The requirement of all spill over schemes including on-going building projects is Rs. 925.45 lakhs for 1985-86 and the total requirement in Seventh Plan is Rs. 1,000.63 lakhs.

30.17 Besides the spill over schemes, there are some schemes of sixth plan which have to continue in the Seventh Plan. The important continuing schemes are Non-formal education Programme, Adult literacy Programme, grant to Non-Government schools and colleges, Universities and other institutions. Introduction of plus three course Vocationalisation of Plus two Stage, provision for scholarships and matching State share for Centrally sponsored schemes have been included as committed schemes. It is estimated that a sum of Rs. 10423.66 lakhs in total is required for the continuing and committed schemes during Seventh plan out of which the requirement for 1985-86 is Rs. 1138.66 lakhs

### Elementary Education

30-18. In the elementary sector overriding priority would be assigned on the schemes connected with programme for universalisation of elementary education properly construed, such a programme would involve preparation of schemes to cover the following categories of children

- (a) All children within the age group of 6—11 on the basis of projected child population for the year 1990.
- (b) Children who were enrolled prior to commencement of the Seventh Five-Year Plan, but dropped out from the formal stream and have not been subsequently covered by the non-formal stream.
- (c) Since the retention rate cannot be raised to 100% from the beginning of the Seventh Plan the drop outs from among those who were enrolled during the Seventh Plan.

The programme designed to cover all the three categories mentioned above would have tremendous budgetary implications. In view of constraints of resources and also in view of the fact that the limited programme envisaged for the Seventh Five-Year Plan in this document already involves a very substantial enhancement as compared to the Sixth Plan provisions. The coverage during the Seventh Plan has been limited to the projected child population in the age group of 6—11 and 11—14. Thus no separate provision is being made for coverage of the drop outs from among those enrolled during the Sixth Five-Year Plan and from among those who would be enrolled during the Seventh Five-Year Plan in the formal streams.

30-19. The requirement of additional teachers both in the formal and non-formal streams has been calculated on the basis of the number of children out of the projected child population of the relevant age group who are proposed to be covered in the formal stream and in the non-formal stream. In working out the requirement of teachers and instructors a teacher pupil ratio of 1:40 and 1:25 has been adopted at the primary level for the formal and non-formal streams respectively. It should, however, be noted that the teacher-pupil ratio in the formal primary schools suggested above is higher than the present state average. As regards the M. E. stage, the teacher-pupil ratio of 1:28 and 1:20 has been envisaged for the formal and non-formal streams respectively. The teacher pupil ratio suggested for the formal stream is about 30% higher than the State average. As regards the non-formal stream Government of India have accepted a teacher-pupil ratio of 1:10, but since this ratio would involve a substantial increase in the number of non-formal teachers required, the ratio of 1:20 has been adopted.

30-20. Another kind of norm can also be adopted for assessing the requirement of additional man power both in the formal and non formal streams. It has been accepted that a village having a population of 200 or more should have a primary school and a village having population of 500 or more should have a M. E. School. Similarly it has also been accepted that there should be a primary school within the distance of 1 K. M. and a M. E. School within the distance of 3 K. Ms. from the home of every child. The application of population and distance criteria would also result in very substantial increase in the number of teachers and instructors that would be required during the Seventh Five-Year-Plan. In view of this budgetary implication the adoption of distance and population criteria, has not been adopted as the basis for calculation of requirements. While the distance and population factors would be given due consideration while determining the location of new schools, these considerations are not proposed to be adopted as rigid criteria for location of new schools or for working out additional requirement of man-power.

30-21. By the end of Sixth Plan, it is expected that 32.04 lakhs of children within the age group of 6—11 would have been enrolled in the formal stream. In addition 11.63 lakhs children also have been covered by non formal schools. As against this, the projected child population of the age group of 6—11 for the year 1990 is 39.5 lakhs. Even on a modest estimate at least 10% overaged and under aged children are likely to seek admission in classes I-V. Thus the total number of children would need to be covered during the Seventh Plan period would be 43.4 lakhs. Out of this 37.62 lakhs children are proposed to be covered by formal schools and 5.75 by non-formal schools. On the basis of the teacher pupil ratio of 1:40 of the total requirement of primary school teachers would be 94,047 as against which the present strength of

primary school teachers is 82,547. Thus the additional teachers required during the Seventh Five-Year Plan for the formal stream would be 11,500. On the basis of the teacher-pupil ratio of 1:25 for the non-formal schools the total requirement of non-formal teachers during the Seventh Plan would be 23,000.

30.22. By the end of the Sixth Plan it is expected that 7.78 lakhs children within the age-group of 11-14 would have been enrolled in M. E. Schools in the formal stream. About 1,2000 children are also expected to have been covered by the non-formal Middle Schools.

30.23. The level of enrolment likely to be achieved by the end of the Sixth Five-year Plan represents a coverage of about 39.45 per cent of all children within the age-group of 11-14. Universalisation of enrolment of children belonging to this age-group would involve raising the level of enrolment by nearly 60 per cent over the next five years. Apart from the fact that such a target may not be feasible, it is also to be noted that since universalisation of enrolment in the age-group of 6-11 is only likely to be achieved by the year 1989-90, universalisation in the age-group of 11-14 can only be achieved three years thereafter. As such it is proposed to aim at a coverage of 65 per cent of children within the age-group of 11-14.

30.24. The projected child population in the age group of 11-14 for the year, 1990 is 21.8 lakhs. Approximately 20 per cent over-aged children are expected to seek admission in Class VI to VIII. If 65 per cent of the children seeking admission in Classes VI to VIII are to be provided with facilities for enrolment, the target for coverage would be about 17 lakhs. Of these 17 lakhs, 13 lakhs children are proposed to be covered by formal schools and 4 lakhs children by non-formal schools. On the basis of proposed teacher-pupil ratio of 1:28 in the formal schools and 1:20 in non-formal schools, the additional requirement of teachers in formal schools would be 10,075 and requirement of non-formal teachers would be 20,150.

30.25. To meet the diverse requirements of villages and habitations which have not been provided with schooling facilities so far, it would be necessary to adopt a mixed instructional pattern. There may be small habitations which do not have sufficient number of students to sustain a formal school and at the same time the habitation may be far away from the villages having schools. In such a situation establishment of only a non-formal school would be justified. Keeping in view the diversity of requirements and limitation of resources, the instructional pattern which would be followed will be as follows:

- (i) Non-formal schools both for Primary and M. E.
- (ii) Formal L. P. Schools with non-formal U. P. and/or M. E. Schools.
- (iii) Formal U. P. Schools with non-formal M. E. Schools.

30.26. One of the important reasons for high rate of drop-outs is the non-availability of U. P. facilities in several Primary Schools and existence of a large number of single teacher L. P. Schools. There is need for up gradation of L. P. Schools to U. P. Schools and U. P. Schools to M. E. Schools and the need for provision of additional teacher for single teacher schools would be reviewed and an additional teacher or additional class will be sanctioned keeping in view the requirements.

30.27. With a view to providing incentives for retention in areas which are particularly backward and where motivation for education may be lacking, it is proposed to introduce several incentive schemes brief outlines of which are furnished below:—

- (i) For Blocks with literacy rate of 25 Per cent below the State average:—
  - (1) Supply of free text books to children of Primary and M. E. Schools.
  - (2) Supply of free uniforms to girls in Primary and M. E. Schools.
  - (3) Supply of Mid-day Meals to children of Primary Schools.
- (ii) Block with literacy rate between 25 per cent to 50 per cent of the State average:—
  - (1) Supply of free text books to children in Primary and M. E. Schools
  - (2) Supply of free uniform to girls of Primary and M. E. Schools,
- (iii) For Blocks with literacy rate between 50 per cent to 75 per cent of the State average:—
  - (1) Free text books to all children in Primary and M. E. Schools

30-28. Attendance reward for one child of each ERRP beneficiary attending either a Primary School or M. E. School subject to minimum attendance of 80% at the rate of Rs. 50 per annum for Primary School students and Rs. 75 per M. E. School students.

30-29. Since improved science curriculum has been adopted at the Primary and M. E. stages it is proposed to supply science equipments to Primary and M. E. Schools, maps, charts and other teaching aids are also required for imparting effective teaching.

30-30. The Library facilities in Primary and M. E. Schools at present are far from satisfactory. Reading and self Education habit can not be acquired in later years unless it is developed from an early age. It is proposed to give library grants to each school in alternate year @ Rs. 300 per Primary and Rs. 500 per M. E. School.

30-31. In tribal and other inaccessible areas lack of residential facilities for teachers has led to the serious problem of teacher absenteeism. It is proposed to construct 4,000 quarters for the Primary School teachers and 2,000 quarters for M. E. School teachers during the plan period. At the elementary stage, lack of grant school buildings is a serious disincentive for enrolment and retention and creates serious problems. It is proposed to construct school buildings for all schools to be opened during the plan period and additional class rooms in the schools which are to be upgraded.

30-32. Administration needs to be adequately strengthened at all levels to cope with the vast expansion of enrolment in Primary and M. E. stage. The improvement in the quality of education depends on effective inspecting and supervisory machinery at the district and block level. A District Inspector can not do justice to Schools if the number of Schools under his administrative control exceeds 500. On this basis 87 District Inspector of Schools with necessary staff are required by the end of the plan period as against 56 at present. The financial position may not permit to create 31 additional District Inspector Offices. However, at present under the jurisdiction of eleven District Inspector of Schools there are more than 1,000 schools and it is proposed to bifurcate these 11 out of the 56 Educational Districts and open 11 new District Inspector of Schools offices.

30-33. To reduce the residue of Office establishment work on the District Inspector of Schools so that they can devote more time to inspection and other academic work it is proposed to appoint 56 Dy. District Inspector of Schools in the 56 existing District Inspector of Schools Offices. To look after proper maintenance of accounts, submission of financial returns in time and timely/audit compliance and to check financial irregularities, it is proposed to appoint 56 Accounts Officers, one each in the existing District Inspector of Schools offices.

30-34. According to the norm which has been placed before the 8th Finance Commission, one S. I. has to supervise 30 Schools in tribal areas and 40 Schools in other areas. On the basis of this yardstick an additional number of 291 S. I. of Schools are required to be appointed. To check the pay bills of primary school teachers, one Clerk in charge of each block is proposed to be appointed in the office of the B. D. O. In 40 out of 56 existing D. I. Offices, there are no Accountants at present. It is proposed to create 40 posts of Senior Clerk-rum Accountant in these offices to look after account matters. For effective supervision of Schools, specially in Tribal Areas where no communication facility is available and the Schools are located in a scattered manner, it is proposed to provide a jeep each to all the existing District Inspector of Schools during the 7th Plan.

30-35. The administrative machinery at the Directorate level has to be strengthened in view of implementing the major programme of universalisation of the elementary education. To assist the Director, Elementary Education, a post of Jt. Director is proposed to be created. In view of enormous expansion of non-formal education, it is proposed to create a post of Assistant Director (N.F.), a post of Section Officer and his staff for Non-formal education. There has been no addition to the staff in the office of the Elementary Directorate during the Sixth Plan period. The audit organisation to look after the audit work of Government Schools and subordinate offices is inadequate to cope with the volume of work. The statistical unit also has to be strengthened. It is proposed to earmark sum of Rs. 45 00 lakhs in total, for strengthening the Elementary Directorate.

### Teacher Education Programme

30.36. In order to improve the quality of instruction in Elementary Schools, it is proposed to expand in-service teacher training facilities. The teachers need refresher courses to cope with modernised and enriched curriculum in Science and Mathematics at all stages of School Education. There are some lady teachers in Primary Schools who did not have mathematics as a subject in the High School stage and they have to teach arithmetics in elementary classes. Refresher course in Mathematics is essential for such teachers.

30.37. The SCERT is in charge of all training programmes for the elementary School teachers. For strengthening Teacher Education Programmes and for taking up training courses in a wider scale to cover more number of elementary school teachers, the existing staff of the SCERT is found to be inadequate. For creation of additional staff taking up Research Projects relevant to Elementary Education and for conducting N.T.S. (National Talent Scholarship) examinations provisions have been made during the Seventh Plan.

30.38. INSAT Programmes will expand during the Seventh Plan and the major portion of the expenditure is expected to come as Central Assistance. It is proposed to provide an outlay of Rs.80 lakhs from State side for the INSAT Programme.

### Adult Education

30.39. The national policy is to make literate all the illiterates in the country in the age group (15—35) As per the guideline book "Adult Education Programme" published by Government of India in 1983 the projected target of enrolment from 1983--90 of the total illiterates of Orissa in the age-group (15—35) is 55.35 lakhs. During 1983-84, 1.66 lakhs of beneficiaries were enrolled and during 1984-85 it is targeted to cover 2.115 lakh of learners. Hence we have to cover the remaining 51.58 lakhs of illiterate adults during 1985--90.

30.40. It is proposed to cover 7.48 lakhs of learners through N. S. S., N. Y. K. and voluntary agencies during the 7th Five-year Plan. The remaining 44.1 lakhs of Adult learners are to be covered by Central and State Sectors. For achieving this target, it is proposed to open 15,500 adult centres through Voluntary Agencies, 10,450 centres through other Agencies like the N. S. S. and the N. Y. K., 73,500 centres in state sector and 73,500 centres in Central Sector during the Seventh Plan period. As per the estimate of the review committee appointed by Government of India the cost per learner is Rs. 150.00 inclusive of all expenditure.

30.41. Since the adults made literate through the Adult Literacy Programme are liable to fall into the original state of illiteracy, it is proposed to introduce a post-literacy programme on experimental basis. This programme, if proved successful is proposed to be introduced in a wider scale. The programme envisages six week training course for two consecutive years for the learners who have completed their education in the adult centres. The local college students in degree and P. G. classes can be appointed as instructors when they are free after University examinations and during vacations. It is proposed to pay remuneration to instructors at the rate of Rs.100.00 per month. Two cash prizes for learners who attend classes regularly are proposed to be awarded. It is proposed to implement the programme for 25,000 learners annually.

30.42. There is a Audio-Visual unit at the Directorate level. It is proposed to open Audio Visual units at District level in view of massive expansion of Adult Literacy Programme. Education through Audio Visual system is found to be more suitable for Adult learners. It is proposed to purchase a projector and some Educational films for each District Centre. The total cost of adult literacy programme is Rs. 3,362.25 lakhs.

### Secondary Education

30.43. In this sector the emphasis will be on normal growth, consolidation of existing facilities, and qualitative improvement rather than an quantitative expansion. High Schools are proposed to be opened only in backward and tribal areas to remove regional disparity. Consistent with the priority to Secondary Education accorded in Seventh Plan the following schemes have been drawn up.

30.44. Since large number of non-Government High Schools have opened in the Sixth Plan period, opening of new schools on private initiative will be discouraged except of educationally backward district. On an average there is one High School in the State for every 8,000 population. At present there are seven districts namely Balangir, Ganjam, Kalahandi, Koraput, Phulbani, Sambalpur and Sundergarh where the number of High Schools is less than the number of schools required according to the State average of one High School per 8,000 population. For the seven districts mentioned above 522 High Schools are required to be established to bring them to the level of State average. Constraints of resources would not permit opening of such a large number of High Schools in one Plan period. Considering the resource position and demand for enrolment at the High School level, it is proposed to open 80 Government High Schools out of which ten would be Girls' High Schools in the seven educationally backward districts. Non-Government High Schools in these districts do not have much scope to grow and therefore it is proposed to take over 20 selected Non-Government High schools belonging to these districts by the Government. Due to expansion at the middle school stage, the demand for enrolment at the High school stage is bound to grow. Since no High School is proposed to be opened in educationally advanced districts, it is proposed to open 1,000 additional sections in the existing Government High Schools in these districts and 1,000 additional sections in existing non-Government High Schools during the Plan period for accommodating the increasing number of students at the secondary stage.

30.45. 210 High Schools will continue to receive grants from plan side during the Seventh Plan period. Besides, 184 High Schools will be eligible for full grants from 1985-86. 156 new High Schools in 1985-86 and 866 new High Schools between 1985-90 will qualify for receiving grants. The total requirement of grant-in-aid for the plan period amounting to Rs. 3,438.00 lakhs is proposed to be provided out of which Rs. 434.00 lakhs have been provided for 1985-86.

30.46. The Vocationalisation of the +2 Stage is envisaged as a part of Secondary Education. The upgradation of High Schools to higher Secondary Level would require building-up necessary infrastructural facilities. For financial point of view +2 stage of education has been located in colleges. In the Seventh Plan period it is proposed to upgrade 80 High Schools and introduce vocational courses at the rate of four vocational courses in one upgrade Higher Secondary School. The average cost of opening one vocational course will be Rs. 2 lakhs in the first year and Rs. 1.5 lakhs in the subsequent years.

30.47. The Text Books and Courses of studies for High School students are changing every three or four years. Refreshers Training Courses for teachers are necessary to equip them to teach modernised text books specially in Science, Geography and Mathematics. To enable the Board of secondary Education to organise training courses on a wider scale, it is proposed to grant a sum of Rs. 50 lakhs to the Secondary Board for the purpose during the Seventh Plan.

30.48. Under this scheme Book-banks already opened in High Schools for the benefit of poor students will be strengthened and new Book-banks will be opened. 500 new merit scholarships and N.R.T. Scholarships for talented students in rural areas are proposed to be awarded. As per the recommendation of the state labour ministers conference it is proposed to award stipend at the rate of Rs. 150.00 per month to the children of bonded labourers studying in schools.

30.49. The ongoing building projects would require Rs. 84.00 lakhs for completion according to the current schedule of rates and this amount is proposed to be provided in 1985-86. Besides new building projects including construction of High school buildings, construction of hostels, teachers' quarters buildings for institutes and offices functioning in rented houses are proposed to be constructed during the plan period.

30.50. The conference of State Education Secretaries held on 23-24 May, 1984 has recommended, "substantial sums of money should be made available in the next plan period to strengthen the existing libraries and setting up of new ones where they do not exist," selected books in Oriya worth about Rs. 1,500 are being supplied to each Government High School every year. It is proposed to extend this facility to all non-Government High Schools. At present there are no librarians in High Schools. It is proposed to make a modest beginning during the Seventh Plan period and appoint one

Assistant Librarian in each of the 43 Government High Schools located at the District and State Headquarters. This Programme of improving library facilities in Schools require Rs. 207.15 lakhs in total during the Seventh Plan out of which Rs. 10.75 lakhs is to be spent in 1985-86.

30-51. The existing three M. F. Schools for deaf, dumb and blind students are proposed to be upgraded to High School level as a matriculate disabled student has better prospects of employment. There is demand for admission of more students in the existing four Government schools for disabled children at Bhubaneswar and Burla. In these schools the norm is to appoint one teacher for every 10 students. Besides the Government schools, there are also private schools for deaf, dumb and blind children. Teachers are also employed in some normal schools to take care of disabled children. At present there is no training school for teachers of disabled children in the State and it is proposed to establish one such training school.

30-52. It may not be possible to remove all existing deficiencies in the Schools in one Plan period. A modest beginning is proposed to be made in the areas such as construction of additional class rooms in schools having poor class room facilities, construction of hostels and teachers' quarter in backward areas and supply of science equipments and furniture.

30-53. A new Upasastri course equivalent to +2 stage in sanskrit education is proposed to be introduced in 6 selected tols. For opening one Upasastri course, 7 posts of lecturer, one post of a clerk and one peon post are required to be created.

30-54. The number of sanskrit tols have increased in recent years. A new Upasastri course is proposed to be introduced in some tols. After the introduction of the system of direct payment to teachers and pandits there has been no expansion in the Superintendents' Office to cope with the additional work. In view of the increased volume of work, it is proposed to create a post of Administrative-cum-Accounts Officer who will be in charge of drawal and disbursement and an Assistant Superintendent to assist the Superintendent. Three posts of clerk and 2 posts of peon are also required for the office.

30-55. At present there are three Assistant Superintendents of Sanskrit Studies posted at Balasore, Puri and Berhampur. The tols in Western Orissa are under the control of the Assistant Superintendent, Berhampur. For effective supervision of tols in Western Orissa, an Assistant Superintendents' Office at Sambalpur is proposed to be opened during the 7th Plan.

30-56. 50% of the cost of Appointing Hindi Teachers is available as Central Assistance. It is proposed to create 250 posts of Hindi teachers as State share during the 7th Plan Period.

30-57. The CIEOL, Hyderabad has approved the scheme for establishment of a District centre for training the High School English Teachers. Substantial central assistance is expected to be available for this institute. The office staff and contingency has to be provided for by the State. It is proposed to provide Rs. 7 lakhs for the Institute during the 7th Plan out of which Rs. 1 lakhs is proposed to be spent in 1985-86.

30-58. There are 3,346 High Schools in the State at present. One Inspector of Schools can effectively supervise and administer one hundred High Schools. There are 15 Inspectorates and on this basis 18 new Inspectorates are required to be opened. Since the financial position may not permit such an expansion during the Plan period, it is proposed to create 4 new Inspectorates in areas where concentration of High Schools is comparatively more. To relieve the work-load on Inspectors of Schools it is proposed to appoint one Addl. Inspector in each of the 19 Inspectorates. Out of the existing 15 educational Circles in the State at present Government buildings have not been provided for six Inspectors of Schools Offices and for the residence of one Inspector of Schools. It is proposed to construct these six office buildings and one set of quarters for the existing Inspectorates and four sets of quarters for the new Inspectors. Thirteen out of the fifteen Inspectors of Schools have vehicles which are more than 10 years old. As such their replacements have become urgent and it is proposed to replace them in the plan period in a phased manner.



30-59. The formation of Common Cadre and introduction of Inter-transferability of Headmasters of the aided educational institutions of the State has started. There are now 1449 Headmasters and Headmistresses in the aided High Schools (Direct payment). This task would involve collection of detailed statistics in respect of employees serving in different aided institutions. The existing staff in the Directorate which are already short of the prescribed yardstick may not be able to take the workload. Therefore additional hands are required to be appointed.

30-60. Consequent upon the tri-furcation of the Directorate on "as is where is basis" the Secondary Directorate has been functioning separately. But no additional staff has been created so far, although a large number of additional Staff were due to the Secondary Directorate on account of implementation of various new schemes concerning non-Government High Schools, M. E. Schools relating to service conditions of aided School, triple benefit schemes and education Tribunal matters. Hence some more additional staff have been suggested to be created during the 7th Plan Period.

30-61. At present there are 15 Inspectors of Schools, 2 Hindi Training Colleges, 1 Superintendent Sanskrit Studies 243 Govt. High Schools, 96 Govt. Girls' High Schools and 63 Secondary Training Schools under the Directorate of Secondary Education. There are only 2 Auditors to look after the Audit work of these large number of offices and institutions. For regular Audit of these offices and Institutions 4110 Audit days are required in a year. Additional requirement of auditors in the Secondary Directorate, thus, comes to 28. For this Audit Organisation 5 posts of Audit Superintendent 28 Auditors 2 Junior Typists with 2 Type-writers and some Peons are proposed to be created.

30-62. At present library grants are provided to Government High School. Most of the Non-Govt. High Schools also have libraries. During the 7th Plan it is envisaged to intensify the library movement. There is a proposal to supply library books to all the Primary, M. E. and non-Govt. High Schools during 7th Plan period. To prepare different schemes for the progress of library movement and to ensure proper selection and purchase of books a library cell is proposed to be created at the Directorate. To form the cell, it is proposed to create one post of Deputy Director (Library), one post of Assistant Director, 4 posts of Clerks and 3 posts of Peons.

30-63. The total cost of strengthening the Secondary Directorate is 0.62 percent of the total Plan outlay for Secondary sector.

#### Higher Education

30-64. In the sphere of Higher education, the main emphasis will be on consolidation of existing facilities removal of basic infrastructural deficiencies and other deficiencies in Libraries, Laboratories etc. During the plan period qualitative improvement of Higher Education rather than quantitative expansion will be aimed at. However, some lateral expansion may be necessary in educationally backward areas. In the last decade a large number of new private colleges have come up. Most of the Non-Govt. Colleges provide teaching facility in the Arts faculty, few have provision for teaching Science and Commerce courses. As a result there has been a disproportionate growth of the three streams. At present the in take capacity of +2 stage in the State is about 48,000 in Arts, 13,000 in Science and 10,000 in Commerce streams. This imbalance is responsible for educated unemployment. A Science Graduate has a better prospects of employment. Many technical courses are being opened for Science students and they are more in demand due to rapid technological advancement all around.

30-65. It is proposed to increase the in take capacity of Science stream at +2 stage in Government Colleges by opening Science faculty where Science streams do not exist and increasing the number of seats in the existing Science faculties. Government may take over some Non-Government colleges having scope to open Science Faculty.

30-66. Out of the 47 Govt. colleges, Science faculty does not exist in 22 colleges. It is proposed to open Science faculty in only 7 out of 22 colleges where facilities for Science teaching is not available.

30-67. This will provide 1,000 additional seats in science stream at +2 stage. It is also proposed to provide 1,000 more seats in Science by increasing the sanctioned strength in existing Science colleges.

30-68. It is also proposed to open Science courses at +3 stage in 4 Govt. colleges during the Seventh Plan.

30-69. In Commerce stream, it is proposed to open +2 course in one college and +3 course in two colleges. In Arts stream it is proposed to open +3 course in two Women's colleges.

30-70. The number of graduates desiring to take admission in P.-G. Classes is increasing every year. At present in some subjects students having first class Honours degree fail to get admitted in P.-G. Course. This problem is acute in the Science faculty. It is proposed to open 4 P.-G. Courses in Science Subjects, three in Arts Subjects and two in Commerce in the Government Colleges of the State.

30-71. With the introduction of 10+2+3 system of Education, there will be five classes in a degree college. There has been practically no expansion of Laboratory facilities in the Science colleges after the introduction of +2. So new laboratories in 25 Science colleges are proposed to be constructed.

30-72. Hostel facilities exist in 27 Government Colleges only. It is proposed to construct Hostels in 14 colleges. Out of the remaining 20, 8 Women's Colleges having no Hostels should have hostels on priority basis. As hostel facility is quite inadequate in almost all colleges, it is also proposed to expand the existing hostels in 27 colleges.

30-73. There is acute dearth of residential quarters for the college teachers and for the Non-teaching staff as well. At present less than 10% of the teaching staff have been provided with Government quarters. The position is not better in respect of the non-teaching staff. In order to provide residential accommodation to a larger number of staff it is proposed to construct 700 quarters for the teachers, 300 quarters for the non-teaching staff.

30-74. The library facilities are far from satisfactory in most of the colleges. In view of the introduction of +2 and +3 courses which have enriched course contents well-equipped libraries are urgently required. A modest beginning is proposed to be made in this direction during the 7th Plan and accordingly it is proposed to extend the Library Building in 5 (five) Government Colleges. Besides provision has been made for purchase of library books in colleges where new facilities are proposed to be opened.

30-75. Vocationalisation at +2 stage is one of the major objectives of the (10+2+3) system of Education. Due to constraints of resources it has not been possible to introduce Vocational Stream so far. The Council of Higher Education has identified about 35 Vocational Courses. During the 7th Plan period, it is proposed to open Vocational Streams in Government Colleges for 5,000 students which constitute 25% of the in-take capacity at +2 stage in Government Colleges.

30-76. In the year 1985-86 students will be admitted in the first year of the new 3 year degree course. The two classes of the existing degree course will also continue for two years. Therefore facilities have to be created for students of one extra class in degree colleges from the beginning of the 7th Plan period. The three year degree course will have three components namely (a) Foundation Course (b) Applied/Ancillary and (c) a Core Course. The core component, broadly speaking is similar to the present degree course but components (a) and (c) are entirely new and teaching facility has to be provided for these two. Even after the optimum utilisation of the existing teachers, at least 250 posts of lecturers will be required for Government Colleges.

30-77. For the existing colleges having Science faculty at degree stage, 104 Laboratory Assistants and 104 Laboratory Attendants at the rate of 4 Laboratory Assistants and 4 attendants per college are required to provide laboratory facilities to students belonging to one additional class in the degree stage.

30-78. The existing infrastructural deficiencies in such as shortage of class room accommodation, provision for common room, urinals, bicycle shed etc., which are minor irritants for students should be removed as far as practicable. It is proposed to provide an outlay of Rs.100 lakhs.

30-79. As a measure of qualitative improvement of Higher education, it is proposed to built up two degree colleges at the headquarters of each district, one of the two being a Women's College owing the Seventh Plan period. These two model colleges will have facilities for Honours teaching in all subjects in the three faculties with provision for other facilities such as residential, Library, Laboratory, Games and Co-curricular activities.

30-80. Increasing number of Non-Government Colleges will mature for grant-in aid during Seventh Plan and many will come under direct payment scheme. Libraries in Non-Government Colleges are inadequately equipped. Consequent upon the introduction of new 3 years degree course, students will be required to refer to books relating to the foundation course and applied course. Further up-to-date quality books in Oriya literature are being supplied to Government Colleges, This facility may be extended to Non-Government Colleges during the Seventh Plan. An outlay of Rs 100 lakhs is proposed to be provided for purchase of library books in Non-Government Colleges.

30-81. Payment of Scholarships have to be continued to meritorious students belonging to +2 Degree and P.-G. Classes. It is proposed to introduce NRT Scholarship at the +2 stage. Before the introduction of +2 course, students in High Schools were enjoying NRT Scholarship for 4 years. With the introduction of +2 they will receive the Scholarship for 3 years only at the High School Stage. It is proposed to award NRT Scholar to such students at the +2 stage also. It has been estimated that for awarding the Scholarship to 1800 meritorious students (equivalent to the present number of NRT Scholarship) annually, Rs. 34.5 lakhs is required on the basis that a Day Scholar student is to receive @ Rs. 60 per month and a Boarder @ Rs.100 per month.

30-82. In the last decade Higher Education has expanded enormously. The number of colleges and student strength are increasing at a rapid pace. In the meantime our State has aligned itself with the national mainstream and +2 +3 system of Education are being implemented in the colleges. The introduction of new patterns of Education need constant attention and supervision. To relieve the pressure of work on the Director, it is required to strengthen the Directorate of Higher Education.

30-83. With the increase in the number of colleges, enrolment strength and introduction of +3 courses, the work-load for the Deputy Director has increased enormously. To relieve the press of work on the Deputy Director (General) and the Deputy Director (NGC) one post of Asst. Director for Govt. Colleges and another post of Asst. Director for Non-Govt. Colleges are required to be created.

30-84. Officer of the Directorate of Higher Education has remained static for more than a decade. Number of Universities, College and student strength in all colleges have increased a rapid pace. During the last two years of the Sixth Plan +2 system has been introduced and during Seventh Plan period +3 pattern of Education is going to be introduced. In view of the increasing work-load in the office of the Director, Higher Education, it earnestly felt that the Directorate should extend commensurate with the increase in work-load to deal with the administrative work properly. It is therefore, proposed that the Directorate be expanded on yard stick and non-yardstick. A variety of non-receipt work such as maintenance of a common cadre, preparation of departmentwise seniority list, verification of service books of Govt. and Non-Govt. College teachers, preparation of statements in connection with opening of Hon's classes, increase of seats in both Govt. and Non-Govt. colleges etc. are at present keeping the directorate busy. Therefore it is proposed that adequate staff should be provided to take care of these non-receipt work.

30-85. In view of the enormous increase in the work-load, it has become exceedingly difficult to supervise and co-ordinate all budgetary matters. It is therefore, proposed that a post of Budget Officer may be created and filled up from among the Ministerial staff on promotion. Further it is proposed to create one Section for verification of returns of expenditure submitted by Treasuries and Sub-Treasuries to Accountant-General, Orissa and maintenance of monthwise expenditure received from subordinate offices of Education Directorate. The existing staff are inadequate for preparation of Budget estimate, Revised estimate, Draft Appropriation of Accounts, performance Budget and other allied matters. Besides this, as per the decision during 1977, fees and fines collected from students reading in Non-Government Institutions have to be deposited into the Government Treasuries. With this decision the existing work-load of the Budget Branch was further increased in connection with monthly collection, compilation and verification of Receipt Figures. It is, therefore, proposed to create one section for the purpose..

### Physical Education and Youth Services Programmes

30·86. The development of Physical Education and Youth Welfare activities have suffered due to lack of funds in previous plan. In the Seventh Plan it is proposed to provide funds for coaching programme of selected players for participating in State and National level tournaments, maintenance of play field and strengthening the only Government Physical Education College in the State.

30·87. Sports and Games for the school students are being organised by the Directorate through the State High School Athletic Association to select best players and Athletes National Participation organised by the School Games Federation of India. It is necessary to provide funds to conduct State Level Meets and Matches prior to their National participation. After the State Level Meets the selected players have to be coached in all items of games for better performance in the National level sports and games organised by the S.G.F.I.

30·88. Government of India desire to open permanent training cum-testing centres and to set up a Cell in the Directorate under the National Physical Fitness Programme in the State. A sum of Rs.50,000·00 annually is required for the purpose.

30·89. There is only one Government College of Physical Education in Orissa which has no building and campus of its own. It is proposed to construct a permanent college building and its hostel. B. P. Ed. Course has been introduced in the college since 1980-81 and it is proposed to provide for the teaching and non-teaching posts. It is also proposed to open M. P. Ed Course in the said college with a view to improve the standard of Physical Education in the State.

### Employment Generation

30·90. The proposed Plan Outlay provides funds for creation of 1,02,300 posts in total in the Schools, Colleges and offices of the Education Department of State. Besides part-time employment opportunity under the non-formal and Adult Education Programme will be granted for 18,800 persons. On the constructional side assuming that 16 per cent of the total capital outlay on building will be spent for supervision of the work and 34 per cent on casual labour (on the average of Rs. 12·00 per day per person) total employment for 91,000 Person days and 33,000 person years will be generated during the plan period.

### Central and Centrally Sponsored Scheme

30·91. The Principal schemes under this sector are continuance of the N. S. S. Programme, National Scholarships, appointment of Hindi teachers, award of Scholarship in Hindi and Sanskrit, Non-formal Education, Adult Literacy and INSAT Programme. The total outlay on Central and Centrally sponsored Scheme is estimated at Rs. 7376·21 lakhs out of which a sum of Rs. 1,229·32 is proposed to be spent in 1985-86.

### Tribal Area Sub-Plan

30·92. The Tribal Sub-Plan have been prepared keeping the special problems of Tribal people in view, 40 per cent of the outlay earmarked for providing schooling facilities in both formal and non-formal education programme and 50 per cent of adult education programme (including the Central Scheme) is proposed to flow to Tribal Sub-Plan. The new institutional pattern of combining formal and non-formal methods is likely to be successful in tribal areas in increasing enrolment figures and also in reducing the dropout rate. The local persons knowing tribal language will be given due preference in the appointment of school teachers. The need of relaxing training qualification for local teachers are being examined, where the general curriculum carries no relevance to the life and needs of the Tribal Population. It has to be revised in the light of the requirement of the community and the prevailing life condition. The curriculum is proposed to be re-designed accordingly. Adequate number of Government High Schools are proposed to be opened in tribal districts. Suitable Vocational streams for the tribals at the 11-12 stage will be introduced. The establishment of proposed model colleges in each district will fulfill the need of poor and meritorious tribal youths aspiring for higher education in well equipped colleges of their home district. A sum of Rs. 14,639·29 forming 37 per cent of the total State Plan Outlay of Rs. 38,889·05 lakhs has been quantified for expenditure in Sub-Plan area. During 1985-86 out of the total

outlay of Rs. 5,157.95 the flow to sub-plan would be Rs. 1,545.27. This outlay will be supplemented by funds drawn from the outlay on Central and Centrally Sponsored Schemes. A sum of Rs. 3,466.43 lakhs forming 46 per cent of total central and centrally sponsored plan outlay of Rs. 7376.21 lakhs has been quantified for Tribal Sub-Plan.

#### **Scheduled Caste Component**

30.93. For achieving the target of universal education in the plan period, due weightage has been given to unserved habitations where Harijans constitute 10 per cent or more of the total population. 30 per cent of the outlay earmarked for providing schooling facilities in both formal and non-formal streams is proposed to flow to Scheduled Caste component. Incentives like the supply of free text books, free uniform to girls, attendance scholarship and provision of mid-day meal aim at benefiting the S. C. children. Provision of quarters for Primary School teachers will be helpful in improving the school atmosphere. A sum of Rs. 8902.93 lakhs forming 22 per cent of the total State Plan Outlay of Rs. 38889.05 lakhs has been quantified for Scheduled Caste component. Out of this a sum of Rs. 1026.93 lakhs is proposed to be spent during 1985-86. From the total Central Plan outlay of Rs. 7376.21 lakhs, Rs. 1920.16 lakhs (26 per cent) has been quantified for Scheduled Caste component.

## CHAPTER 31

### ART AND CULTURE

31.1 Orissa is famous for her rich heritage in art, dance, drama music, archaeological monuments, ancient manuscripts and art objects etc. It has to be preserved and further developed. The rulers and Zamindars were traditionally supporting art and culture. After their departure from the scene, it has become the responsibility of the State to preserve and encourage art and culture. It is also necessary that the State has to develop awareness among the public about its past heritage. Attempts are to be made to utilise cultural activities as a support to the educational programmes. Promotion of traditional crafts and skills can form part of the educational programme. Keeping these objectives in view, programmes for art and culture, development of libraries and Oriya language and literature were drawn up for implementation during the Seventh Plan period. An outlay of Rs. 650 lakhs has been proposed for the Seventh Plan i. e. Rs. 600.00 lakhs for art and culture and Rs. 50.00 lakhs for development of M. I. L. and Library programmes. The details of the schemes are briefly discussed below.

#### General programmes relating to Art and Culture

31.2, The schemes for art and culture will be implemented mainly through different cultural organisations and reputed institutions namely Orissa Sahitya Academy, Orissa Sangeet Natak Academy and Orissa Lalit Kala Academy. The progress of different schemes executed so far and proposal for implementation during Seventh Plan are mentioned below :

31.3. In order to undertake different cultural programmes and for implementing the plan schemes, successfully, it is proposed to strengthen the Department and the Directorate by creating some staff to cope with the additional work-load. A sum of Rs. 20.00 lakhs is proposed during the Seventh Plan period.

31.4. It is proposed to revive the post of Chief Editor who will be designated as Chief Editor-cum-Chief Curator of Palmleaf manuscripts section. Since the activities of Editorial Wing is primarily to study the palm leaf manuscripts of the Museum and edit and publish them, it will be proper if the Chief Editor-cum-Chief Curator of the palmleaf section supervises the work of the Editors.

31.5. It is proposed to strengthen the Directorate set-up by creating a post of Deputy Director, Culture. Apart from assisting the Director he will specifically look after the M. I. L. programme. Since the State Library building is proposed to be received back by the end of the current financial year, the State Library will require supervision at a higher level. Besides organising the State Library during the Seventh Five-Year Plan to make it a most prestigious library, the Deputy Director will take up a project for developing and establishing a section in the library for Orissan studies. It may be mentioned that the Orissa Bibliography has been published under the auspices of Heidelberg University and the books and periodicals listed thereunder are not available in a central place. Since the Department of Culture is responsible for further research on Orissan culture, with the expansion of the Orissa State library this collection will be taken up as a priority project and the Deputy Director will be made responsible for organising the same. He will also supervise the District Libraries and subdivisional libraries. Besides, the Deputy Director, Culture has to look after the much expanded programme of art education in the State. It is relevant to mention here that a new College of Art has been started at Bhubaneswar during the last year of the Sixth Plan. With the introduction of +2 system the two Art Colleges and the Music College will have 5 years of education for the Graduate stage only. Besides, the Music College is going to have Post-Graduate classes. There is at present no officer available to supervise the programme of Art Education effectively. The Deputy Director will look after the Art Education programmes besides M. I. L. and Library programmes.

31.6. It is also proposed to create one post of Assistant Director, Culture. It is to be mentioned that at present we have only one post of Assistant Director on the programme side designated as Assistant Director (Production) and his job is to look after the publication of the Department. However, for

organisation of cultural programmes, release of grants and all other activities there is no supervising officer at the Directorate to assist the Director. Earlier the cultural programmes were being organised by the Orissa Sangeet Natak Academy and this has, however, been discontinued and the cultural programmes are being organised by the Directorate. It is, therefore, proposed that the creation of a new post of Assistant Director, Culture to look after the organisation of cultural programmes and grants to the cultural organisations as well as to look after the indigent artist pension scheme is essential. Consequently, the Assistant Director (Production) will look after the M. I. L., Programmes and art education. It has been proposed to create the post of one Record Keeper, two senior assistants and two junior assistants which is the absolute minimum to manage the present work-load of the Directorate. These are in the nature of routine growth. Three posts of peons have been proposed of which two will be for the Deputy Director of Culture and one for the Assistant Director, Culture. It has been proposed to create two posts of drivers for the two new vehicles proposed to be purchased, namely, one diesel jeep and one staff car for the Directorate.

31.7. During the year, 1983-84, an Odissi Research Wing has been established under the Directorate of Sports and Culture in order to undertake research in the Odissi Dance and Music and to codify and maintain this form of Art for future generations. A sum of Rs. 15.00 lakhs is proposed for the purpose.

31.8. At present, there are only three auditoriums in the State Capital at Bhubaneswar with a total sitting capacity for 640 only. Difficulties are experienced in staging large cultural functions. It is proposed to increase these facilities. A sum of Rs. 11.50 lakhs is proposed for the development of Rabin-dramaudap and Kalamandap.

31.9. During the Sixth Plan period a sum of Rs. 38.01 lakhs had been given to the organisations and cultural institutions for promotion of dance, drama, music, literature and art. Some of these institutions, situated in remote areas, are also engaged in development of folk art and folk culture. These are to be patronised by the State so that the traditional arts may remain alive. With view to preserving the old culture and to make these cultural organisations more active in their respective fields, an outlay of Rs. 40.00 lakhs is proposed for giving them grants-in-aid during the Seventh Plan.

31.10. During the Sixth Plan Period financial assistance has been provided to indigent authors for publication of their unpublished work. A sum of Rs. 1.70 lakhs has given to such authors for publication of their unpublished manuscripts. There are many more authors who are unable to publish their manuscripts due to indigent circumstances. They will be assisted to publish their valuable manuscripts both in Oriya and Sanskrit. For this purpose a sum of Rs. 2.50 lakhs is proposed during the Seventh Plan Period.

31.11. The Chhau Dance is the remnant of martial tradition of Oriya people. It is proposed to preserve and develop this dance. For this, a sum of Rs. 2.50 lakhs is proposed.

31.12. In order to provide incentive for producing quality Oriya films, the State Government have instituted prizes for the producers, actors, actresses, directors, etc. For the purpose, a sum of Rs. 5.00 lakhs proposed during the Seventh Plan.

31.13. The State Government have introduced a scheme for giving monthly pension to writers, artists, and sportsmen, those who have devoted their life for development of literature, arts and culture, sports and games in the State and are now leading their life in a very miserable condition. State Government have sanctioned pension @ Rs. 200 per month to 10 persons in 1980-81, 144 persons in 1981-82, 128 persons in 1982-83 and 113 persons in 1983-84. Government have proposed to give pension to 200 more artists @ Rs. 200 per month in each year. Moreover, Government have sanctioned pension to journalists during the current financial year. For this scheme a sum of Rs. 40.00 lakhs is proposed during the Seventh Plan.

31-14. With a view to perpetuating the memory of eminent writers' patriots, social workers and others who dedicated themselves for the betterment of the State and society, steps have been taken to put up memorials for them. During the Sixth Plan period, financial assistance has been extended to registered organisations to take up construction of memorials. To continue this effort during the Seventh Plan period a sum of Rs. 5.00 lakhs is proposed.

31-15. Under the reactivation of 1961 scheme of Government of India, as many as 71 indigent artists are continuing to get their assistance at the rate of Rs. 375 per month. During the current financial year names of 80 persons have been recommended to Government of India for giving pension to indigent artists. A sum of Rs. 5.00 lakhs is proposed during the Seventh Plan period.

31-16. With a view to promoting the cultural unity of the State, the Orissa Sahitya Academy will undertake various development schemes in the State. For this purpose it is proposed to provide an amount of Rs. 20.00 lakhs during the Seventh Plan.

31-17. During the Seventh Plan period, Orissa Sangeet Natak Academy will take up different programmes for development of dance, drama, music and dramatic literature, etc. For this a sum of Rs. 15.00 lakhs is proposed during Seventh Plan.

31-18. The Orissa Lalit Kala Academy will be given grants during the Seventh Plan for taking up books on painting, reproduction of art works, organisation of exhibition and competition, etc. A sum of Rs. 31.00 lakhs is proposed in Seventh Plan for this purpose.

31-19. Promotion of Art education in the State requires immediate attention. The following important institutions are imparting art education :

1. Art and Craft College, Khallikote
2. B. K Art & Craft College, Bhubaneswar
3. Vikram Dev Art School, Jeypore
4. Utkal Sangeet Mahavidyalaya, Bhubaneswar

These institutions are facing a lot of difficulties in providing teaching facilities accommodation etc. They require improvement to their main building and also completion of hostel building. For this purpose an outlay of Rs. 87.50 lakhs has been proposed.

31-20. In order to develop the standard of the State Museum, it is proposed to expand and open new galleries, conduct survey and collection of antiquities and specimens, establishment of a photography library, provide equipment and materials for the chemical laboratory, develop the library. For this purpose funds are to be provided in the Seventh Plan. Further there are 10 Branch Museums in the State. There are still places of interest in the remaining districts, where Branch Museums should be established. It is necessary to provide permanent accommodation for 7 Branch Museums located in different districts which have not been well organised so far. It is, therefore, proposed to provide funds for construction of permanent buildings for Branch Museums and to provide equipments for scientific display of exhibits. An outlay of Rs. 40.00 lakhs has been proposed for the purpose.

31-21. The Library of State Archives needs further expansion. Acquisition of rare publications is considered essential particularly for use of research scholars. It is also proposed to take up publication programme. A provision of Rs. 40.00 lakhs is proposed for the purpose during Seventh Plan.

31-22. The Orissa State Archaeology is functioning for exploration, excavation and survey of ancient sites of Archaeological and Historical importance and conservation of ancient monuments. Accordingly, exploration and survey of Chitrotpala valley and Daya valley in the district of Cuttack and Puri are in progress. It has been decided to continue to exploration work during the Seventh Plan. It is proposed to take up excavation work at Marguda valley in Seventh Plan. Besides this, there is a proposal for



conservation of historical and archaeological monuments. 146 temples and ancient sites have been declared as State protected. Conservation work in respect of 56 monuments have been completed. It is proposed to provide Rs. 40.00 lakhs in the Seventh Plan.

31.23. It is proposed to take up some new schemes during the Seventh Plan period. They include, District Cultural Centre, Large Theatre at Bhubaneswar, Sanskruti Vihar, Festival of Orissa, Promotion of Art and Culture in border areas, Promotion of Art and Culture (Preservation of Guru-Sishya Parampara), State Awards, Fellowship, Establishment of Artisan village, Construction of replica of Konark, the Project of South-East-Asia and Establishment of Urdu Academy.

31.24. The Department of Culture has a variety of field programmes for which at present there is no specific unit at the district level although various institutions under the Department of Culture are functioning without proper co-ordination at the district level. These institutions are the District and Subdivisional libraries. Memorial halls constructed and managed by the Government, branch museums and site museums and sculpture sheds. Besides, other field activities of the Department of Culture include conservation of monuments and their protection, review of activities of various voluntary cultural organisations, sanction of grant to them, preservation of various cultural traditions in the State in the field of performing and plastic arts and organisation of cultural programme, deputation of cultural groups to functions inside and outside the State, organisation of book fairs, grants to libraries, pensions and grants to indigent artists etc. During the Sixth Plan period these activities have expanded considerably. As many as 400 persons are being given pension under the State Government and Central Government schemes. This is also likely to increase to 1,000 during the course of the Seventh Five-Year Plan. Number of cultural organisations have increased substantially and their number is more than 5,000 at present. These are increasing day by day. After the bifurcation of the Directorate of Sports and Culture as two separate Directorates there is no supervising officers for the library scheme which was being looked after by the District Sports Organisers.

31.25. In order to supervise the above-mentioned programme effectively and to provide a central forum for the cultural activities it is proposed to start District Cultural Centres in each district. The concept of District Cultural Centres would be to house the District Library and the District Museums and in addition to have some sales counters for the sale of the publication of the Department of Culture, the State Museum, Archaeology and Archives and the three Academies. Besides, there will be a medium sized stage and an open yard to function as the auditorium which can be later made into a covered auditorium with the availability of higher resources in the subsequent years. It is presumed that the existing staff of the District Libraries and the Assistant Curators of the Branch/Site Museums will be integrated with the District Cultural Centres. The District Cultural Centres will be headed by an officer of Class II State Government service who will be called the District Cultural Organiser. He will be assisted by one Library Assistant and one Assistant Curator for the Museum and the Library-cum-Reading Room. In addition the District Cultural Centres will have one Steno-cum-Typist, one Caretaker-cum-Store Keeper who will look after the sales of publications and also the stage facilities apart from the house keeping activities of the District Cultural Centre. There will be an Assistant-cum-Accountant, two Peons and one Mali-cum-Chowkidar. This will provide the much needed focal point for preservation and propagation of our cultural heritage. It is proposed that the centres can be started in the rented building to start with and since this will be a common centre wherever the libraries and museums are held in separate hired buildings will be shifted and will be integrated in a common building. It is proposed to take up construction of two buildings of the District Cultural Centres at Puri and Ganjam in view of their great importance for Orissa Culture. A sum of Rs. 40.00 lakhs has been proposed for this scheme during the Seventh Plan period.

31-26. Bhubaneswar is fast developing into metropolitan city. The establishment of headquarters of NALCO at Bhubaneswar as well as rapid industrialisation around the city in the Chandaka nucleus industrial centre combined with the general development of the city as the capital of the State have increased the need for higher level of cultural infrastructure in a very big way. One of the essential ingredients of a proper cultural atmosphere is the availability of a proper auditorium commensurate with the size of the population of the city. It has been proposed to spend Rs. 6.00 lakhs during the Seventh Five-Year Plan.

31-27. Promotion of art and culture in border areas is very important in order to safe-guard the interest of Oriyas living there and also to instill confidence in them bringing out cultural integration. Therefore, it is proposed to organise cultural programme in areas like Parlakhemundi, Gunput, Koraput, Rourkela, etc. for focusing our culture and heritage before them and also the non-Oriyas living there. A sum of Rs. 20.00 lakhs is proposed to be spent during the Seventh Five-Year Plan.

31-28. A number of master artists in the State have grown old and since there is no formal system of Gharana in Orissa, their talents are likely to be lost to posterity unless steps are taken to provide apprentice training under these Gurus. This will cover the entire range of cultural activities like painting, performing arts, vocal and instrumental music and handicrafts. With each acknowledged Guru 3 or 4 apprentices could be attached for a period of 3 to 5 years for imbibing the traditional artistic excellence achieved by the Gurus in their own field. Suitable honorarium has to be paid to the Gurus stipend to the apprentices and expenses for documentation of work of the Gurus have also to be made. A sum of Rs. 5.00 lakhs is proposed to be spent during the Seventh Five Year Plan.

31-29. It is now universally recognised that presentation of awards is a definite incentive for achieving high level of excellence. There is no major State award in the field of culture at present. It is, therefore, felt that a system of State awards of sufficient higher value similar to the Jnyana Peeth Award needs to be introduced for the various fields of culture like literature, music, performing arts and fine arts. The award will be of the order of Rs. 1.00 lakh each. Hence a sum of Rs. 10.00 lakhs is proposed in the Seventh-Five Year Plan.

31-30. There are many aspects of Orissan art and culture which have got to be systematically studied and documented. It is not possible to complete this work entirely by the initiating of the Government with its multifarious activities. Therefore, it is proposed that every year two major fellowships of the value of Rs. 1.00 lakh each in the similar to Homi Bhabha and Jawaharlal Nehru fellowships may be awarded for taking up study of any particular aspects of Orissan art and culture. A sum of Rs. 2.50 lakhs is proposed in Seventh-Five Year Plan.

31-31. A committee of experts is actively working for finalising the conjuctural plan of the Konark temple as it was, when the entire temple was standing. Considering the constraint of resources a replica of the temple extending over height of 544' is proposed to be built. There is also a thinking that an artisan village will be established adjacent to this complex. It may even be necessary to start a college of traditional architecture for training Sthapatis in the same line as the institution in Tamil Nadu at Mahabalipuram. A sum of Rs. 13.00 lakhs is proposed to be spent during the Seventh Five Year Plan.

31-32. A project to find out the ancient relationship of Kalinga with South East Asian Countries and to formulate a concrete plan of action to determine the cultural inter-relation between Kalinga and South East Asian countries has been taken up. The project report has since been compiled by Dr. K. S. Behera who has indicated the total requirement of funds and organisational set up. It is also necessary to commit funds on a continuous basis for a period of four years of the project's life. A sum of Rs. 10.00 lakhs is proposed in the Seventh Plan period.

31-33. An Urdu Academy has already been established at Cuttack. Therefore, a sum of Rs. 2.00 lakhs has been proposed to be given as grant to this Academy at the initial stage to create necessary assets with the expenditure of Rs. 1.00 lakh and recurring grant of Rs. 1.00 lakh per annum. Therefore, an amount of Rs. 10.00 lakhs is proposed in the Seventh Plan for this purpose.

## M. I. L. and Library Services

### Development of Modern Indian Language

31-34. The Directorate of Culture has an Editorial Section primarily intended to edit the rare and valuable manuscripts available in the Orissa State Museum. Approximately, 35,000 valuable and rare manuscripts have been preserved in the State Museum. The selected manuscripts are edited and published by the Publication Wing of the Directorate. The major difficulties in achieving substantial progress is paucity of sufficient funds for the purpose. It is necessary to increase the pace of editing and publication of rare and valuable manuscripts during the Seventh Plan period. An outlay of Rs. 5.00 lakhs is proposed in the Seventh Plan period.

31-35. *State Library*—There is a State Library located at Bhubaneswar. The Library has 30,000 books and periodicals. The library is rendering satisfactory service to the public with provision of books and reading materials. There is a proposal to provide a binding workshop for the Library where binding and re-binding works can be done. During the Seventh plan period, it is proposed to provide valuable and rare books and periodicals to the State Library for the benefit of research scholars. An outlay of Rs. 5.00 lakhs has been proposed during the Seventh Plan period.

31-36 *District Library*—The Department has established 13 District Libraries at different district headquarters. Besides six ex-District Board Libraries of Ganjam District have been taken over by Government. Apart from that four Subdivisional Libraries have been set up at Bargarh in Sambalpur district, Nuapada in Kalahandi district, Rayagada in Koraput district and Rairangpur in Mayurbhanj district. In order to enrich the library by means of providing valuable books and periodicals and other materials, it is proposed to provide funds to the tune of Rs. 15 lakhs during Seventh Plan period.

31-37 *Grants to Raja Rammohun Roy Library Foundation*—In order to cater to the needs of the school going children and to keep the reading habits of the adult literate masses of rural areas, a good number of rural libraries have started functioning with private effort with the patronage of State Government and Raja Rammohun Roy Library Foundation. Under this scheme payment of annual contribution to the Foundation will be made for extending assistance to rural libraries. Financial assistance will be given to other rural libraries for their improvement. An outlay of Rs. 15.00 lakhs is provided in the Seventh Plan for the purpose.

31-38 *Building project for libraries*—The libraries at the district headquarters have been accommodated in hired buildings. Most of the buildings are not suitable for the purpose. It is very much essential to provide funds for construction of building for these libraries alongwith provision of funds for books and reading materials with equipment with scientific display. An outlay of Rs. 10.00 lakhs is provided during the Seventh Plan period for the purpose.

## CHAPTER -32

## TECHNICAL EDUCATION

32.1 In the proverbially poor State like Orissa a new area has begun in the Industrial Sector by adopting a dynamic Industrial Policy during the Sixth Plan. This, coupled with the emergence of huge central projects like NALCO and others have made the necessity of technical manpower manifold. So the expansion of Technical Education in the State, both in traditional and non traditional disciplines is no more a debatable issue. But the task is enormous and the expenditure involved is quite huge. Within the limited resources the ambitious programme is to be restricted to the mere necessities.

32.2 Before stepping into the proposals of Seventh Plan, it is perhaps essential to have a look at the performance during the Sixth Plan. An assessment was made by a task force regarding the availability of technical man power in the State and its deficiency. Accordingly, it was contemplated to enhance the intake capacity in Regional Engineering College, Rourkela and University College of Engineering, Burla, to establish a new College of Engineering at Talcher and to start Engineering Degree Courses in Orissa University of Agriculture and Technology at Bhubaneswar. In the diploma course, it was decided to introduce a new discipline (Textile Technology) and to establish a Polytechnic at Talcher. Despite severe financial strain on account of natural calamities in the State, during the Sixth Plan period, it has been possible to start two new Engineering Colleges. One at Talcher and other at O. U. A. T., Bhubaneswar with an intake capacity of 180 and 90 respectively. The intake capacity of the existing Colleges at Burla and Rourkela have been raised from 396 to 525. In Diploma education, an institute of Textile Technology at Choudwar and Polytechnic at Talcher were established during the Sixth Plan period. Intake capacity of the Engineering Schools at Jharsuguda, Cuttack and Berhampur were increased. Coaching class for A. M. I. E., has also been started.

32.3. Against the above the back drop and again with the limited resources, it has been considered expedient to consolidate and strengthen fully the existing Institutions before we plan for new ones. The incomplete work at Talcher and in, O.U.A.T. Bhubaneswar must be completed. The new disciplines of Textile Technology introduced at Choudwar must be nourished properly. With technology developing so fast, we have always to be in the run to keep pace with it. Our students must, therefore, be exposed to new and sophisticated machineries and their old and outdated equipments need immediate replacement. Some of the buildings have come to a dilapidated condition. Hostels have become jam-packed and over-crowded. The future builders of the nation should not be allowed to stay in such a condition and it required modernisation with all up-to-date amenities. Technocrats shun the teaching profession in view of attractive remuneration available in other lines and hence there is dearth of qualified teachers in many disciplines. Incentives must be provided to attract technocrats to the teaching profession. Quarters must be provided for them and where available, it should be repaired and renovated, if necessary.

32.4. With such a yoke of staggering spill over liability, there is perhaps little scope to think of new ventures. In spite of this, it is difficult to resist the need of generating more technical manpower in view of the phenomenal growth of industry both in the State and Central Sector. It is proposed to convert the Orissa School of Engineering at Cuttack to an Engineering College in view of infrastructure already available in the Engineering School. The Proposed conversion will involve shifting of the present Engineering School to Choudwar for which some provision have to be made. At the beginning stage, traditional disciplines like Civil Mechanical and Electricals are to be introduced in the College and in due course introduction of non-traditional disciplines will be thought of.

32.5. The working group, while discussing the proposal, proposed to introduce other diversified branches with much stress in Architectural Engineering. It was felt that because of limited employment opportunities, the intake capacity in such disciplines has to be kept small. It is proposed to introduce this discipline in the Engineering courses in O.U.A.T.

32.6. The requirement of technical manpower in the State has not yet been finally assessed and the exercise is still in progress. With a dynamic industrial policy, the industrial profile of the

State has altogether been changed and a number of medium and small scale industries have come into existence. So, it is evident that the requirement of technical man-power must have gone up. Accordingly, the in-take capacity both in the Degree and Diploma course have to be increased. It is proposed to increase the in-take capacity in the Burla Engineering College from 225 to 300. In Diploma course, in the three Engineering Schools at Cuttack, Berhampur and Jharsuguda, it is proposed to increase the in-take capacity in Electrical and Mechanical Engineering by 30 nos. in each discipline. In the U. G. I. E., Rourkela, it is proposed to increase the in-take capacity from 15 to 30 in Chemical Engineering. It is also proposed to increase the in-take capacity in the said institution in metallurgical engineering from 15 to 30.

32.7. The quantum leap in the industrial sphere during the Sixth Plan has generated ample scope for education in Business Management. At present there is no institution worth the name in the State to impart education in this discipline and as such it is high time to consider to establish an institution for this purpose. This has to be done in accordance with the standard prescribed by India Institute of Management and the location will be at Bhubaneswar.

32.8. There are two polytechnics specially meant for women. One at Bhubaneswar and the other at Rourkela. It is proposed to introduce new discipline of Pharmacy courses, Electronics and Telecommunication in women polytechnics, at Bhubaneswar.

32.9. Besides the above, introduction of Post-Diploma Course in computer application at Berhampur Engineering School, Berhampur is also proposed. In the Rayagada Polytechnic, introduction of Civil Engineering is also considered advisable.

32.10. Widening the scope of technical education in the above mentioned line, has its resultant burden on the headquarter organisation which have to be strengthened. Besides, incentives as mentioned earlier to the technocrats in order to attract them to the teaching profession have to be provided. Some other continuing scheme like Book Bank, stipend etc. are also to be provided. Schemewise details are given below.

| Engineering Schools

Sl. No.	Name of the Institution	Programme of work	Proposed out lay for Seventh Plan (Rs. in lakhs)
(1)	(2)	(3)	(4)
1	Orissa School of Engineering, Cuttack.	Shifting of O.S.E., Cuttack to Choudwar. Enhancement of in-take capacity in Electrical and Mechanical Engineering from 30 to 60 in each branches.	242.48
2	Berhampur Engineering School, Berhampur.	Enhancement of in-take capacity in Electrical and Mechanical Engineering from 30 to 60 in each branch and introduction of Post Diploma course in Computer application.	30.00
3	Jharsuguda Engineering School, Jharsuguda.	Enhancement of in-take capacity in Electrical and Mechanical Engineering from 30 to 60 in each branch.	14.50
4	Women's Polytechnic, Bhubaneswar.	Introduction of new courses such as Diploma in Pharmacy, Electronics and Telecommunication with 20 in-take each and completion of incomplete work such as hostel, staff quarters and procurement of equipments.	90.38
5	Utkalmani Gopabandhu Institute of Engineering, Rourkela.	Increase of in-take capacities from 15 to 30 each in Chemical and Metallurgy branch.	5.94

(1)	(2)	(3)	(4)
6.	S. K. D. A. V. Polytechnic, Rourkela.	The institution was functioning in a rented houses. Own buildings are under construction. Provision has been made to complete the work.	65.10
7.	Orissa School of Mining Engineering, Keonjhar.	Completion of incomplete work for introduction of Civil Engineering during 6th Plan.	17.98
8.	Polytechnic, Rayagada	Completion of incomplete work and introduction of new branch i. e. Civil Engineering with in-take of 20.	70.20
9.	Institute of Textile Technology, Chowdwar.	Procurement of equipments and recurring expenditure.	50.65
10.	Modern Polytechnic, Talcher.	60 per cent of the recurring expenditure ..	31.54
Total ..			618.77

### Engineering Colleges

#### Grant to University College of Engineering, Burla

32.11 The in-take capacity of the College was enhanced from 180 to 225 during the Sixth-Five Year Plan. It is also proposed to increase the in take capacity during the Seventh Plan to 300. Therefore, buildings, hostels, staff quarters including new staff are required. It has been estimated that an amount of Rs. 250.00 lakhs will be necessary for the purpose i. e. Rs. 190.00 lakhs non-recurring for buildings etc. and Rs. 60.00 lakhs recurring for stall etc.

#### Grant to Orissa University of Agriculture and Technology, Bhubaneswar

32.12. Degree courses in Civil, Electrical and Mechanical have been introduced in the Orissa University of Agriculture and Technology during the Sixth Plan period. As per the Expert Committee report, Rs. 163.16 lakhs is required for building and equipments. Out of which Government have provided Rs. 35.60 lakhs during Sixth Five-year Plan and so the balance amount of Rs. 127.56 lakhs is the requirement during the Seventh Plan. It has also been proposed that a new discipline i. e. Architectural Engineering is proposed to be introduced in the said institute during the Seventh Plan. So, the requirement will rise upto Rs. 163.90 lakhs inclusive of Rs. 44.40 lakhs of recurring expenses.

#### Grants to Orissa College of Engineering, Sarang, Talcher

32.13 as per the Expert Committee report, Rs. 608.01 lakhs is required for buildings and equipments out of which Rs. 288.00 lakhs have been provided during the Sixth Five Year Plan leaving a balance spill over requirement of Rs. 320.02 lakhs during the Seventh Five year Plan. Similarly, as per the report of the Expert Committee, an amount Rs. 147.90 lakhs is required for recurring expenditure. The non-recurring expenditure, after proper assessment has been reduced to Rs. 316.99 lakhs. Thus the total requirement comes to Rs. 464.94 lakhs

### Conversion of Orissa School of Engineering, Cuttack to an Engineering College

32.14. It is proposed to convert the Engineering School at Cuttack to an Engineering College. In this context, a comparative statement of number of colleges and in-take capacities of the neighbouring states is pertinent which is given below--

Serial No.	Name of the State	Number of Colleges	In-take capacities
(1)	(2)	(3)	(4)
1.	West Bengal	15	1920
2.	Madhya Pradesh	11	1861
3.	Andhra Pradesh	31	5407
4.	Bihar	7	1555
5.	Orissa	4	795

32.15. The above statement is sufficient to conclude that there is need to increase the number of Engineering Colleges in Orissa in order to remove regional imbalance. As construction of a new Engineering College is an expensive venture which the State with its limited resources can't afford to, it is, perhaps expedient to convert the Orissa School of Engineering at Cuttack to an Engineering College because the cost will be reduced to a considerable extent on account of the availability of infrastructure. It has been assessed that an amount of Rs. 177.34 lakhs will be required i. e. Rs. 20.00 lakhs for buildings, Rs. 80.00 lakhs towards non-recurring and Rs. 77.34 lakhs towards recurring expenses.

### Grants to Regional Engineering College, Rourkela

32.16. The in-take capacity of Regional Engineering College, Rourkela has been enhanced from 216 to 300 during the Sixth Five Year Plan. As per the terms and conditions, 50 per cent of the recurring expenditure are to be borne by the State Government. Similarly for developmental work, it has been assessed that Rs. 47.50 lakhs will be required. The total requirement will be of the order of Rs. 62.55 lakhs for the Seventh Plan period.

### Establishment of Institute of Management at Bhubaneswar

32.17. A number of medium and small scale industries have come up which need degree holders in Business Management. At present, there is no such institution in the State and our students have to seek admission in the institution of other states where the scope is extremely limited. In order to provide opportunities to the students interested in this discipline, it is proposed to establish an institute of management at Bhubaneswar. An amount of Rs. 200.00 lakhs is required for this purpose.

### Headquarter Organisation

32.18. As stated earlier, diversification and creation of new disciplines along with widening scope of technical education will require strengthening of headquarter organisation. The technical wing, which was a part of the Director of Industries, was segregated and emerged as a full fledged Directorate during the year, 1979. It has no building of its own. Its staff have no separate quarters. More supervisory staff will also be required for effective implementation of the programme mentioned above. It is therefore proposed to keep an amount of Rs. 47.50 lakhs for strengthening the organisation.

### **Book Bank**

32-19. The curriculum of the Polytechnics has been reorganised befitting the present need. The financial standard of the students of Polytechnic of the State is below average and hence they are unable to purchase technical books which are usually costly. So, in order to facilitate the students to avail the opportunity of reading different technical books, the scheme of Book Bank was introduced duly approved by the State Government in different Polytechnics. In order to make the Book Bank full-fledged a sum of Rs. 5.00 lakhs has been proposed to be provided under the Seventh Five-Year Plan.

### **Stipend to Polytechnic Teachers to undergo Training in Technical Teachers Training Institute**

32-20. The Polytechnic teachers are regularly sent for short courses and long course Training to Technical Teachers Training Institute, so as to refresh their technical skill with the up to date developments in the field of technology. For short course training no stipend is provided. However, for long course training stipend is provided to the teacher-trainees. It is proposed to keep Rs. 1.00 lakh to meet the expenditure towards payment of stipend to Polytechnic teacher.

### **Stipend to students reading outside the State**

32-21. Students from Orissa are being sent to undergo Degree and Diploma Course in Engineering outside the State for which Rs. 5.00 lakhs is required for payment of stipend during the Seventh Five-Year Plan.

### **Incentives**

32-22. All India Council of Technical Education have recommended many times in the past to implement the revised scale of pay for Polytechnic teachers. The recommendation of the All India Council of Technical Education could not be implemented due to various reasons. At present, the Lecturers and Senior Lecturers are given pay scales at par with Assistant Engineers and Executive Engineers. Qualified people are not attracted to the teaching profession and large number of teaching posts are lying vacant. It is under consideration of the Government to allow 20 per cent teaching allowance as special pay to the teaching staff of Polytechnics during the Seventh Five-Year Plan. Provision for quarters to the teaching staff will also serve as an incentive. The total amount required for these purposes have been estimated to be Rs. 44.00 lakhs.

### **Interaction between Polytechnics, Engineering Colleges and Industries**

32-23. The All India Council of Technical Education and its Expert Committee, time and again, have recommended for interaction between Technical Institutions and Industries. The idea is to invite Senior Faculty Members of the Engineering Colleges and knowledgeable Technical officials from Industry to the Polytechnics to attend seminars and deliver guest lecturers. Similarly, Polytechnic teachers should also be given opportunity to visit various field establishments to gather practical experience. Due to lack of funds guest Lecturers have not been arranged in the Diploma Institutions in the past. It is necessary to have link between Degree Institutions, Diploma Institutions, Industries and other Technical Institutions by organising Lectures and Seminars etc. To meet the normal expenditure towards T. A., D. A. and remuneration it is proposed to provide a sum of Rs. 5.00 lakhs during the Seventh Five Year Plan for 10 Diploma Institutions in the State.

32-24. Thus a total outlay of Rs. 20,50.00 lakhs has been calculated to be the minimum requirement during the Seventh Plan period for Technical Education, of which Rs. 3,20.00 lakhs has been proposed for the year 1985-86.



## CHAPTER 33

## SPORTS AND YOUTH SERVICES

33.1. Recently, Government of India have initiated a 16-point National Sports Policy to provide momentum to sports in the country. As a part of this policy, it is proposed to set apart a portion of the national income for development of sports. The eventual figure would be 1% of the country's gross national product. Keeping the national policy guidelines in view, the State Government have already drawn up a State Sports Policy. In this policy, emphasis is sought to be laid on providing minimum facilities, like playgrounds, indoor halls, swimming pools, district stadia, establishment of sports schools and sports hostels, rural sports centre, organisation of coaching facilities, incentive and awards to the talented sportsmen, etc.

33.2. Besides the above, steps have already been taken to build up necessary sports infrastructure which is a pre-requisite for building up of good athletes and sportsman. Creation of sports infrastructure stands on an entirely different footing in the sense that such facilities once created are likely to have lasting impact in bringing about all round development of the youth and young of the State. Keeping this long term objective in view, Government have accorded very high priority to build up some of the essential sports complexes in the State.

33.3. The working on the Seventh Plan, set up by the State Government recommended an outlay of Rs. 28.04 crores for development of Sports in the State which included a requirement of Rs 12.24 crores for spill over schemes, While the major construction activities are proposed to be financed by supplementing funds out of the earnings of State Lottery, the State Plan outlay for the Seventh Plan has been suggested at Rs. 7.60 crores with an allocation of Rs. 1.50 crores for the year 1985-86.

33.4. Spill-over projects included in the proposals are construction of Kalinga Stadium at Bhubaneswar (Rs. 10.00 crores) and Indoor Stadium at Cuttack (Rs. 1 crore), construction of a Swimming Pool and construction of a State Aquatic Centre (Rs. 1.20 crores), construction of a Gymnasium at State Capital (Rs. 1.50 crores) and establishment of a Public School in the model of Raj (Rs. 2.00 crores) at Bhubaneswar. These are projects mainly intended for development of sports infrastructure in the State. These projects can be financed out of the earnings of the State lotteries. Another project has also been taken on hand, namely, the modernisation and expansion of the Barabati Stadium complex. The over-all estimate of this project is Rs. 1.89 crores on which only Rs. 40.00 lakhs have been provided in the budget for the year 1984-85. Balance funds will, therefore, have to be provided during the Seventh Plan period. Besides expansion of existing schemes will account for Rs. 330 lakhs.

33.5. Excluding the projects mentioned above, an outlay of Rs. 7.60 crores during the Seventh Plan period @ Rs. 1.50 crores per year is proposed for the following schemes in order of priority :

	Rs. in lakhs
1. Construction of District Stadia	.. 90
2. Sports Schools and Hostels (including building projects)	.. 1,44
3. Rural Sports Competition	.. 40
4. Grants to Rural Sports Organisations	.. 5
5. Women's Sports Festival	.. 10
6. Rural Sports Centres	.. 14
7. Development of play fields	.. 25
8. Scholarships to students	.. 20
9. Grants for preparatory Coaching Camps	.. 22

	(Rs. in lakhs)
10. Grants to District and State Level Associations	25
11. Grants to Orissa Council of Sports	15
12. Incentives and awards	10
13. Distribution of sports goods and equipments	5
14. Directorate of Sports & Youth Services	250
15. Creation of centres of excellence	5
16. Deputation of candidates to N. I. S.	5
17. Administrative building	20
18. Purchase of equipments	15
19. Improvement of the existing Swimming Pools	22
20. Establishment of Notional Institute with Sports complex	18
Total	760

33.6. Brief account of some of the important schemes is given below :—

#### Construction of District Stadia

33.7. It has been decided that Rs. 1.00 lakh would be given to the Athletic Associations of each district which have no stadium. Consistent with this decision of the Government construction of stadium in different district headquarters as well as at other important growth centres is being financed. 11 district projects have so far been financed. Most of these stadia are in the initial stages of construction and will require substantial financial assistance from Government for their completion. State Government are also availing of central assistance for this purpose as admissible under the Government of India's scheme. In the Seventh Plan, therefore, it is proposed to make an allocation of Rs. 100 lakhs @ Rs. 20.00 lakhs per year.

#### Sports Schools and Sports Hostels

33.8. Establishment of Sports Schools and Sports Hostels is one of the most important programmes of the Department of Sports. During 1984-85, 14 Sports Schools and one Sports Hostel have been established. Under this programme 25 to 30 boys are admitted in each Sports School and hostel at Class VIII level with provisions for continuance up to Class X. Selections of the boys for admission to these schools and hostels are made on the basis of their proficiency in selected games and sports. In sports schools, the boys get a stipend of Rs. 2 per day towards supplementary diet in addition to sports garments, kits, etc. This is over and above the normal scholarships that S. C. and S. T. boys are entitled to from the Government. Proposals to grant scholarships at the same rate to the non-S. C. and S. T. boys whose parents are not income-tax assesses are under consideration of Government. In sports hostels, the selected boys get a monthly stipend of Rs. 200, besides free lodging facilities in the hostels. The schemes also provide for development of playgrounds and conduct of inter-school competitions. The idea is to catch the talented athletes and sportsmen from a very young age. State's performance in the field of sports and games in the coming five years will largely depend on successful implementation of this programme. At present, we have only one sports school in each district, except in Mayurbhanj, where there are two sports schools. It is proposed to extend this programme and adopt at least one school in each subdivision of the State during the Seventh Plan. But considering the limited allocation of funds, the programme has been suitably pruned

and now it is proposed to cover only half of the sub-divisions during next five years. The over-all requirement of funds at present rates including construction of hostel building, staff quarters for the Coaches, Superintendents, etc., is Rs. 144 lakhs.

#### **Rural sports Competitions**

33-9. In the national sports policy as well as in the sports policy being finalised by the State Government, emphasis has been laid for the development of sports in the rural areas mainly with a view to spotting and nurturing talent. This scheme is sponsored by the National Institute of Sports, Patiala. Government of India meet a part of the expenses in organising block and district level tournaments and the rest of the expenses are met by the State Government. During the Seventh plan period, it is proposed to expand this programme in the districts, subdivisions and block in order to involve the students and the youths in the rural areas. It is, therefore, proposed to make a provision of Rs. 40.00 lakhs for this purpose in the Seventh Plan.

#### **Women's Sports Festival**

33-10. This scheme is also sponsored by the National Institute of Sports, Patiala. They conduct the national level tournaments every year. At present, the State Government is providing Rs. 1.00 lakh per year for this purpose for conduct of block and district level competitions and also for participation at the national level. During the Seventh Plan, it is proposed to make a provision of Rs. 10.00 lakhs at the rate of Rs. 2.00 lakhs per year. The idea is to encourage and popularise sports and games among the women.

#### **Rural Sports Centres**

33-11 This is a centrally sponsored scheme and expenses are shared by the Government of India and the State Government on 50:50 basis. Under this scheme, essential sports equipments worth Rs. 600 in the first year and Rs. 300 from the second year onwards are supplied to the selected centres in the rural areas to encourage games and sports among the students and rural youths. The Physical Education Teachers attached to the selected centres get a remuneration of Rs. 50 per month for organising games and sports activities after the school hours. So far, 261 schools have been identified for the purpose and declared as Rural Sports Centres. It is programmed to cover all the 314 blocks during the Seventh Plan period. At present, Rs. 1.65 lakhs is being provided annually in the State plan for this programme. During the Seventh Plan period it is proposed to make a provision of Rs. 14.00 lakhs.

#### **Grant of Scholarships to Sports Students**

33-12. At present 200 scholarships at the rate of Rs. 30 per month for the school students and 200 scholarships at the rate of Rs. 50 per month for the College students are being sanctioned. Proposals have been drawn up to enhance the rate as well as the number of scholarships for the talented sports students in the schools and colleges of the State during the Seventh Plan period. A provision of Rs. 20.00 lakhs is therefore, proposed to be made in the Seventh Plan.

#### **Grants to district and State level associations**

33-13. District level associations are affiliated to the State level sports and games associations and they in turn are affiliated to All India Federations, and Indian Olympic Associations. Under the existing organisational pattern; these affiliated bodies are only authorised to sponsor teams from the State for participation at the National level tournaments/Championships. The State Government are, therefore extending financial assistance to State and district level associations in organising sports and games in the State. These associations conduct district and State level tournaments and sponsor teams for national level competitions. Before participation in the national level tournaments it is also necessary to have intensive coaching for a period ranging from two

weeks to two months depending on the nature of the game. During the Seventh Plan, it is proposed to make two separate provisions, one for preparatory coaching and another for organisation of regular tournaments inside the State for Rs. 22.00 lakhs and Rs. 25.00 lakhs, respectively.

#### **Grants to Orissa Council of Sports**

33.14. Orissa Council of Sports is an advisory body to Government on matters of sports and games. This body is financed by the Government. 16 acres of land in Cuttack in the Satyabrata Stadium grounds is presently being utilised by the Orissa Council of Sports for organising games and sports. It has already been decided that in future, Sports Council will consider all applications for grants and also for coaching programmes. The regional Coaching Centres, sponsored by the National Institute of Sports, Patiala are also attached to the Orissa Council of Sports. At present, the Council has very nominal staff consisting of two clerical hands and four class IV staff besides a part-time Secretary who is also the Deputy Secretary-cum-Joint Director, Sports. It is proposed to have a whole-time officer in Class II in the Sports Council to look into the day to day matters and also to supervise the coaching programmes. Indoor Stadium complex is coming up within the Satyabrata Stadium grounds and in course of time, it will develop into an important sports centre in the State. Sports hostel at Cuttack is also located here and the boys of the sports hostel are also utilising the Satyabrata Stadium grounds. It is, therefore proposed to make a provision of Rs. 15.00 lakhs during the Seventh Plan period as grants to Orissa Council of Sports for organising coaching and rural sports, construction of the first floor building of the Council, development and maintenance of the Satyabrata Stadium grounds, purchase of equipments, etc.

#### **Incentives and Awards**

33.15. The purpose of the scheme is to provide financial assistance and other facilities to individual sportsmen who have shown extraordinary brilliance in a particular field of sports. The idea is to ensure that one does not suffer on account of lack of proper facilities, financial or otherwise. It is also proposed to institute a State award on the pattern of Arjun Award to be known as 'Utkal Award'. A provision of Rs. 10.00 lakhs is, therefore, proposed in the Seventh Plan.

#### **Creation of centres of excellence**

33.16. Over the years, different parts of the State have taken to different types of sports and games and have produced sportsmen of repute. Under the scheme, centres of excellence will be established in different parts of the State depending on the popularity and standard of games and sports in the region. These centres will be provided with up to date and modern equipments as well as qualified coaches for regular training and organisation of competitions. A provision of Rs. 5.00 lakhs is proposed to be made for this purpose.

#### **Administrative building**

33.17. Site for construction of administrative building of the Directorate has already been selected and the work started with a provision of Rs. 11.00 lakhs in the Annual Plan 1984-85. The latest cost of the building is assumed as Rs. 31.00 lakhs. For completion of this building, it is proposed to make a provision of Rs. 20.00 lakhs in the Seventh Plan.

#### **Directorate of Sports and Youth Services**

33.18. State Government have created an independent Directorate of Sports in May, 1984. The Directorate will deal with all matters relating not only to the sports and games but is likely to deal with physical education. The over-all expenditure of the full fledged Directorate during the Seventh Plan period is estimated to be Rs. 250 lakhs. The Directorate will have three wings, namely, Sports and Games, Physical Education and Training.

33.19. In the Annual Plan for 1985-86, proposals have been made for creation of certain essential posts and supply of the most needed office equipments. In the Directorate, it is proposed to create one post of Administrative-cum-Accounts Officer (to be drawn either from O. A. S.-II or O. P. S.-II) and also a post of Deputy Director, Sports. In addition, it is proposed to create two posts of District Sports Organiser, one for Bhubaneswar Athletic District and another leave reserve post. At present there are only 13 District Sports Organisers.

33.20. At present, there are 42 sanctioned posts of Coaches in the scale of Rs. 500—930. It is proposed to have a graded cadre of Coaches during the next 5 years headed by a senior coach in the scale of Rs. 1,050—1,300. Besides, there will be Grade I Coaches in the scale of Rs. 850—1,450 and Grade II Coaches in the scale of Rs. 525—1,300. To start with, it is proposed to upgrade 14 existing posts to Class-II rank and create 6 new posts in Junior Class-I during 1985-86 for the office of the Director of Sports. It is proposed also to create two posts of Section Officers, two Typists, One Senior Diarist, one Daftary, one Treasury Sarkar, two Drivers, one Audit Superintendent and four Auditors. It is absolutely necessary to purchase one new covered Diesel Jeep and one electric stencil cutter and four type machines for the new Directorate.

33.21. During 1985-86, it is also proposed to construct 14 staff quarters for the Coaches of the Sports Schools and six staff quarters at the sports complex at Cuttack and six for the Coaches and the District Sports Organisers stationed at Bhubaneswar. Similarly, provision has been made for construction of the second floor building of the sports hostel at Cuttack and construction of the sports hostel at Rourkela. In the districts it is proposed to construct quarters for the District Sports Organisers and provide minimum office accommodation to them. It is also proposed to take up construction of dormitory for accommodation of the students of the sports schools particularly in the tribal districts. The over-all requirement of funds for these building projects is Rs. 45.00 lakhs.

33.22. Besides the above, a provision of Rs. 18.00 lakhs is also made for the development of sports complex at Bhubaneswar including Indoor Badminton Court, practice play-fields, gymnasium, etc.

## CHAPTER 34

## HEALTH AND FAMILY WELFARE

34.1. The fundamental objective of the State as well as National Health Policy is to provide universal primary health care and medical services consisting of public health, preventive, promotive and curative aspects to all sections of the society with special attention to needs of those living below the poverty line, hilly, tribal and remote areas of the State.

34.2. During the Sixth Five-Year Plan attempts were made to provide nutrition for vulnerable groups; children, pregnant women including family planning, prevention and control of communicable diseases and essential medical care for all the people.

34.3. The National Health Policy "Health for all by 2000 A. D." envisages (i) Universal provision of promotive, preventive basic curative services and Public Health aspects are to be secured through well organised programmes; (ii) special plans to provide health care including family welfare to the vulnerable group i.e., children and pregnant women; (iii) prevention and control of endemic communicable and non-communicable diseases; (iv) activities directed towards the promotion of food supply and the improvement of nutritional status; and (v) provision of protected water supply and sanitation. Keeping these objectives in view, Seventh Five-Year Plan proposals have been formulated.

34.4. Orissa is the least urbanised state in the country. More than 90 per cent of population live in villages situated in remote areas where basic sanitation and hygienic protected water supply are lagging. Natural calamities like flood, drought and cyclone bring the occurrence of water borne diseases causing fatal epidemic. Communicable diseases like cholera, gastro-enteritis and other water borne diseases, incidence of which is higher in coastal districts like Balasore, Cuttack, Ganjam and Puri, need the immediate preventive Health Care.

34.5. The available health services in the State are not adequate to meet the total health requirement of the People. In the context of the above facts investment resources in the health sector on a scale considerably larger than what was proposed in the earlier plans is inescapable if the objective is to achieve significant reduction in the present disparities in regard to provision medical and health facilities between the urban and rural areas and to reduce the major communicable and non-communicable diseases.

34.6. The likely expenditure during the Sixth Plan period would be Rs. 3,495.18 lakhs. But the proposed Seventh Plan outlay is Rs. 12,399.00 lakhs which is more than three and half times of the Sixth Plan expenditure. This is because of the fact that Health programmes have so far been founded at a low level in the plan. During previous plan periods implementation of various health programmes has not even received 2 per cent of the State Plan outlay. There is pressing need from various sectors for extension of health facilities and unless the plan outlay is increased to the suggested level in the Seventh Plan the target given in "Health for all by 2000 A. D." cannot be achieved.

**Minimum needs Programme**

34.7. There are 314 Primary Health Centres (P. H. Cs) and 20 additional P. H. Cs in the State. Additional P. H. Cs were established during the Sixth Plan period. According to the present norms, one Additional P. H. C. for more than one lakh population in non-tribal areas and one for 50,000 population in tribal area has to be provided. During the Seventh Five Year Plan, it is proposed to establish 100 additional P. H. Cs with a cost of Rs. 925.00 lakhs including Rs. 600.00 lakhs for building components. The yearly requirement in the State Plan will be Rs. 263.00 lakhs including Rs. 240.00 lakhs for buildings.

34.8. As per National health policy, a sub-centre is to serve at least a population of 5,000. According to this policy, the State's requirement is 3,540 sub-centres. During the Fifth Plan period 2,038 sub-centres have been established and during the Sixth Plan 2,089 sub-centres have been established bringing the total number of sub-centres to 4,127. Therefore, according to the approved programme 1,413 sub-centres will be established during the Seventh Plan period. It is proposed to construct buildings for 300 sub-centres at the rate of Rs. 1.00 lakhs each. The requirement of funds for the purpose comes to Rs. 300.00 lakhs.

34.9. In project districts served by the U. K. Aid Project certain infrastructure has been provided for the upgraded P. H. Cs. But in eight other non-project districts such infrastructure has not been built up. For 25 upgraded P. H. Cs, to be provided with such facilities during the Seventh Plan period the requirement will be Rs. 2.50 crores at the rate of Rs. 10.00 lakhs each.

#### Hospitals and Dispensaries

34.10. National Highways and important highways are passing through different corners of the State. Due to rush of traffic there is frequent accidents. It takes a considerable time to take the injured person to hospitalise him. Only Headquarters Hospitals of the State have been provided with Orthopaedic Specialists with certain beds. In order to give immediate medical relief to the injured persons, it has been suggested to establish 19 accident units in the important Hospitals, situated near by the National Highways and industrial areas. They include four District Headquarters Hospitals at Balasore, Baripada, Dhenkanal and Keonjhar, 11 Subdivisional Headquarters Hospitals, three P. H. Cs and one Hospital at Soro. It is proposed to provide one Orthopaedic specialist, two staff nurse, one radiographer and one attendant to each of these hospitals. As the bed strength is limited in the three P. H. Cs, additional bed will be provided for the purpose.

34.11. The District Headquarters Hospitals and some important Subdivisional Hospitals have been provided with one Ambulance van. It is essential that there should be two vans in District Headquarters Hospitals to cater to the need of the patients. So one more ambulance van along with Driver, Cleaner, Stretcher bearer is to be provided to District Headquarters Hospitals. The Seventh Plan requirement is Rs. 66.32 lakhs including building component of Rs. 4.50 lakhs. The requirement during the year 1985-86 is Rs. 2.50 lakhs only.

34.12. Establishment of Intensive Coronary Care unit in all the 13 District Headquarters Hospitals has become very much essential. This unit with two beds each will be accommodated under the proposed expansion of Headquarters Hospitals, during the Seventh Plan period. For management of the unit a post of Cardiologist, Additional Medical Officer, Staff Nurse ancillary staff and necessary equipments are to be provided with a cost of Rs. 76.38 lakhs. The requirement for the year 1985-86 is Rs. 13.20 lakhs.

34.13. In all the District Headquarters Hospitals, except Cuttack where Medical College exists, the post of Dentist is available. To make the unit full fledged, provision has been suggested in the Seventh Plan for creation of the post of Dental Technician at Baripada and Capital Hospitals only, since in all other places Technician posts are available. With the provision of these two Technicians, all the District Hospitals will provide full dental service. The provision for this purpose is Rs. 17.53 lakhs.

34.14. For strengthening the Nursing Supervisory cadre in different hospitals a sum of Rs. 590.00 lakhs is necessary during the Seventh Plan period.

34.15. During the Sixth Plan Rs. 50.00 lakhs has been provided for Capital Hospitals for buildings and equipments. Because of its importance Capital Hospital requires further improvement. For this, a sum of Rs. 450.00 lakhs is provided in the Seventh Plan i.e., Rs. 375.00 lakhs for buildings and Rs. 75 lakhs for equipment, additional beds, etc.

34-16. At present, Specialists in all the District Headquarters Hospitals and Subdivisional Hospitals have been provided in important disciplines. But there is complete dearth of residential accommodation for them and also for other staff. No buildings were constructed for them, as the posts were subsequent additions. It is proposed to provide residential accommodation by construction of 612 number of staff quarters (both Gazetted and Non-Gazetted). The requirement of funds is Rs. 517.20 lakhs.

34-17. The existing District Headquarters Hospitals buildings were constructed much before the Sixth Plan period. In the meantime, Specialist services have been inducted therein. The number of both indoor and outdoor patients have increased manifold. During the Seventh Plan period, the bed strength of 11 out of 13 District Headquarter Hospitals (except Cuttack and Berhampur) requires to be increased to 200. To fill up this gap, 865 beds are necessary. For this a sum of Rs. 439.70 lakhs including Capital Outlay of Rs. 284.70 lakhs which also includes accommodation for specialist clinics have been provided.

34-18. Out of 43 Sub divisional Hospitals in the State, 14 are required to be 100-bedded and the rest 29 are 50-bedded. To achieve this norm 1,286 beds will be required. The requirement of funds for these beds comes to Rs. 912.33 lakhs including Capital Outlay of Rs. 593.65 lakhs which also includes accommodation for Specialists.

#### Medical Education

34-19. Greater importance has been attached to improve the quality of Medical education and rural orientation. Provision have been suggested to create some posts according to the recommendation of the I. M. C. and purchase of some sophisticated equipments for various Departments during the Seventh Plan period. The new schemes proposed during the Seventh Plan include mainly construction of buildings of the different Departments. Some of the old buildings of the S. C. B. Medical College, Cuttack have been declared unsafe by the P. W. D. authority. Besides opening of different sections and sub-sections both in clinical and non-clinical Departments, have necessitated construction of new buildings.

34-20. Under Medical Education which includes cancer institute a bigger provision is necessary. Every Medical College clamours for funds especially for purchase of sophisticated instruments because medical science is progressing rapidly and we are not able to avail of advanced facilities and techniques even in the Medical Colleges. For this, a sum of Rs. 350 lakhs has been provided. A number of building deficiencies exist in all the Colleges and more particularly at Cuttack where many of the buildings have outlived their life and are now a source of danger. Within the cramped confines of the College campus some multistoried construction is unavoidable. Similar is the case with the Cancer Institute where Government of India is now disinclined to give equipments since we have not been able to house certain equipments already received in proper building.

34-21. It has been suggested to take up one Centre of medical excellence similar to the Chandigarh Post - Graduate Institute. This is a long standing aspiration of the people of Orissa. Such an Institute could be established at Bhubaneswar. A properly equipped Post-Graduate Institute would be able to give all the Specialised treatment and modern facilities for our people who are spending lakhs of rupees every year on journey to Vellore, Chandigarh, Delhi and other places. For this, a sum of Rs. 15.00 crores has been provided. The establishment of such an institute is a matter of necessity to the people and justifiable pride for the Government.

34-22. The Dental College which has started functioning recently has no hostel building. Provision has been made for Rs. 85.00 lakhs including Rs. 25.00 lakhs for hostel building.

34-23. Libraries of the three Medical Colleges are required to be expanded and construction of Central Store in three Medical Colleges has become most essential. Besides that construction of additional Nursing Home, F. M. T. Block, staff quarters, animal house and 'X' Ray Department



are to be undertaken during the plan period. Similarly, the only Government managed Institute of Paediatrics at Cuttack is running shortage of building space. A total provision of Rs. 1,176.20 lakhs has been proposed for buildings of all types.

34.24. The existing system of water supply in the Institute of Paediatrics is insufficient. In order to provide adequate water supply, a separate tubewell is necessary. A sum of Rs. 5.00 lakhs has been provided for the purpose.

#### Research

34.25. The Research activities in the Medical Colleges are very much desirable. The development of such activities are not satisfactory in our Medical Colleges due to paucity of funds. For this, the laboratory services, bio-engineering equipments and their maintenance, etc., are absolutely necessary. It is desirable to develop the research facilities in the three Medical Colleges of the State. Funds to the extent of Rs. 30.00 lakhs for the Seventh Plan period, which includes Rs. 15.00 lakhs for 1985-86 have been provided for three Medical Colleges.

#### Training Programme

34.26. Following training programmes are undertaken with the annual in-take capacity as detailed below in the three Medical Colleges of the State :

1. Laboratory Technicians	..	120
2. Radiographers	..	30
3. Dental Hygienist-cum-Chair side Dental Assistant.		10
4. Paramedicalists	..	64

There is continuous need for para medical personnel. In order to provide adequate para medical staff to the Medical Institutions, the above training programmes are required to be continued since new health services are proposed for implementation during the Seventh Five Year Plan period (1985—90). Besides the above, it is also proposed to open two more training centres for Pharmacists at V. S. S. Medical College, Burla and M. K. C. G. Medical College, Berhampur during the Seventh Plan period having annual in-take capacity of 30 each. The total provision as suggested under 'Training Programme' for the Seventh Plan period is Rs. 16.00 lakhs and for Annual Plan 1985-86 is Rs. 3.83 lakhs.

#### Grants to R. C. C. R. T. S., Cuttack

34.27. Regional Centre for Cancer Research Treatment Society is now functioning in a very old building having only 100 indoor beds. This was originally a part of the S. C. B. Medical College, Cuttack. It was separated as an independent centre since February, 1981 and was made an autonomous body in April, 1984. This is one of the 10 such centres in India. This Centre lacks certain basic needs such as accommodation, equipment and personnel. It is contemplated to bring it on par with other centres in the country. Since accommodation is badly needed provision has been made to complete the buildings with first two years of the Seventh Plan Period at a cost of Rs. 150.00 lakhs. The estimate has been limited to the barest necessity for the Seventh Plan, whereas the actual requirement is much more. Some of the sophisticated equipments have already been arranged and the rest are in the process of acquisition. These equipments require accommodation and therefore priority has been given to this item. The calculation has been done on the basis of required floor space.

34.28. Equipments pertaining to Brachy Therapy, External High energy, Photon and electron beam therapy, nuclear medicine imaging, computerised exialtemography imaging, ultrasound imaging and different scopic instruments for surgical diagnosis and establishing mobile cancer detection centres are proposed to be procured for the benefit of the cancer patients. Other items such as books, animal house, radiobiology laboratory, experimental laboratory, tissue culture laboratory staff, vehicle are ancillary to the functioning of the Institution.

34-29. In view of the growing need to deliver satisfactory and improved method of treatment to patients whose number is fast increasing and in view of establishment of various treatment sections, it is essential to increase the beds to 250 since minimum 250 beds is aimed at for such centre at all levels.

34-30. Provision of staff, both for medical and administration is included in a phased manner basing on the minimum necessity. The total provision as suggested for the R.C.C.R.T.S., Cuttack for the Seventh Five Year Plan is Rs. 950.00 lakhs which includes capital component of Rs. 150.00 lakhs and for annual plan 1985-86 is Rs. 165.00 lakhs which is inclusive of Rs. 60.00 lakhs for building projects.

#### **Control of Communicable Diseases**

34-31. Control/Eradication of Communicable Diseases is covered by Centrally sponsored schemes with 50% share of the State Government. The specific proposal, in respect of various schemes and provision proposed there for representing the State share are indicated therein.

#### **Strengthening of Epidemiology services and Cholera Control**

34-32. During the Sixth Plan period the Vaccine Institute has been strengthened to produce more cholera vaccines. Due to Constitution of Cholera Control teams the trend in incidence in Cholera and others has been steadily decreasing. Still it is an alarming problem to the State. The Control/eradication of diarrhoeal disease including Cholera requires the improvement of environmental sanitation, particularly the provision of safe drinking water. Beginning from Fourth Five Year Plan concentrated and co-ordinated attack against the diseases has been taken up in the districts like Cuttack, Puri, Balasore, Ganjam.

34-33. To strengthen the cholera control programme, it has been proposed to establish a Mobile Unit at State Headquarters to undertake speedy action in controlling the situation with the staff consisting one Medical Officer, one A.N.M and one driver. It is proposed to provide a diesel Jeep alongwith necessary laboratory equipments and chemicals. The total cost of the scheme comes to Rs. 82.25 lakhs for the Seventh Plan period which includes the requirement of annual plan for 1985-86 at Rs. 17.00 lakhs.

#### **School Health Services**

34-34. In the 9th Joint Conference of Central Council of Health and Family Welfare, held in New Delhi during July, 1983, recommendation was made to make effective school health survey of all Primary Schools and Secondary Schools. There are 33,988 Primary Schools with approximate number of 30 lakh students and 3,200 Secondary Schools with 5 lakh students. These students population is to be covered by 314 P.H.Cs. It is proposed that all Schools should be visited at least once a year. For effective record keeping and efficient management of health services, printing of health cards and Registers, provision of Schools Health kits, POL to P.H.Cs. Medicines for treatment of minor ailments and training programme of school teachers are essential. Besides it has been proposed to implement School Health Services in 50 (fifty) Tribal blocks of Balasore, Mayurbhanj, Keonjhar, Sundargarh, Sambalpur, Phulbani, Kalahandi, Koraput and Ganjam districts during the Seventh Plan period. It is expected that about 4,000 schools consisting of about 4 lakh students in the above 50 tribal blocks will be covered. The total requirement for the purpose is Rs. 59.75 lakhs during Seventh Plan period. For the year 1985-86, the requirement will be Rs. 12.00 lakhs.

#### **Tuberculosis**

34-35. The aim of the scheme is to control tuberculosis (T.B) in industrial areas and tribal areas. For control of the disease, anti-T.B drugs at a cost of Rs. 180.00 lakhs are necessary during the Seventh Plan. The cost will be borne on 50:50 basis by the Government of India and the State Government. The Jeeps provided to the Dy. Director, T.B. and all the District T.B. Officers for supervision are more than 15 years old and require replacement. Rs. 14.00 lakhs will be required for replacement of these jeeps. The cent percent cost of the materials under the scheme will be met by Government of India. The total requirement under the scheme will be Rs. 194.00 lakhs during the Seventh Plan period. The annual outlay for the year 1985-86 will be to the extent of Rs. 44.00 lakhs and the State share will be of Rs. 22.00 lakhs.

**Filaria**

34-36. The Filaria Control Programme is mostly confined to the urban areas as the Municipal bodies are not in a position to provide adequately the materials like M.C.Oil, layten, etc. During the Seventh Plan period for effective control of the menace of mosquitoes a provision of Rs. 205.50 lakhs has been proposed which will be borne by the State Government as well as by the Government of India in equal share.

**N.M.E. P.**

34-37. The scheme National Malaria Eradication Programme (N.M.E.P.) is being implemented in the State which is financed on 50:50 basis by the Government of India and the State Government. Government of India have approved establishment of one insecticide testing laboratory at the State Headquarters at a cost of Rs. 13.65 lakhs. According to Government of India pattern five urban Malaria Units are to be established in the town having a population of more than 40,000. The total requirement for the scheme during the Seventh plan period will be Rs. 4,876.50 lakhs and the State share is Rs. 2,438.25 lakhs.

**Indian System of Medicine and & Homeopathy**

34-38. Day by day the system of treatment under Indian System of Medicine and Homeopathy are becoming popular. Development of Ayurvedic and Homeopathic Colleges in the State alongwith hospital facilities and construction of buildings have been included in the Seventh Plan period. Few more new schemes such as Family Welfare Unit, Malaria and Filaria Unit have been proposed to be established, during the Seventh Plan period. It has been proposed to establish one Naturopathy Hospital and one Unani Hospital in the State during the Seventh Plan period.

34-39. Practically there are no buildings for accomodation of the staff of different levels, Dispensaries, Hospitals and College Hospitals. Almost all the function in private buildings. A provision of Rs. 367.68 lakhs has been proposed for the buildings of all categories in the Seventh Plan.

**M.N.P.(I.S.M.)**

34-40. During the last year of the Sixth Five Year Plan two Ayurvedic and two Homeopathic Dispensaries have been upgraded to that of Subsidiary Health Centres. Prior to this, no Ayurvedic and Homeopathic Dispensaries were given that status. During the Seventh Five Year Plan, it has been proposed to convert 15 Ayurvedic and 15 Homeopathic Dispensaries to that of Subsidiary Health Centres, for which a sum of Rs. 143.76 lakhs has been proposed.

34-41. Government have taken over the management of Ayurvedic College, Balangir. Gopabandhu Ayurvedic Mahavidyalaya, Puri is required to be strengthened by way of providing library facilities, creating some teaching posts and taking up construction of buildings, etc. Similar steps has been taken for Dr.A.C. Homeopathic Medical College, Bhubaneswar to make it fullledged and for construction of its hostel building. It has been proposed to establish a translating cell for preparing an exhaustive descriptive catalogue on the folk medicine by collecting for old manuscripts preserved in different libraries.

34-42. The efficiency of Ayurvedic & Homeopathic drugs in preventing and controlling different communicable diseases has proved worthy of appreciation. The scheme like Filaria, Malaria, Chicken pox and survey on Yaws and I.S.M. & Homeopathy are working successfully. It has been proposed to establish one unit for Filaria, two units for Malaria and one unit for Chicken pox during the Seventh Plan period. Funds have also been suggested to establish one unit to launch a programme for control and eradication of Leprosy under I. S. M.

34-43. A 50-bedded Ayurvedic Hospital has been started by me one voluntary organisation at Paikamal in Sambalpur district named after Lord Nrusinghanath under a scheme with Government assistance. The State Government are to bear one-third of the Non-recurring expenditure as Grant-in-aid to the Institution. Application for the same has been forwarded to Government of India. A provision of Rs. 15.00 lakhs has been proposed for this scheme in the State Plan.

34-44. Since Ayurvedic, Homeopathic and Unani system of treatment have proved popular in the State, it is proposed to open 126 Homeopathic, 126 Ayurvedic and 15 Unani dispensaries during the Seventh Plan period. A provision of Rs. 307.95 lakhs has been proposed for the purpose.

### Drugs Control and Food Adulteration

34.45. During the last couple of years there has been much clamour in the press, platform, parliament and State Assemblies of the different States for strengthening their machineries for enforcement of the Drugs and Chemicals Act and the Prevention of Food Adulteration Act, so that manufacture and marketing of non-standard drugs and adulterated food materials are effectively checked for protecting the health of the public. Considering from all angles, the general consensus was to lay more stress in augmenting the Inspectorate staff and the testing facilities for both Food and Drugs during the Seventh Plan. In this context, the recommendations of "Task Force" set up by Government of India has a bearing with regard to the norm prescribed as to the ratio between the number of Drugs Inspectors vis-a-vis the number of existing Drug sales and Manufacturing outlets. For that matter, Orissa should have 76 Drugs Inspectors by the end of Sixth Plan and 121 Drugs Inspectors by the end of Seventh Plan. With the existing constraints of financial limitations, it is proposed to augment the Drugs Inspectorate staff at least by creating 60 more Drugs Inspectors by the end of Seventh Plan in a phased manner so as to maintain the level at the level of requirement by the previous plan period.

34.46. Many States like Maharashtra, Gujarat, M.P., Bihar, U.P. and Andhra Pradesh have already set up combined Food and Drug Administration in their States. Since the nature of administration of the Drugs and Chemicals Act and Prevention of Food Adulteration Act are technically and legally similar, an administration, namely the Food and Drugs Administration will not only ensure proper enforcement of these two laws, but also would be economical from the administrative point of view. The deliberations of the Health Ministers meet held on 1-9-1984 at New Delhi were also on the above line which was kept in view while formulating the Seventh Plan for Food and Drug Administration in the State. The following Schemes for the Combined Food & Drug Administration which are feasible are proposed in the Seventh Plan:

Name of the Schemes.	Proposed outlay during 1985-90 (Rs. in lakhs)
1. Strengthening of Drugs Inspectorate staff in the State.	96.00
2. Creation of three Zonal offices of Food and Drugs Administration at the three zones.	22.00
3. Augmentation of the Food & Drugs Administration at the Dist. level-setting up of public education and consumer protection and Revenue monitoring cells at Dists. & Headquarters level.	30.60
4. Strengthening of the Intelligence Cell of Drugs Control Administration to function as a full fledged wing for both Food and Drug Intelligence work in the State.	25.00
5. Augmenting the Headquarters Organisation in respect of Drug Wing.	15.00
6. Creation of a Food wing at the Headquarter for Administrative supervisory & legal Work.	10.00
7. Strengthening of Food Organisation at the District level.	30.00
8. Augmentations of Food Inspectorate staff at Major Subdivisional, Municipal and N. A. C. level.	40.00
9. Strengthening of the State Drug Testing Laboratory, Bhubaneswar to augment its testing capacity and spectrum to meet the work-load of the enhanced Inspectorate strength.	54.00
10. Strengthening of the State Food and Public Health Laboratory, Bhubaneswar.	20.00
11. Creation of three Zonal Food and Drug Testing Laboratories at three Zones to cope with the work-load of Food & Drug Testing as per expectation of the estimates committee of the Parliament.	76.00
Total	418.60

From the above scheme-wise revelation, it would be seen that the total financial involvement in the 7th Plan period (1985-90) for proper enforcement of D & C Act and P. F. A. Act would be to the tune of Rs. 418.60 lakhs out of which the capital content is Rs. 26.40 lakhs. As regards Annual plan for 1985-86 the requirement has been kept at Rs. 63.29 lakhs.

## CENTRAL PLAN

### National Leprosy Eradication Programme

34-47. *Establishment of Leprosy Eradication Units*—So far 42 Leprosy Eradication Units have been established. According to the pattern of Government of India one Leprosy Eradication Unit is to be established @ 1.4 lakh population. With the establishment of another eight Leprosy Eradication Units, the entire State will be covered. It is proposed to establish eight Leprosy Eradication Units. 16 Leprosy Eradication Units which were set up in earlier plans was in different pattern. To meet the increased demand, these 16 units need to be upgraded, according to the revised Leprosy Eradication Unit pattern. With the completion of the 16 units, all the Leprosy Eradication Units established earlier will be as per the revised pattern. Out of 13 districts of the State, Office of the District Leprosy Officer has been established in 10 districts. Therefore, it is proposed to establish D.L.O. Office in the remaining three districts. In the earlier plans, the D.L.O. Office was established according to the old pattern. Therefore, upgradation of three D.L.O. Office according to the revised pattern of Govt. of India is proposed at a cost of Rs. 11.70 lakhs. According to the revised GOI pattern, two Leprosy Eradication Units need to be upgraded in 1985-86 for which an amount of Rs. 10.90 lakhs have been proposed.

34-48. By the end of Sixth Plan, 10 temporary hospitalisation wards have been established in eight districts. It is proposed to establish six more temporary hospitalisation ward during Seventh Plan period to cover the entire State as per the Government of India norm.

34-49. *S.E.T. Centres*—It is proposed to establish 10 more Centres to complete the requirement of the State as per the present norm. So far 227 S.E.T. Centres have been established.

34-50. *Epidemiological surveillance Units*— It is proposed to establish one epidemiological Survey team at the State Headquarters at a cost of Rs. 9.97 lakhs.

34-51. *Establishment of Rehabilitation promotional Units*— It is proposed to establish such units at a cost of Rs. 46.11 lakhs.

34-52. The entire amount of Rs. 1,266.35 lakhs required for the Seventh Plan is to be met by Government of India, since this has been taken up as a Central Plan. This includes Rs. 38.15 lakhs for building component only. For the annual plan period of 1985-86, the requirement will be to the tune of Rs. 153.53 lakhs which includes Rs. 22.67 lakhs for building component.

### Prevention And Control of Blindness

34-53. Establishment of Regional Institute at M.K.C.G. Medical College, Berhampur. It is proposed to establish one Regional Institute at M.K.C.G. Medical College with provision of additional 150 beds. Provision has been made for construction of building and other staff, instruments, equipments, etc. The total requirement under the scheme is projected to be Rs. 53.40 lakhs, with building component of Rs. 30.00 lakhs.

34-54. Upgradation of Ophthalmic Unit at V.S.S. Medical College, Burla. It is proposed to upgrade the Ophthalmic Unit with provision of 35 additional beds. Necessary staff, equipments etc. have been provided including construction of building. The scheme will cost of Rs. 6.45 lakhs with Rs. 0.70 lakhs towards component.

34-55. *Strengthening of Ophthalmia Cell at State Hqrs*—It is proposed to strengthen the Ophthalmic Cell in the Directorate with provision of a programme Officer and other ancillary staff along with provision of a vehicle for proper supervision. The scheme will cost Rs. 4.80 lakhs.

34-56. *Strengthening of District Head quarters Hospitals for Ophthalmic Services*—Since most of the Cataract operations are conducted in the camps, it is proposed to provide second Ophthalmic Specialist along with a vehicle and other ancillary staff in all the 13 District Headquarter hospitals.

34.57. In earlier plans, 174 beds were created without construction of any building. It is proposed to construct buildings in 13 district hospitals, for which beds have already sanctioned in earlier plans. The scheme will cost Rs. 41.14 lakhs with building component of Rs. 3.50 lakhs.

34.58. *Establishment Ophthalmic Services in Subdivisional Hospital*—It is proposed to provide Ophthalmic Services in 14 important Subdivisional Hospitals with provision of five additional beds and Ophthalmic Specialist and equipments Rs. 50,000 for each. The total cost of the scheme will be Rs. 42.30 lakhs with building component of Rs. 14.00 lakhs.

34.59. *Provisions of Ophthalmic Services at P.H.Cs*—It is proposed to provide an Ophthalmic Assistant and instruments, equipments to these 150 identified P.H.Cs. The scheme will cost Rs. 49.75 lakhs.

34.60. Thus the total requirement for prevention and control of blindness programme (Central Plan) for the Seventh Plan period will be Rs. 197.44 lakhs with building component of Rs. 46.20 lakhs. Similarly, for the Annual Plan of 1985-86, requirement will be to the tune of Rs. 36.79 lakhs, including building component of Rs. 19.40 lakhs.

### Family Welfare

34.61. Family Welfare Programmes are being implemented in the State with cent per cent assistance from Government of India. Under the Central Plan, an amount of Rs. 4,886.69 lakhs was earmarked during the Sixth Plan. But the actual expenditure including the anticipated expenditure for the year 1984-85 will be in order of Rs. 6,585.68 lakhs. The additional increase of Rs. 1,716.99 lakhs is mainly due to increase in Pay, DA and ADA of staff and increase in payment of rate of sterilisation operation (compensation amount) in undertaking sterilisation operation and supply of contraceptives. All the ongoing schemes are proposed to be continued. During the Seventh Plan period, the expenditure is likely to be in order of Rs. 13,869.12 lakhs. The extra rise has been due to inclusion of running cost of 1,389 sub-centres created under the Area Development Programme Project and maintenance of additional staff created for the 177 ANM Training Schools and I HVs from the Family Welfare side. (Centrally sponsored scheme during the Sixth Plan period).

34.62. The Multipurpose Workers scheme was taken up during the Sixth Plan as a Centrally sponsored Plan. This includes training and implementation of MPW scheme, in the Sixth Plan, Rs. 774.04 lakhs was earmarked under the Central sector and Rs. 387.02 lakhs was earmarked under the State Plan as State share of the scheme but the actual expenditure is Rs. 63.32 lakhs under Central share and Rs. 39.32 lakhs in the State share. According to the scheme the Government of India will bear 50% of additional cost due to rationalisation of pay, D.A. etc. of staff of MPW scheme. Since this component of the MPW scheme could not be finalised during the Sixth Plan period, the expenditure was low. An amount of Rs. 76.83 lakhs has been kept for this Centrally sponsored scheme.

### Employees State Insurance Scheme

34.63. The objective of the Employees State Insurance Scheme is to provide medical facilities to the insured persons in the factories/industrial and other establishments and their family members as per the provision made in the E. S. I. Act, 1948. Expenditure on this account is shared between the State Government and E. S. I. Corporation at the agreed ratio of 1:7. The expenditure is initially borne by the State Government and ultimately shared between the State Government and the E. S. I. Corporation at the above ratio. The Scheme was implemented initially in this State from the 31st January 1960 with about 23,000 insured persons which has now gone up to 1,47,000 till end of July 1984. The E. S. I. Corporation has prescribed the *per capita* ceiling of expenditure per year per employees unit which is subject to revision from time to time. The E. S. I. Corporation also intimates the number of employers unit pertaining to individual dispensaries every year on the basis of which the overall ceiling of expenditure is assessed. The Sixth Plan approved outlay for "Employees' State Insurance Scheme" was Rs. 20 lakhs (State share only) against which the anticipated expenditure would be Rs. 24.10 lakhs (State share only).

34.64. During the Seventh Five-Year Plan, it has been proposed to spend Rs. 404.10 lakhs (State share being Rs. 48.64 lakhs) for continuance of three E. S. I. hospitals, two Annexe wards and five E. S. I. Dispensaries, and opening of 10 E. S. I. dispensaries and augmentation of bed strength of E. S. I. hospital, Jagatpur from 15 to 50 beds and creation of eight posts specialists, etc.

34.65. Notable achievements during Sixth Five-Year Plan period are (i) re-organisation of E. S. I. Directorate, (ii) augmentation of E. S. I. Hospitals at Chowdwar from 62 to 100 beds and at Brajarajnar Directorate, (iii) augmentation of E. S. I. Hospitals at Ciowdwar from 62 to 100 beds and at Brajarajnar Directorate, (ii) augmentation of E. S. I. Hospitals at Ciowdwar from 62 to 100 beds and at Brajarajnar Directorate, (iii) six-bedded annexe ward at Barang and Barbil and 10-bedded annexe ward at Barbil and Bhubaneswar, (iv) continuance of 25 bedded hospital at Jaykaypur, (v) opening and continuance of one doctored dispensaries at Balasore, Jagatpur, Paradeep, Kaluanga, Lathikata, Charampa, Bhagatpur, Nuapatna, and two-doctored dispensaries at Sambalpur, Tora, Dhanmandal, Dhenkanal, Rourkela and Bhadrak and a three-doctored dispensary at Rourkela, (vi) continuance of 8 upgraded dispensaries at Barang, Berhampur, Hirakud, Jharsuguda, T. P. Mills area, Ganjam, Brajarajnar and Jaykaypur, (vii) opening of 15-bedded E. S. I. Hospitals Bhadrak and Rourkela and (viii) Upgradation of E. S. I. dispensaries.

34.66. The proposed target for Seventh Five-Year Plan 1985-90 includes (i) continuance of 15-bedded E. S. I. hospitals at Bhadrak, Rourkela and Jagatpur, (ii) continuance of 10-bedded annexe wards at Bhubaneswar and Barbil, (iii) continuance of E. S. I. Dispensaries at Bhadrak, Charampa, Bhagatpur, Nuapatna and Mancheswar, (iv) opening of 10 E. S. I. dispensaries at Puri, Kendrapara, Khurda, Tirtol, Baripada, Talcher, Belpahar, Rupsa, Dhenkanal and Theruvali, (v) augmentation of bed strength at Jagatpur Hospital from 15 to 50 beds, (vi) creation of two posts of Deputy Director in the rank of C. D. M. O. for the E. S. I. hospitals at Jaykaypur and Brajarajnar, (vii) creation of 8 posts of Specialists for E. S. I. Hospitals at Jaykaypur, Brajarajnar and Kansabahal, (viii) replacement of Ambulance van at Brajarajnar, Rajgangpur, Kansabahal and Jaykaypur, Central Medical Store and purchase of 3 ambulance van for Hirakud, Bardol, Rourkela, (ix) strengthening of E. S. I. Directorate by creation of posts and replacement of staff car of E. S. I. Directorate and purchase of one Jeep for Bhubaneswar Dispensary and (x) purchase of 5 X-Ray machines for Bhadrak, Rourkela, Barbil, Bhubaneswar and Jagatpur.

## CHAPTER 35

## SANITATION AND DRINKING WATER-SUPPLY

**Urban water-supply and Urban sanitation**

35.1. A clean living environment calls for a proper management of Water-Supply and Sewerage disposal. It was decided during the United Nations Water Conference held in March, 1977 that the Decade 1981—91 would be designated as the "International Drinking Water-Supply and Sanitation Decade" to achieve the aforesaid objective. India as a signatory to the U. N. Resolution, has pledged its full support to the action plan under the International Decade. The Seventh Five Year Plan (1985—90) has been formulated keeping in view the objectives of International Decade for drinking water-supply and Sanitation Programme.

**Service levels in Orissa at the time of formulation of Decade Programme**

35.2. As per 1971 Census, the total Urban population was 18.45 lakhs in 81 towns which has increased to 31.06 lakhs by 1981 in 100 towns. During the last decade (1971—81) there has been an overall increase of 68.29% of the population in Urban areas. State Government in Housing and Urban Development Department have declared 96 Urban bodies as Municipalities (27 Nos.) and N. A. Cs (69 Nos.) till March, 1981. According to 1981 Census, the total population in these 96 Urban Local bodies stands at 30.05 lakhs as against the projected population of 27.30 lakhs by 1981 in the decade document. Up to the end of March, 1981, 10.72 lakhs i. e. 39.27% of the projected population of 27.30 lakhs (by 1981) was provided with safe drinking facilities in 75 U. L. Bs (25 Municipalities and 50 N. A. Cs) and 2.91 lakhs of Urban population (10.66%) was covered through Sewerage system and safe excrete disposal method in 4 U. L. Bs (1 Municipality + 3 N. A. C.) partially. The position is summed up in the Table below.

Table 35.1

(Population in lakhs)

Programme	No. of Urban local bodies.	Population		Coverage by		Percentage coverage
		Projected 1981	1981. Census	31-3-1981		
				No. of Urban Local Bodies	Population covered.	
Urban Water-Supply	96	27.30	30.05	75	10.72	39.27/35.67
Urban Sanitation	96	27.30	30.05	4	2.91	10.66/9.68

**Proposed level of coverage**

35.3. Considering the low level of coverages by March, 1981, the Apex Committee at the National level fixed the following targets for the decade to be achieved by March, 1991

	Coverage	Standard of service
1. Urban Water-Supply	... 100%	140 lpcd.
2. Urban Sanitation	.. 100% in Class-I cities, 80% (Overall in Class-I & other Cities)	With Sewerage and Sewerage Treatment. (With sewerage and low cost method of disposal)



The decade document was prepared to achieve the objectives set forth as above for implementation during the International Decade (1981-91) for drinking water-supply and sanitation. The Sector-wise break-up of physical and financial targets are given in the table below :—

Table 35.2

Sector	Projected population in 1991	Population covered up to 31-3-1981	Population in lakhs	
			Rupees	in lakhs
			1991 Target population	Decade Funds required as per Decade Plan
Urban Water-Supply ..	38.07	10.72	27.35	8,676.00
Urban Sanitation				
(a) Sewerage System and Sewerage Treatment. ..	14.49	2.60	11.89	4,229.00
(b) Low cost sanitation ...	15.97	0.31	15.66	3,383.10
	30.46	2.91	27.55	7,612.10

#### Sixth Plan Outlay and Coverage

35.4. In the initial four year (1981—85) of the Decade Plan, additionally 40.573 million people could be covered by providing safe drinking water-supply in urban areas, 0.013 million people with Sewerage System and Sewerage Treatment and 0.067 million people were covered by providing low-cost sanitation in Class II and lower category towns. The Sixth Plan outlay and Coverage of population are tabulated below :—

Table 35.3

(Rupees in lakhs)  
(Population in lakhs)

	Allocation of funds during the Sixth Plan			Coverage of population in 1st 4 years	Balance population target of Decade Plan
	1980-81	1981-82	Total	1981—85	1985—91
Urban Water Supply ..	112.06	944.69	1,056.75*	5.73	21.62
Urban Sanitation					
Sewerage System ..	26.50	53.15	79.65*	0.13	11.76
Low Cost Sanitation ..	8.00	33.96	41.96	0.67	14.99

\*The provision of Rs. 5 lakhs earmarked towards Survey Expenses for Water-supply and Sewerage Scheme in the Sixth Plan has been added. The total Sixth Plan outlay for Urban Water-supply Sewerage and Survey expenses comes to Rs. 1,136.40 lakhs.

#### Priorities

35.5. In the conference of State Secretaries, Chief Engineers and Heads of the implementing agencies, a list of priorities to be kept in view while drawing and implementing the Decade programme has been finalised. The *interse* order of priorities in Urban Water-Supply and Sanitation are as follows:—

##### Urban Water-Supply

- (i) Safe drinking water to uncovered towns or uncovered Urban areas.
- (ii) Rehabilitation of Urban Water-Supply.
- (iii) Augmentation of Urban Water-Supply System.

**Urban Sanitation**

- (i) Low cost Sanitation to towns other than Class-I.  
(ii) Sewerage facilities to Class-I cities lacking them at present.

Further, the spillover Schemes would receive first priority in drawing up schemes relating to Urban Water-Supply and Sanitation.

**Goal of the Seventh Plan (1985-90) in the perspective of the Decade Programme and Priorities****Urban Water-supply**

35.6. Considering the decade target and the above priorities, the Seventh Plan Programme has been drawn up in such a manner as cover 90% population of the proposed target with safe drinking water-supply in all the 96 Urban Local Bodies during the Seventh Plan period (1985-90). The balance 10% Urban population would spillover to the next plan for coverage during the ultimate year (1990-91) of the International Decade for drinking water-supply and sanitation. The coverage of population through Urban Water-supply Programme in order of priority during the Seventh Plan period is given in the Table below :-

**Table 35.4**  
**Urban Water-Supply**

(Population in lakhs)

Schemes in order of priority	No. of towns	1991 Decade population	Coverage up to Sixth Plan	Balance target as per Decade Plan (1985-91)	Proposal Target	
					1985-91	1985-90 Seventh Plan.
<i>Original Schemes</i>						
<b>(1) Spillover Schemes from Sixth Plan</b>						
(a) Safe drinking water to uncovered towns.	3	1.385	0.10	1.285	1.285	1.285
(b) Safe Drinking water to uncovered other three urban areas & 2 Joint/Integrated Water-Supply Schemes	..	..	..	..	..	..
<b>(2) Safe drinking water to uncovered towns</b>	15	3.071	..	3.071	4.756	4.200
<i>Augmentation Schemes</i>						
<b>(3) Rehabilitation of Urban Water-Supply</b>	38	5.983	1.29	4.693	4.693	4.224
<b>(4) Augmentation of Urban Water-Supply Systems in</b>	..	..	..	..	..	..
(a) Class-I	7	14.491	9.10	5.391	10.971	9.874
(b) Class-II & below towns.	33	13.140	5.96	7.180	7.180	6.462
<b>TOTAL</b>	.. 96	38.070	16.45	21.62	28.885	26.125

As may be seen from the above Table, the balance target of the decade programme by 1991 and that of the detailed programme drawn up for implementation in the Seventh Plan would indicate that the target population (28·885 lakhs) to be covered by Urban Water-Supply Schemes is higher than the one worked out in the decade programme (21·52 lakhs) for the remaining period. The reasons are :- (i) Execution of 15 (fifteen) Urban Water-Supply Schemes in uncovered urban area is to be taken up afresh. Since these are new schemes, they are to be planned, designed and executed to serve at least 15 years. Hence it has been envisaged to cover prospective population up to 2001 instead of 1991; (ii) Execution of 7 (seven) Urban Water-Supply Augmentation Schemes in 7 Class-I cities are to be taken up to serve the designed population at least for 15 years up to 2001 instead of 1991.

35·7. In case of all new and augmentation Water-Supply Schemes in urban areas, provision for installation of handpump tube-wells in urban areas to serve 25% of the urban population has been made. The piped Water-Supply Scheme may not be extended to slum areas and economically weaker areas of the town as this section of the population is not likely to take house connection. Instead, spot sources like handpump tube-wells would only be provided. Piped Water-Supply Schemes would be extended to serve 75% of the urban population. This arrangement would effect economy in providing drinking water facilities in urban areas.

#### Urban Sanitation

35·8. As per the objective of the International Decade for safe drinking water-supply and sanitation, it has been envisaged that 100% urban population by 1991 in Class-I cities would be covered by Sewerage Systems and Sewerage Treatment. The overall coverage in all urban areas by sewerage systems and low cost sanitation would be 80% of the decade target population by 1991. The programme drawn up for the Seventh Plan (1985—90) contemplates coverage of 90% of the decade target. The balance 10% of decade population would be covered in the last year of the decade in the next Plan. The target of coverage is tabulated below :

Table 35·5

#### Urban Sanitation

(Population in lakhs)

Schemes in order of priority	No. of towns	1991 Decade target	Coverage up to Sixth Plan	Balance Decade target (1985—91)	Proposed target Seventh Plan (1985—90)
(1) Low cost sanitation.	89	15·97	0·98	14·99	14·99
(2) Sewerage system & sewerage treatment in Class-I cities.	7	14·49	2·73	11·76	10·50
<b>Total</b>	<b>96</b>	<b>30·46</b>	<b>3·71</b>	<b>26·75</b>	<b>24·07</b>

35.9. The low cost sanitation programme for implementation in different categories of towns in Seventh Plan period (1985-90) is indicated below :

Table 35.6

(Population in lakhs)

Programme in order of priority	Balance decade population target		Population to be covered during Seventh Plan under		No. of latrines under	
	1985-91	1985-90 Seventh Plan	Conversion of Bucket latrines to sanitary	Construction of public latrines	Conversion	Public latrines
1. Low cost sanitation to 89 communities.						
Class-II towns - 2	1.31	1.10	1.06	0.12	17,667	80
Class-III towns - 28	8.17	7.35	6.62	0.73	11,033	487
Class-IV towns - 40	4.35	3.92	3.53	0.39	58,833	260
Class-V towns - 16	1.06	0.95	0.85	0.10	14,167	67
Class-VI towns - 3	0.10	0.09	0.00	0.01	1,333	7
Total - 89	14.99	13.49	12.14	1.35	2,02,333	901

It may be clarified that under low cost sanitation the population to be covered during Seventh Plan would be 90% of the balance decade target population. Out of which 90% of Seventh Plan target population would be covered under conversion of Sanitary latrines programme and 10% under Public latrines programme. On an average 6 persons would be served by a conversion of bucket type latrine to sanitary latrine and 150 persons are likely to be served by one public latrine. The requirements have been worked out accordingly.

35.10. Providing of Sewerage System and Sewerage Treatment in 7 Class-I Cities comes next in order of priorities in the Seventh Plan. The target of population coverage is given in the Table below:

Table 35.7

(Population in lakhs)

Name of the Class-I cities	Balance Decade population target		Remarks
	1985-91	1985-90 Seventh plan	
<b>(2) Sewerage System and Treatment.</b>			
1. New Capital, Bhubaneswar.	0.81	0.73	Col.3. 90% of balance decade population would be covered in the Seventh Plan leaving 10% of the decade target to 1st year of Eighth Plan.
2. Cuttack.	3.98	3.58	
3. Berhampur	2.28	2.05	
4. Rourkela (ST) }	1.84	1.65	
5. Rourkela (CT) }			
6. Sambalpur	1.44	1.30	
7. Puri	1.41	1.27	
	11.76	10.58	

**Estimates of requirement of funds during Seventh Plan period (1985—90)**

35.11. The population coverage and requirement of funds for the balance portion of the decade programme spanning from 1985-86 to 1990—91 is divided into Seventh Plan (1985—90) and the first year (1990-91) of the Eighth Plan in the proportion of 90:10 according to the norms outlined in the decade perspective. Considering the fact that implementation of an Urban Sewerage or Water-Supply Scheme would normally take about three to five years, all the Schemes covering 96 urban local bodies have to start by the penultimate year of the Seventh Plan for their completion by the end of the decade. The sizable amount of the total requirement i. e. 90% of the funds would have to be therefore, provided in the Seventh Plan.

35.12. As per the guidelines issued by Government of India, the base line year for the working out the estimates of requirement of funds for the Seventh Five-year Plan would be 1984-85 at the price level of 1981-82 with an escalation factor of 5% per annum. Considering the escalation factor, the price level at the base-year i. e. 1984-85 comes to 1.15 times the price level of 1981-82 and the estimates are projected for the Seventh Plan accordingly. The requirement of funds for the Urban Water-supply Schemes during the Seventh Plan is shown in the table below :—

**Table 35.8**

Sl. No.	Urban Water-Supply Schemes in order of priority	Seventh Plan population target	Population in lakhs Rupees in lakhs	
			Seventh Plan estimated cost at 1981-82 price level.	Seventh Plan Total requirement of funds at 1984-85 price level.
(1)	(2)	(3)	(4)	(5)
1	Completion of eight (8) spillover Urban Water-Supply Schemes from Sixth Plan.	1.285	690.25	690.25
2	Urban Water-Supply to 15 uncovered towns.	4.280	1,032.66	1,187.56
3	Rehabilitation of 30 Urban Water-Supply Schemes.	4.224	1,018.97	1,171.81
4	Augmentation of Urban Water-Supply Schemes in 7 Class-I cities.	9.874	2,752.34	3,165.20
5	Augmentation of Urban Water-Supply Schemes in 33 Urban Communities.	6.462	1,559.00	1,792.82
<b>Total</b>		<b>26.125</b>	<b>7,053.22</b>	<b>8,007.64</b>

35.13. The requirement of funds for urban sanitation schemes is summarised in the Table below :—

TABLE 35.9

(Population in lakhs)  
(Rs. in lakhs)

Programme in order of priority	Seventh Plan population target		Estimated cost at 1981-82 price level		Estimated cost at 1984-85 price level	
	Conversion	Public latrine	Conversion Rs. 225 @ per capita	Public latrine Rs. 135 per capita	Conversion	Public latrines
<b>1. Low cost Sanitation to 89 Urban Communities.</b>						
Class II towns—2	1.06	0.12	230.50	16.20	274.20	18.63
Class III towns—28	6.62	0.73	1,489.50	98.55	1,712.93	113.33
Class IV towns—40	3.53	0.39	794.25	52.65	913.39	60.54
Class V towns—16	0.85	0.10	191.25	13.50	219.94	15.53
Class VI towns—3	0.08	0.01	18.00	20.70	1.35	1.55
Total— 89	12.14	1.35	2,731.50	182.25	3,141.24	209.50
	=13.49		=2,913.75		=3,350.82	
	Seventh Plan target population		Estimated cost at 1981-82 price level @Rs. 350 per capita		Estimated cost at 1984-85 price level	
<b>2. Sewerage system &amp; Sewerage Treatment in Class-I cities-7.</b>						
		10.58		3703.00		4258.47
Total towns—96		24.07		6616.75		7609.29

#### Requirement of funds for operation and Maintenance during the Seventh Plan

35.14. The draft master Plan for Water-Supply and Sanitation Sector mentions at para. 5.4 about the high degree of responsible attention required in order to conserve and prolong the useful service life of all facilities. The working group set up by the Apex Committee has recommended to add an element towards operation, maintenance component during the decade period. 35 per cent of the total Seventh Plan outlay for Urban Water-Supply and sanitation is therefore proposed to be set apart for meeting the requirement of operation and maintenance during the Seventh Plan as per details given below.

Table 35.10

(Rs. in lakhs)

	Seventh Plan outlay	O. & M. requirement	Total requirement
Urban Water-Supply	8,007.64	280.26	8,287.90
Urban sanitation	7,609.29	266.32	7,875.61
Total	15,616.93	546.58	16,163.51

### Survey and Investigation

35.15. An amount of Rs. 25.00 lakhs was provided in the Sixth Plan to meet the expenses of Survey and investigation relating to water-supply and Sewerage Schemes. In view of enlargement in the proposed Seventh Plan outlay, an amount of Rs. 100.00 lakhs has been proposed in the Seventh Plan to meet the increased cost of Survey and Investigation of Schemes.

### Building Programme

35.16. In the Sixth Plan outlay, the total provision was Rs. 70.00 lakhs for construction of Residential and Non-residential buildings of Public Health Engineering Organisation. Out of which Rs. 2.36 lakhs was earmarked for repayment of HUDCO loan for P. H. Maintenance staff housing scheme at Bhubaneswar. In the Seventh Five-Year Plan, the activities of P. H. E. O. would increase many folds. In many places, there are no residential or non-residential buildings for accommodation of staff and office. Hence a provision of Rs. 200.00 lakhs is proposed in the Seventh Plan for the purpose, out of which Rs. 13.38 lakhs is set apart for repayment of HUDCO loan.

### Institutional Finance

35.17. In the agreed outlay of Sixth Plan, the total provision for availing institutional finance for execution of Urban Water Supply Schemes was Rs. 502.79 lakhs, out of which an amount of Rs. 451.72 lakhs is likely to be availed by the ultimate year of the Sixth Plan. Due to poor resource base, many Urban Local Bodies (ULBs) have found it difficult to repay the loan incurred from the I. J. C. for their Urban Water-Supply Schemes. Experience has shown that the present pattern of funding Urban Water-Supply Schemes needs some modification. The requirement of funds for the Spill over schemes and for schemes to be taken up during the Seventh Plan is as follows :—

	(Rs. in lakhs)
1. Spill over Urban Water-Supply Schemes as per funding pattern already approved by Government.	690.25
2. Schemes to be taken during Seventh Plan Period	7,317.39
	<hr/>
Total—Urban Water-Supply	8,007.64
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### Total requirement of funds for Urban Water-Supply Sanitation Sector during the Seventh Plan

35.18. As discussed above, the following financial outlay is suggested for the Seventh Plan for implementation of the objectives laid down in the International Decade for drinking Water-Supply and Sanitation.

	Rs. in lakhs
Survey & Investigation	.. 100.00
Urban Water-Supply including building programme	.. 8,207.64
Urban Sanitation	.. 7,609.29
Operation & Maintenance	.. 546.58
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Total	.. 16,463.51
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**Annual Plan 1985-86****Urban Water-Supply, Sewerage and Drainage Schemes**

35-19. The suggested Annual Plan outlay for 1985-86 stands at Rs. 700.00 lakhs which is considered inadequate to achieve the target set forth in the Seventh Plan (1985-90). An average of Rs. 32.00 crores per annum would be required in urban water-supply and Sanitation Sector to meet the requirement. However, considering the limited resources of the State the programmes for the year 1985-86 have been confined to Rs. 700.00 lakhs as below :-

	Name of the Scheme	(Rs. in lakhs)
<b>I.</b>	1. Survey & Investigation	10.00
<b>II.</b>	Urban Sanitation Sewerage Schemes	
	2. New Capital Sewerage	35.00
	3. Cuttack Sewerage Scheme	25.00
	4. Conversion of Bucket latrines to Sanitary latrines	15.00
	5. Construction of public latrines	30.00
<b>III.</b>	Urban water-supply	
	(a) Building programme	
	6. Construction of Non-residential and Residential buildings	7.19
	7. Repayment of HUDCO loan	2.81
	(b) Urban Water Supply Schemes-Spilled over from Sixth Plan to Seventh Plan	
	<i>Original</i>	
	8. Joint water-supply Scheme, Berhampur	126.00*
	9. Water-Supply to Joda N. A. C.	34.05
	10. Water-Supply to Choudwar Town	12.55
	11. Water-Supply to Jatni Town	68.18
	12. Integrated water-supply Scheme, Joda	31.57*
	<i>Augmentation</i>	
	13. Interim water supply Improvement Scheme for New Capita	31.50
	14. Berhampur water-supply Distribution Scheme	100.07
	(c) The following outlay for uncovered Town have been proposed during the year 1985-86	
	15. Brajaranagar	25.00
	16. Sonepur	15.08
	(d) The proposed outlay for the following Rehabilitation Schemes are as follows :-	
	17. Charapur	15.00
	18. Titilagarh	10.00
	19. Kesinga	10.00
	20. Padmapur	5.00



Name of the scheme	(Rs. in lakhs)
(e) The Plan proposals for the augmentation of the Class I Town of the State are as follows :—	
21. Sambalpur	.. 39.00
(f) The following Class II Towns have been proposed for the Augmentation of the Urban Water Supply System.	
22. Biramitrapur	.. 25.00
23. Nawarangpur	.. 17.00
24. Sundargarh	.. 10.00
Total	.. 700.00

\*N. B.—Due to lack of financial resources Berhampur Municipality and Joda N. A. C. are not in a position to deposit the share out of their own resources for execution of Joint W/S. Project, Berhampur and Integrated W/S Scheme, Joda respectively. Hence their share has been proposed to be provided as grant to the U. L. Bs. for timely completion of these two Schemes.

#### Rural Water Supply

35.20. The number of inhabited villages in the State is 46,992 with a population of 200.99 lakhs as per 1971 census. The projected Rural population by 1991 is 283.40 lakhs. As per the objective of International Water Supply and Sanitation Decade (1981—91) 100 per cent Rural population is to be provided with safe potable water supply by the 31st March 1991. The aim of the Sixth Plan was to cover all the identified problem villages in the State numbering 27,077 with at least one source per village. It is hoped that all these identified problem villages excepting some located in inaccessible pockets would be covered with atleast one source per village by March, 1985. Besides, a number of unidentified villages are being covered with tube wells through the funds available from Natural calamities (Drought, cyclone and Flood etc.) Grants.

35.21. Although as per target of International Water Supply and Sanitation Decade 1991 population of all villages will be covered with adequate drinking water facilities, priorities will be given to cover the already identified problem villages (27,077) fully. Due to successive droughts and depletion of ground water table and various other reasons a large number of villages out of the 19,915 villages in the un-identified list qualify to be included in the list of problem villages. As per instructions of Government of India. Survey of these villages is in progress and the list is expected to be finalised soon. These freshly identified problem villages also require to be covered on priority basis.

35.22. The DANIDA bilateral Water Supply Project is expected to be implemented in the State in the identified problem villages in 20 Saline Blocks, with the help of Danish International Development Agency. Government of India would reimburse 70% of the cost of the project to be State Government. The project components are (i) to install 5006 new hand pump tube wells and rejuvenate 2450 existing hand pumps (ii) to establish 11 category I piped schemes, approximately 15 category II piped Schemes and a considerable number of small scale piped schemes, (iii) to establish necessary know-how about the water resources in the project area in order to manage the utilisation of resources, (iv) to carryout a number of experimental, supportive and supplementary activities aiming at improving the present practices and quality of rural water supply programme (v) to promote proper utilisation of safe drinking water, (vi) to establish a hand pump maintenance systems and (vii) to generate and carryout local involvement in the installation operation and maintenance and cost articpation of the water supply system in a few selected communities in the project area.

35.23. Out of the total of 282.40 lakhs Rural population (1991 projected), about 169.12 lakhs population are envisaged to be covered by the end of Sixth Plan period, leaving a balance of 114.28 lakhs to be covered by end of Seventh Plan. It is proposed to cover 90% of 114.28 lakhs population (i.e. 102.85 lakhs) during the Seventh Plan period and the balance 11.43 lakhs is earmarked for coverage during the first year of the Eighth Plan period. The cost estimate for Seventh Plan is as under:

1. 70% of 102.85 lakhs population to be covered with hand pump tube-wells (one tube-well/250 persons). No. of tube-wells required for 0.70 x 102.85 (i.e. 72 lakhs) population — one tube-well for 250 persons	= 28,800
Add 20% extra for scattered S.C./S.T. hamlets.	= 5,760
	34,560
Cost of 34,560 tube-wells @Rs.20,000 per tube-well	= Rs. 6912.00 lakhs
2. 30% of 102.85 lakhs population (i.e. 30.85 lakhs) proposed to be covered with piped W/S Schemes. Cost of piped W/S Scheme for 30.85 lakhs population @ Rs. 250 per capita.	= Rs. 7,713.00 lakhs
3. Establishment cost for 5 years @ 11.5%	= Rs. 1,682.00 lakhs
4. Machinery and Equipments @ 4.5%	= Rs. 658.00 lakhs
5. Cost of Maintenance of the assets created during Seventh Plan @ 3.5%	= Rs. 512.00 lakhs
	= Rs. 17,477.00 lakhs

35.24. The proposed distribution of provisions under different programmes for the Seventh Plan is as under:-

Table 35.11

(Rs. in lakhs)

Items	State Plan MNP	State Plan DANIDA	Central Plan ARP	Total.
(1)	(2)	(3)	(4)	(5)
Tube wells	1,603.87	1,808.13	3,500.00	6,912.00
Piped Water Supply	890.40	822.60	6,000.00	7,713.00
Establishment & O.E.	1,147.90	434.10	100.00	1,682.00
Machinery and Equipment	303.47	154.53	200.00	658.00
Operation and Maintenance	188.31	123.69	200.00	512.00
Total	4,133.95	3,343.05	10,000.00	17,477.00

355-25 The proposed provision for the Annual Plan 1985-86 is as under:

Table 35-12

Programme	Amount (Rs. in lakhs)	No. of villages to be covered	Population to be covered (in lakhs)	No. of Schemes to be executed
(1)	(2)	(3)	(4)	(5)
M. N. P.	800.00	156	3.59	2,500 T. Ws.
M. N. P. (DANIDA)	500.00	323	2.41	831 T. Ws. & I. P. Ws.
Total	1,300.00	479	6.00	3,331 T. Ws & I. P. Ws,
A. R. P.	2,100.00	5,125	32.01	10,000 I. Ws.
GRAND TOTAL	3,400.00	5,604	38.01	13,331 T. Ws & I. P. Ws.

### Rural Sanitation

35:26 So far no development could be achieved under rural sanitation due to lack of financial resources. Available resources were deployed to meet the demand of drinking water supply requirements in the identified problem villages. Thus, by the end of Sixth Five-Year Plan, coverage by Rural Sanitation is nil.

35:27 With the launching of the International Drinking Water Supply and Sanitation Decade, emphasis has been laid to cover at least 25 per cent of the Rural Population to be served by Rural Sanitation adopting low cost solutions. In the mean while, UNICEF has under taken a modest attempt in 26 selected Rural villages in five districts of Orissa generally prone to natural calamities like Flood, Cyclone and Drought. The U. N. D. P. with the help of TAG and in collaboration with UNICEF have been assigned by Government of India to take up feasibility studies for preparing a report.

35:28 The Decade Master Plan for the Orissa State considers an *ad hoc* cost of Rs. 50.00 per capita which is meant to meet the subsidy in shape of materials like coverslag, 2 to 3 metres of vitrified pipes etc. However, considering the Socio economic condition of the Rural masses and lack of expected public participation, and escalation of prices of materials and labour, it is felt to adopt a *per capita* rate of Rs. 150.00 to translate the targeted goals set forth by the end of Decade.

35:29 The projected Rural population of the Orissa State in 46,992 inhabited villages by the end of 1991, as per the Decade Plan is 28,340 millions. The targeted coverage taking 25 per cent of this population works out to 7.085 millions. Taking 90 per cent of this population (7.085 million) to be covered during the Seventh Plan, around 6.38 millions have to be served by Rural Sanitation

35.30. Total Financial requirements for serving 6.38 millions at a *per capita* rate of Rs. 150 work out to Rs. 95.70 crores. The yearwise phasing in terms of population and capital expenditure in agreement with the phasing envisaged in the Decade Master Plan is as follows:-

Table 35.13

Year	Population in Millions	Proposed outlay Rs. in Crores
1985-86	0.709	10.63
1986-87	1.062	15.930
1987-88	1.417	21.25
1988-89	1.771	26.56
1989-90	1.421	21.315
<b>Total</b>	<b>6.380</b>	<b>95.700</b>

35.31. However, there is a need to undertake indepth studies for indentifying the deserving areas, the appropriate technology and methodology to be adopted and phasing of the programme consistent with the actual funds that would be available.

35.32. In view of the unsatisfactory economic condition of the Rural masses, coupled with inadequate financial resources of the State, it is at the outset proposed to provide an outlay of Rs. 1.00 crore in the initial year of Seventh Plan 1985-86. This outlay of Rs. 1.00 crore shall comprise Rs. 25.00 lakhs under State Grant and the balance Rs. 75.00 lakhs anticipated from the Central Assistance. In case Central assistance cannot be made available an outlay of Rs. 25.00 lakhs can only be provided by the State Government. The estimated coverage for the proposed outlay is given in the following table:—

Table 35.14

	Outlay Rs. in lakhs	Population coverage	No. of latrines
(a) State's Grants	25.00	14,370	2,874
(b) Central Assistance	75.00	43,135	8,627
<b>Total</b>	<b>100.00</b>	<b>57,505</b>	<b>11,501</b>

#### Sanitary Wells

35.33. As mentioned earlier, 10,783 villages out of 27,077 identified villages were to be provided with 28,347 Sanitary Wells in the rural areas. By the end of 1982-83, a total number of 16,996 Sanitary Wells were constructed of these. 1,314 wells remained incomplete till 1984-85, due to escalation of cost in labour charges and materials. It has been decided that no sanitary wells will be constructed in the Seventh Plan period and that water supply will be effected through Tube-wells and piped water supply scheme. Therefore no funds for construction of new sanitary wells in the remaining identified villages has been proposed in the Seventh Five-Year Plan. Only an outlay of Rs. 100.00 lakhs have been provided for completion of

incomplete wells (1,314 numbers). The total requirement of funds at the rate of Rs. 7,500 per well, comes to Rs. 98.55 lakhs. During the current year i.e. 1984-85, provision of Rs. 25.00 lakhs is available which would be utilised for completing 333 incomplete wells. For the remaining 981 wells, a sum of Rs. 73.55 lakhs would be required for the year 1985-86. Out of Rs. 100.00 lakhs proposed for the year 1985-86 a sum of Rs. 26.45 lakhs is proposed to be utilised for construction of sanitary wells in chronically drought affected blocks.

35.34. Accordingly Blocks which are covered by D P A P/I T D A and also D I S Blocks taken up by C. D. & R. R. Department for Sanitary wells have been excluded from the list of chronically drought affected Blocks. A list of 26 such Blocks where long term plan of development is needed has been identified. In these 26 Blocks, it is proposed to construct 10 Sanitary wells in each Block. In other words new 260 wells are to be constructed in the 26 chronically drought affected Blocks during 1985-86 with the provision of Rs. 26.45 lakhs. The Blocks proposed to be covered are Bahanaga, Remuna and Soro in Balasore District, Sonapur in Balangir District, Banki, Baramba, Baridampara, Mahakalpara, Narsinghpur, Rajkanika and Rasulpur in Cuttack District, Hindol and Kishorenagar in Dhenkanal District, Chikhi, Dharakote, Khallikote and Sunada in Ganjam District, Dasapalla in Puri District and Ambhabana, Bhatli, Govindapur, Kolabira, Remal Nektidenu and Rairakhol in Sambalpur District.

## CHAPTER 36

### HOUSING

#### Housing schemes of Housing and Urban Development Department

36.1. The Housing and Urban Development Department are executing the different social housing schemes, namely, Low Income Group Housing Scheme, Middle Income Group Housing Scheme, Village Housing Project Scheme, Rental Housing Scheme, Land Acquisition and Development Scheme and Integrated Housing Scheme under the Minimum Needs Programme. This Department also gives assistance to different housing agencies towards Seed Capital and margin money for implementation of different housing schemes availing loan from financing agencies like HUDCO and Commercial Banks. For infrastructural development in the housing colonies established by such agencies grants in suitable cases are also given. The Orissa State Housing Board is also given grants for repayment of HUDCO liabilities towards execution of flood housing scheme. The Board is also given administrative grant for meeting the administrative expenses under flood housing scheme.

36.2. As against Plan ceiling of Rs. 600.00 lakhs fixed for Sixth Five-Year Plan under Housing, a total expenditure of Rs. 610.12 lakhs has been incurred during the first four years from 1980-81 to 1983-84. A budget provision of Rs. 150.00 lakhs which exists during the current year, i. e. 1984-85 will be spent to achieve the target fixed under different schemes. Thus the total expenditure during the Sixth Five Year Plan ending 1984-85 comes to Rs. 760.12 lakhs.

36.3. During the first four years of the Sixth Five-Year Plan ending 1983-84, 1358 houses under V. H. P., 286 under L. I. G. H., 151 houses under M. I. G. H. and 69 houses under Rental Housing Scheme, i.e. a total number of 1864 houses in all have been constructed. In addition to these, 300 houses under V. H. P., 34 houses under L. I. G. H., 54 houses under M. I. G. H. and 8 houses under Rental Housing Scheme, i.e., 396 houses in all are expected to be constructed during 1984-85.

36.4. The approach to the Seventh Five-Year Plan prepared by the Planning Commission lays emphasis in the Housing sector to the development of infrastructure primarily consisting of electrification, water supply, local roads, sewerage, garbage collections, etc. Accordingly, this has been kept in view while making necessary Plan provision during the Seventh Five-Year Plan and in the annual Plan of 1985-86. Also the importance of Housing has been given priority next to food during Seventh Five-Year Plan. To enable the housing agencies to take up large housing programmes the necessity of providing substantial amount of margin money has been envisaged while estimating provision for the Seventh Plan and the annual Plan of 1985-86. Accordingly, against Sixth Five-Year Plan outlay of Rs. 600.00 lakhs the proposed outlay during the Seventh Plan (1985-90) has been estimated at Rs. 2422.75 lakhs which is about four times outlay of the Sixth Plan. Briefly, the Seventh Plan proposed outlay are as follows:

Name of the Scheme/Projects	Proposed Outlay (Rs. in lakhs)
1. L. I. G. H. Scheme	150.00
2. M. I. G. H. Scheme	300.00
3. Rental Housing Scheme	250.00
4. L. A. & D. Scheme	20.00
5. V. H. P. Scheme	300.00
6. Administrative grant to Housing Board	25.00
7. Grants to Housing Agencies towards Seed Capital/Margin Money for Social Housing Schemes	500.00
8. Infrastructure Development for Housing Schemes	500.00
9. Grants to O. S. H. B. for repayment of HUDCO loan for Flood Housing Scheme	372.75
10. Housing Statistical Cell	5.00
Total	2422.75

36.5. It is proposed to provide a sum of Rs. 445.00 lakhs for the year 1985-86 for executing different social housing schemes and giving grants to the Housing agencies as detailed below:—

	(Rs. in lakhs)
(1) M. I. G. H.	50.00
(2) L. I. G. H.	25.00
(3) V. H. P.	50.00
(4) R. H. S.	30.00
(5) Land Acquisition & Development	3.00
(6) Administrative grant to Housing Board	5.00
(7) Grants towards Seed Capital/Margin Money	100.00
(8) Infrastructure Dev.	100.00
(9) Repayment of HUDCO loan	81.00
(10) Housing Statistical Cell	1.00
Total	445.00

36.6. As regards the M. I. G. H. Scheme, the budget provision for 1984-85 is Rs. 15.00 lakhs as against the demand of the Collectors amounting to Rs. 274.30 lakhs which includes both committed and fresh cases. There has been continuous demand for M. I. G. H. loan in different districts for construction of houses for private individuals. In view of this, it has been proposed to keep a budget provision of Rs. 50.00 lakhs during 1985-86.

36.7. As regards the L. I. G. H. Scheme, during 1984-85, there is a budget provision of Rs. 3.00 lakhs in 1984-85 against, the demand of Collectors to the tune of Rs. 87.77 lakhs. Here also there is pressing demand from the Collectors to release more funds for the L. I. G. H. loan and therefore, it has been proposed to keep a budget provision of Rs. 25.00 lakhs during 1985-86.

36.8. So far as V. H. P. scheme is concerned for construction of houses for economically weaker sections, the budget provision during the current year 1984-85 is Rs. 19.30 lakhs against the demand of the Collectors to the extent of about Rs. 56.00 lakhs. This is a very popular scheme in the rural areas and there has been demand from the different districts for distribution of this loan to the beneficiaries. In view of this, it has been proposed to keep a provision of Rs. 50.00 lakhs under V. H. P. scheme during 1985-86.

36.9. Under the Rental Housing Scheme, different types of houses are constructed and given on rental basis to Government employees. The percentage of satisfaction is very less and it has not been possible to cover a large number of areas particularly in the tribal districts where there is no scope of any Private rented house for the Government employees. During the current year, there is a provision of Rs. 12.90 lakhs for construction of house under the Rental Housing Scheme. It is necessary to provide more houses in different districts, Subdivisions and Tahasil headquarters to the Government employees who are going without Government quarters and therefore, it has been proposed to provide Rs. 30.00 lakhs during 1985-86. It has also been proposed to provide Rs. 3.00 lakhs as land acquisition and development cost for construction of these houses.

36.10. Administrative grant to Housing Board is given to defray the expenses on establishment cost of the staff and contingencies connected with Flood Housing Scheme. The Flood Housing Scheme of 1980 is continuing and some more houses are yet to be completed. It is expected that this operation will continue till end of June 1985. It has therefore, been proposed to keep a provision of Rs. 5.00 lakhs as administrative grant to Orissa State Housing Board for this purpose.

36-11. So far as Seed Capital and Margin money is concerned there is a budget provision of Rs. 1.00 lakh in 1984-85 which has been given to the Housing Board. The Housing Board Development Authorities and Improvement Trusts are constructing houses by availing HUDCO loan. HUDCO does not give 100% of the loan for construction of houses. The maximum is about 75%. The balance 25% is to be met by the State Government for the house constructing agencies. Due to the bad financial position of the Housing Board, Development Authorities and the Trusts, it has not been possible for them to provide quite a sizeable amount of margin money to avail of the HUDCO loan although these housing agencies have formulated a number of schemes. Implementation of the schemes are being delayed due to want of adequate margin money. In respect of the Housing Board, the requirement of the margin money as intimated to Government during 1984-85 for implementation of different housing schemes is as follows:—

1. Chandrasekharpur Housing Scheme	Rs. 297.73 lakhs
2. Berhampur	Rs. 17.57 lakhs
3. Balasore	Rs. 9.36 lakh
4. Chhend, Rourkela	Rs. 56.72 lakhs
5. Talcher	Rs. 20.45 lakhs
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Total	Rs. 401.88 lakhs
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The requirement of Bhubaneswar Development Authority for its Chandrasekharpur Composite Housing Scheme is Rs. 22.00 lakhs. The requirement of other Development Authorities and Trusts may also come to quite a sizeable amount. In view of this, it has been proposed to make a provision of Rs. 100.00 lakhs during the year 1985-86.

36-12. As regards grants for infrastructure development, it has been decided in principle by the State Government to provide infrastructure development free of cost for construction of houses for economically weaker sections. Besides, the thrust during the Seventh Plan is on implementation of the Site and Service Scheme for the economically weaker sections for which infrastructure development is also essential. During the current financial year there is a provision of only Rs. 10.00 lakhs which is utterly inadequate. The requirement of the Housing Board for infrastructure development is as follows:—

1. Chandrasekharpur E. W. S. Housing Scheme	Rs. 5.23 lakhs
2. Satyanagar Slum Dwellers Housing Scheme	Rs. 3.03 lakhs
3. Baramunda E. W. S. Housing Scheme	Rs. 3.84 lakhs
4. Kapilaprasad Phase-II Sewerage Scheme	Rs. 21.13 lakhs
5. Balasore Housing Scheme	Rs. 2.17 lakhs
6. Berhampur Housing Scheme	Rs. 1.41 lakhs
7. Talcher Housing Scheme	Rs. 3.01 lakhs
8. Chhend, Rourkela including Water Supply	Rs. 22.89 lakhs
9. Baramunda Phase-II	Rs. 20.00 lakhs
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Total	Rs. 82.71 lakhs
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36.13. The requirement of Bhubaneswar Development Authority is of the order of Rs. 170.00 lakhs. Besides, the cost of infrastructure development of Bidanasi triangle area at Cuttack has been estimated at Rs. 81.37 crores out of which the share of Cuttack Development Authority will be of the order of Rs. 37.43 crores. In view of this, a very small amount of Rs. 1.00 crore has been suggested as provision to be made during 1985-86.

36.14. The State Government are making budget provision every year for repayment of HUDCO loan incurred by the Housing Board for implementation of the Flood Housing Scheme, 1980. The requirement of funds for this purpose is of the order of Rs. 81.00 lakhs during 1985-86. For Housing statistical cell, Rs. 1.00 lakh will be necessary during the year 1985-86 for establishment cost, maintenance cost, etc. Thus, the total requirement of funds for 1985-86 is Rs. 445.00 lakhs.

#### **Construction Assistance to rural homesteadless persons (M. N. P.)**

36.15. Under the Minimum Needs Programme construction of houses in rural areas for the homesteadless persons through an Integrated Housing Scheme is being taken up during the Sixth Plan period, an outlay of Rs. 100.00 lakhs was earmarked under the scheme. As against this, a total expenditure of Rs. 178.45 lakhs has been incurred to construct 10,596 houses during the first four years, i.e., from 1980-81 to 1983-84. During the current financial year, Rs. 100.00 lakhs has been provided and it is expected that this amount will be spent to achieve the target of construction of 6,667 houses. Thus, during the Sixth Plan period, a total sum of Rs. 278.45 lakhs will be spent for construction of 17,263 houses. During the Seventh Plan period an outlay of Rs. 10,25.00 lakhs has been proposed to provide construction assistance to 68,333 houses. For the annual Plan of 1985-86 it is proposed to provide a sum of Rs. 125.00 lakhs for construction of 8,333 houses.

#### **State Capital Project**

##### **Residential Accommodation**

36.16. Since the capital at Bhubaneswar was started from scratch there were no private houses available in the locality. The employees have to be provided with governmental accommodation. The present strength of the government employees at Bhubaneswar is about 22,500. This is likely to go up further. At present, there are about 7,780 government residential quarters of different types in the capital. In order to meet the demands of the employees, it was felt that at least 7,500 new quarters are required to be built. But due to paucity of funds, the programme is proposed to be taken up in phases. During 1981-82 it was programmed to construct 388 quarters. As availability of funds were limited, only 152 quarters at Bhubaneswar and 8 quarters at Cuttack could be completed by 1983-84. Another set of 168 quarters were actually taken up for construction during 1983-84. For completion of these buildings, a sum of Rs. 20 lakhs will be required in 1985-86. Besides, this 6 'B' type, 6 'C' type and 30 'E' type quarters were taken up for construction in 1983-84. In order to complete these buildings, Rs. 23 lakhs will be required in 1985-86. During the current financial year, construction of 60 'F' type, 60 'E' type, 30 'D' type, 12 'C' type and 8 'B' type quarters at Bhubaneswar and 4 'B' and 4 'C' type quarters at Cuttack are being taken up. For completion of these buildings, Rs. 118 lakhs will be required during the Seventh Plan period and Rs. 45 lakhs is proposed to be utilised in 1985-86.

36.17. There is acute shortage of quarters both at Bhubaneswar and at Cuttack to accommodate the increased staff of different departments from time to time. Though, the requirement is more, considering the resources constraints, it is proposed to construct only 900 quarters during the Seventh Plan period with an outlay of Rs. 1,000 lakhs. It is proposed to take up 300 'F' type, 300 'E' type, 150 'D' type, 100 'C' type and 50 'B' type quarters during the Seventh Plan period.

36.18. Officers on transfer to Bhubaneswar are put to lot of inconvenience for want of proper accommodation on their arrival. Therefore, it is proposed to construct transit accommodation for 100 officers. Besides, accommodation for working women in the hostel for 50 women employees at Bhubaneswar has been proposed to be provided in the Seventh Plan.

### Office accommodation

36-19. In 1959, a new building was constructed to accommodate the State Secretariat at Bhubaneswar. It was intended to accommodate 2,000 employees. The number of employees now has been doubled, in the meantime. Therefore, expansion of the Secretariat building has become an urgent necessity. But, in spite of the fact that an annexe building has been constructed in the Secretariat during the Sixth Plan Period. There will be still shortage of space. Therefore, it is proposed to take up construction of a multi-storied building in the Secretariat during the Seventh Plan Period at a cost of Rs. 1.00 crore.

36-20. Though, one multi-storied building has been constructed for locating office of Heads of Departments, shortage of accommodation still persists. It now accommodates only 12 Heads of Departments. Other Heads of Departments, attached offices and staff are housed in temporary barracks and private rented buildings. During the Seventh Plan Period, it is proposed to construct a multi-storied building for the Heads of Departments at a cost of Rs. 3.00 crores.

36-21. Gopabandhu Academy Administration is a pioneering institution for imparting training to the administrative officers and other State Government officers. It has no building for proper training purposes. It is proposed to construct office building, hostel, auditorium, library, etc. for this institution. To start with, the minimum requirement of Rs. 40 lakhs has been suggested for the building of the academy during the Seventh Plan Period which includes Rs. 10 lakhs for 1985-86. Office building for Lokpal, expansion of the Assembly building with provision for canteen, bank building etc. within the Assembly premises, and facilities like canteen and cycle stand inside the Secretariat, are proposed to be included in the Seventh Plan.

### Roads

36-22. In view of the growing congestion within the existing capital limits, it is necessary that the roads are strengthened and widened. New roads will have to be laid out in the areas which will be developed for residential colonies, institutional and commercial purposes. During the Sixth Plan period doubling of main roads and expansion of important roads in the developing areas have been undertaken. These works are required to be completed during the Seventh Plan period.

### Sewerage and water supply

36-23. In order to tackle the house problem, the State Government have developed some areas in the capital for allotting land, where houses can be built by private persons. At present, plots have been allotted in Nayapalli and Chandrasekharapur area. For providing internal sewerage and water supply to the leased plots, a sum of Rs. 5.00 crores would be required during the Seventh Plan period and it is to be proposed to provide an allocation of Rs. 67 lakhs for the year 1985-86. Besides, water lines and sewerage lines are also to be provided to some of the areas inside the capital.

36-24. For development of different projects within the limits of Capital from time to time and for construction of a lake in Unit No. 9, private lands are proposed to be acquired. In some cases, it is also felt necessary to develop the undeveloped sites before their allocation for residential, institutional or commercial purposes. Simultaneously, with the development of capital projects, plantation and development of parks are necessary both for beautification of the city as well as for maintenance of ecological balance. Funds for the above purposes have been provided in a limited way, within the resources available.

36-25. For development of State capital project a total outlay of Rs. 30 crores has been proposed for the Seventh Plan Period which includes Rs. 3.50 crores for the year 1985-86. The requirement of funds

in the Seventh Plan and for the year 1985-86 in the on-going projects alone has been worked out to be Rs. 4.50 crores and Rs. 2.06 crores respectively. Work-wise break-up are given in the table below.

Table 36.1

(Rupees in lakhs)

Name of the work/item.	Outlay proposed for	
	Seventh Plan 1985-90	Annual plan 1985-86
<b>I. On-Going</b>		
<b>(a) Building</b>		
(i) Completion of incomplete Qrs. taken up during 1981-82.	20.00	19.35
(ii) Completion of 6 'B' Type, 6 'C' Type and 30 'E' Type Qrs.	23.00	11.90
(iii) Construction of 60 'F', 60 'E', 30 'D', 12 'C' and 8 'B' type Qrs. at Bhubaneswar and 4 'B' and 4 'C' type Qrs. at Cuttack.	118.00	45.00
(iv) Construction of building for Gopabandhu Acaademy of Administration.	40.00	10.00
(v) Construction of cycle shed and canteen building of the Secretariat	9.00	8.72
Sub-total --(a)	210.00	94.97
<b>(b) Roads and other Projects</b>		
(i) Doubling of Rajpath (including the rotaries)	35.00	34.92
(ii) Development of Periphery roads at Chandrasekharapur, Nayapalli & Sahidnagar.	75.00	8.48
(iii) Expansion of Bidyut Marga	50.00	15.00
(iv) Doubling of Sachlvalaya Marg	72.00	40.77
(v) Land Acquisition	10.00	10.00
(vi) Widening of road from Station Square to Guest House	2.00	1.86
Sub-total--(b)	244.00	111.03
Total--I	454.00	206.00
<b>II. New Projects</b>		
<b>(a) Building</b>		
(i) Construction of staff Qrs. at Bhubaneswar and Cuttack, special repairs to old Qrs., Establishment & Improvement of Markets at Bhubaneswar and Civil and Electrical Works (maintenance of office buildings at Bhubaneswar and Cuttack).	1,000.00	19.00
(ii) Multi-storied building for Heads of Department	300.00	15.00
(iii) Transit accommodation at Bhubaneswar for 100 Officers	30.00	..
(iv) Working Womens Hostel for 50 employees at Bhubaneswar	15.00	..
(v) Office of Lok Pal	20.00	..
(vi) Expansion of Assembly building & Constn. of canteen & bank building for O. L. A.	50.00	2.00
(vii) Multistoried building for the Secretariat.	100.00	..
Sub-total-(a)	1,515.00	36.00

Name of the work/item	(Rupees in lakhs)	
	Outlay proposed for	
	Seventh Plan 1985-90	Annual Plan 1985-86
<b>(B) Roads and other Projects</b>		
(i) Widening of roads, construction of new roads and improvement to roads and drains in New Capital including development of roads at R. R. L and Institute of Physics.	300.00	20.00
(ii) Covered drains and footpaths.	..	50.00
(iii) Land acquisition for lake and development of New Capital	..	100.00
(iv) Plantation and development of parks	..	50.00
(v) Development of undeveloped sites	..	31.00
(vi) Internal Sewerage and water supply to lease plots of New Capital	..	500.00
	<hr/>	
Sub-total—(b)	..	1,031.00
	<hr/>	
Total— II	..	2,546.00
	<hr/>	
Total- State Capital Project	..	3,000.00
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#### House Building Advance to Government Servants

36.26. Providing loans to Government servants for construction of residential buildings is a Plan Scheme executed by the Finance Department. The outlay originally approved for the Sixth Plan was Rs. 5 crores but the anticipated expenditure is Rs. 5.40 crores. Part advances in 2,435 cases have been sanctioned. In order to provide the balance amount in these cases, the requirement has been estimated at Rs. 5.60 crores. This amount may have to be provided during the Seventh Plan. Besides, the Departments have received 6,740 new applications in respect of which sanctions have not yet been made due to paucity of funds. The estimated requirement is Rs. 19.80 crores. It is proposed to provide an outlay of at least 50% of this during the Seventh Plan so that all applications received till date can be catered to within the Plan period. The total requirement under the scheme thus, would be Rs. 15.50 crores. An outlay of Rs. 1.75 crores has been proposed for the Annual Plan 1985-86.

## CHAPTER 37

### URBAN DEVELOPMENT

37.1. With increase in the population, progressive industrialisation and commercialisation of the economy, the process of urbanisation has been accelerated. The available infrastructural facilities and community services in urban areas are not adequate to subserve the needs of the growing urban population. While closing the gaps in different areas of Urban Development, Urban Planning during the Seventh Plan would also take into account the trends of growth in the respective areas and provide sufficient facilities particularly infrastructural, so that a balanced development becomes possible. To attend this objective, resources required for different schemes have been carefully worked out and realistic physical targets fixed for the Seventh Plan. The Urban Local Bodies, the Town planning organisation and other statutory and non-statutory agencies would provide the necessary organisational support to implement this plan. The schemes executed under this programme are briefly explained below.

#### Financial assistance to urban local bodies

37.2. *For remunerative Schemes*—Under the provision of Municipal Law, Urban Local Bodies (ULBs) are empowered to impose tax on holdings, and service taxes besides Octroi and fees for licenses etc. The income of the U. L. Bs from these sources has not been productive and elastic as expected in a situation of rising urbanisation. The growth in municipal revenue is 15% per year in the last decade, and therefore it is not possible to meet the recurring expenditure on Urban management from these sources. The income derived from service taxes by the U. L. Bs also fall far short of their actual expenditure for providing services like water supply and sanitation. The tax sources cover 55% or less of total income. So to help the U. L. Bs. in creating permanent assets and securing non-tax income, Government grants are sanctioned in their favour so as to enable them to undertake Remunerative-Schemes like market-stalls, pisciculture, lodging house, hotels, Bus-stand etc. As per the scheme, 25% to 40% of the estimated cost of the project is met by Government grants and the balance amount required for completion of the project is arranged by the U. L. Bs. either from their own resources or from advances/loans from beneficiaries/financing Institutions. It is expected that the U. L. Bs would thereby increase their non-tax revenue for financing different services and activities.

37.3. Against Plan outlay of Rs. 25 lakhs meant for expenditure under the scheme during Sixth Plan a total expenditure of Rs. 17.25 lakhs has been incurred during first four years of the plan period ending with 1983-84 towards financial assistance to U. L. Bs. for construction of 35 market centres. Besides, budget provision of Rs. 7 lakhs is available for 1984-85. It is anticipated that financial assistance would be given to the U. L. Bs for other 4 market complexes during the year. For the Seventh Five Year Plan (1985—90), an outlay of Rs. 500 lakhs is proposed to cover Government grant upto 40% of project cost for construction of 250 market centres at an estimated cost of Rs. 5 lakhs each. For 1985-86, an outlay of Rs. 15 lakhs is proposed towards Government grant for 8 market complexes.

37.4. *For Non-remunerative Scheme*—Most of the Urban Local Bodies have not developed adequate resources to finance their infrastructural overheads and community services like town-halls, office-buildings, staff quarters, drains, wells, Parks, burial ground, Library-cum-Reading Rooms, etc. Consequently, the State Government will continue to sanction grants in favour of the U. L. Bs. up to 50% of the estimated project cost for execution of such schemes in the interest of public welfare subject to matching contribution of the balance 50% by the U. L. Bs concerned.

37.5. Against provision of Rs. 30 lakhs for expenditure during Six Plan period towards construction of 8,000 Sq. metres of Parks, execution of 15 beautification schemes and 80 other schemes, a total expenditure of Rs. 9 lakhs has been incurred during first four years of the plan period ending with 1983-84 for construction of 8,000 sq. metres of Parks and 39 other schemes. Besides, provision of Rs. 1 lakh is also available under the Scheme for 1984-85. With this, it is anticipated that 200 Sq. metres of Parks would

be constructed and assistance would be given to the U. L. Bs. for 10 other Schemes. For the Seventh Plan period, an outlay of Rs. 100 lakhs is proposed to cover Government grant upto 50% of the project cost for construction of 23 town halls, 40 Drains, 80 electrifications and 10,000 Sq. metres of Parks. Out of that an outlay of Rs. 5 lacs is proposed for 1985-86 towards Government grant of 50% for construction of 2 Town-halls, 4 Drains and 500 Sq. metres of Park subject to matching contribution of balance 50% by the U. L. Bs concerned.

### **Town and Regional Planning**

37.6. *Preparation of Master Plans* According to 1981 Census, there are 108 cities/towns in Orissa. By the end of 1979-80 i.e. prior to Sixth Plan (1980-85), draft master plan for 40 cities/towns/areas were prepared and published including Konark which is not a town according to Census classification. The target for Sixth Plan was fixed to complete draft master plans for 18 towns. Out of that draft master plans for 6 towns have been completed by the end of 1983-84. It has been envisaged to complete preparation of 4 more draft master plans during 1984-85 bringing the total draft master plans to 10 (ten) during the sixth plan. The draft master plans of the balance 8 towns, the preparation of which is at different stages of completion, would spilled over to Seventh Plan. Against provision of Rs. 40 lakhs fixed for expenditure during Sixth Plan (1980-85) for preparation of Master Plans, a total expenditure of Rs. 30.16 lakhs has already been incurred by the end of 1983-84. Besides, budget provision of Rs. 10.48 lakhs is available under the scheme for 1984-85.

37.7. For Seventh Five-Year Plan (1985-90), an outlay of Rs. 351 lakhs is proposed under the Scheme. With this amount, it is proposed to prepare 26 draft master plans including 8 spilled over projects of Sixth Plan. For 1985-86, an allocation of Rs. 25 lakhs is proposed for the Scheme, Out of this, a sum of Rs. 12 lakhs would be spent for continuance of the existing 4 district town Planning Units located at Dhenkanal, Balasore, Balangir and Sundergarh. Besides, a sum of Rs. 3 lakhs is proposed to be utilised for creation of two new District Town Planning Units at Keonjhar and Bhawanipatna which will look after the orderly growth of urban settlements in the respective districts and will be engaged in preparing Master Plans for Anandapur and Champua in Keonjhar District, Khariar Road and Kesinga in Kalahandi District respectively. In addition to this, it is proposed to complete draft master plans for 6 towns (4 spilled over and 2 new towns) during that year. Further, it may be stated that the district Town Planning Units have not got their own office buildings although those offices are functioning since 1964 and the Town Planning Organisation has been made permanent. It has therefore been proposed to construct office buildings, in respect of two district Town Planning Units located at Balasore and Dhenkanal at the first instance, for which necessary land has already been alienated. For this, an outlay of Rs. 10 lakhs is proposed.

37.8. *Integrated Development of Small and Medium Towns*—The Scheme started in the State since 1979-80 as a Centrally Sponsored Plan Scheme. As per pattern of the scheme, 50% of the approved outlay on 'A' component schemes of each town like acquisition and development of land for residential scheme, traffic and transportation to subserve the settler and employment projects, development of mandies/markets, provision of industrial estates and other services and processing facilities is being provided by the Government of India as loan assistance. The balance 50% is being met out of the matching contribution provided by the State Government and/or implementing agencies. The matching contribution by the implementing agencies is being provided in the shape of land and/or cash.

37.9. During the Sixth Plan period (1980-85) six towns of the State viz., Puri, Sambalpur, Balasore, Rourkela Civil Township, Jeypore and Dhenkanal were put to operation under the scheme. As indicated by the Government of India, two more towns viz., Khurda and Jagatsinghpur are to be put to operation during 1984-85. Implementation of various components of the programme in the towns of Sambalpur, Balasore and Rourkela Civil Township will be completed by March 1985, and that in respect of remaining five towns viz., Puri, Jeypore, Dhenkanal, Khurda and Jagatsinghpur will spill over to Seventh Plan.

37.10 During the Seventh Plan period, 20 new towns of the State are proposed to be taken up for implementation of the scheme in a phased manner in addition to the aforesaid five spillover towns at an outlay of Rs. 2025 lakhs. In 1985-86, preparation of project reports for eight towns viz., Baripada, Balangir, Bhawanipatna, Phulbani, Jharsuguda, Paradeep, Angul and Jatni would be taken up. But the Scheme would be put to operation in three towns viz., Balangir, Baripada and Bhawanipatna in addition to implementation in five spilled over towns.

37.11. The State Government have received central loan assistance of Rs. 147.27 lakhs by the end of 1983-84 against the total requirement of Rs. 320 lakhs. In 1984-85, a sum of Rs. 70 lakhs is expected to be received from the Government of India towards their share. Thus, the total central loan assistance likely to be received during the Sixth Plan period (1980--85) comes to Rs. 217.27 lakhs. Hence, the balance amount of Rs. 102.73 lakhs is expected to be received from the Government of India during 1985-86 towards their share as 'Backlog' with which the incomplete schemes of the aforesaid five spilled over towns would be completed. Further, it is anticipated that the central loan assistance of Rs. 45 lakhs would also be available during 1985-86 towards implementation of the scheme in three new towns viz., Baripada, Balangir and Bhawanipatna during 1985-86. In other words, it is expected that Rs. 147.73 lakhs will be received from Government of India during 1985-86 towards their share under the Scheme. The Seventh Plan outlay towards 50% share of Government of India is also proposed at Rs. 1000 lakhs for implementation of the Scheme.

37.12. As regards matching share of State Government/Implementing Agencies, it may be stated that Rs. 110 lakhs was provided by the State Government in State Sector during the Sixth Plan period in addition to matching contribution made by the implementing agencies in shape of land and/or cash. Out of that, expenditure of Rs. 72.02 lakhs has been incurred by the end of 1983-84, including establishment expenses. Besides, provision of Rs. 21.62 lakhs is available during 1984-85. For Seventh Plan (1985-90) an outlay of Rs. 1025 lakhs is proposed towards matching share under the scheme which includes Rs. 25 lakhs towards establishment expenses. For 1985-86, an amount of Rs. 40 lakhs is also proposed for the purpose.

37.13. *Assistance to Improvement Trusts/S. P. As. / Development Authorities/Art Commission*--There are 22 special Planning Authorities, five Improvement Trusts and two Development Authorities and the Art Commission functioning in the State for enforcement of the provisions contained in the Orissa Town Planning and Improvement Trust Act, 1956, and the Orissa Development Authority Act, 1982. The responsibility of Planning Authorities in respect of Plan preparation and execution starts with the extension of the Act over the areas and continues even after implementation in two aspects viz., (i) regulatory enforcement and (ii) positive development through execution of the schemes within the framework of the master plan. The present financial condition of improvement Trusts/SPAs/Development Authorities is not sound enough to take up effective execution and development schemes. They are in dire need of financial assistance from Government. Although, there was no outlay earmarked for Sixth Plan, an expenditure of Rs. 16.56 lakhs has been incurred by the end of 1983-84. Provision of Rs. 11.78 lakhs is also available during 1984-85. For Seventh Plan (1985-90), an outlay of Rs. 200 lakhs is proposed under the scheme including Rs. 15 lakhs for 1985-86.

37.14. *Loan Assistance to Development Authorities*--At present two Development Authorities are functioning in the State, one at Bhubaneswar and the other at Cuttack. These two Development Authorities are High Power Corporate Bodies constituted under the provisions of Orissa Development Authority Act, 1982 since 1st September 1983. They are looking after enforcement of the planning laws and execution of different schemes like Housing Accommodation scheme, commercial scheme, improvement and widening of road etc. within their respective development areas.

37.15 During 1984-85, provision of Rs. 250 lakhs is available for sanction of loan assistance to the Development Authorities for implementation of various commercial and other schemes. A plan outlay of Rs. 30.00 lakhs is proposed for Seventh Plan (1985-90) towards seed capital of Development Authorities

to ensure flow of Institutional Finance for execution of various development schemes within the frame work of the respective master plans. For 1985-86, an amount of Rs. 300 lakhs is proposed under the scheme for the purpose.

*Environmental Improvement of Slums (M. N. P.)*

37-16. The Scheme aims at taking up works like drinking water-supply through tube-wells, storm water drains, community baths and latrines, roads and street light etc. in slum pockets to improve their environmental condition. The Scheme is being implemented in the State under M. N. P. It has been taken up originally in Cuttack City and extended to Bhubaneswar subsequently. It will also be extended to other towns in the State. Against an outlay of Rs. 100 lakhs to cover slum population of 37,000 during the Sixth Plan a total expenditure of Rs. 65.00 lakhs has been incurred during first four years of the plan period ending with 1983-84 covering slum population of 33,000. Besides, budget provision of Rs. 20 lakhs is available for the scheme during 1984-85 and it is anticipated that slum population of 14600 would be covered with this amount. Due to escalation in cost of materials and labour and dearth of resources, considerable difficulties are experienced in undertaking and completing the projects in time to benefit the desired number of slum population in various slum pockets.

37-17. For Seventh Five Year Plan (1985--90), an outlay of Rs. 300 lakhs is proposed for the scheme in M. N. P. Sector to cover slum population of 1.20 lakhs including Rs. 60 lakhs for 1985-86 to cover slum population of 23,600.



## CHAPTER-38

### INFORMATION AND PUBLICITY

38.1. It needs no emphasis that Information and Publicity plays a vital role for intensive operation of mass communication programmes. This is an important aspect of Social and Community Services, which aims at communicating the information about developmental plans, programmes and achievements, etc. through sophisticated publicity media like press, radio, photo, film, television and other electronic equipments. The objective of this sector is to form and educate the people and to evoke their co-operation for successful operation of development programme of Government. During the Sixth Five-Year Plan period it could be hardly possible to build up the infrastructure facilities to carry out the publicity programmes to a desired extent due to paucity of funds. Television being the latest and effective publicity technology, it is felt desirable to take full advantage of this media, in motivating the people and carrying them forward in the process of development and progress. Keeping these aspects in view, the programmes for the Seventh Five-Year Plan have been formulated with a total outlay of Rs. 613.00 lakhs.

#### **Direction and Administration -Execution of publicity Schemes**

38.2. The Scheme envisages reorganisation of the public relations set-up on the one hand and strengthening of the infrastructure on the other hand to make public relations approach more meaningful and effective. It is also intended to bridge the communication gap existing now and to reach the grass root level. Accordingly, restructuring of the organisation and infrastructure build up has been worked out in the proposal. On the restructuring side creation of three Joint Directors for three Zones proposed and one Joint Director post at headquarters, 16 Additional DIPRO posts and 314 Block Level Communicators have proposed. The fund requirement for implementing the scheme during the Seventh Plan period will be of the order of Rs. 109.00 lakhs out of which a sum of Rs. 31.60 lakhs will be required during the first year of the Plan, i.e., 1985-86. Fund requirement during the succeeding years will be Rs. 19.40 lakhs each approximately.

#### **Reorganisation of Exhibitions**

38.3. The scheme is designed to make the rural mass conscious about the developmental programmes, activities and progress thereof through photographic visuals etc. It is contemplated to equip the Public Relations Districts with adequate number of exhibits, frames, boards and other requirements so that the District Public Relations Offices could play effective role in carrying the Government message to the people at the grass root level. The present scheme envisages strengthening of the infrastructure at the District level and also to create three full-fledged Mobile Exhibition Units at the State headquarters and at the two Zones of Sambalpur and Berhampur. It is proposed to organise atleast three small exhibition per month regularly by each District Office and also to equip the Mobile Exhibition Units to ensure atleast 144 small exhibitions per unit per year. Special emphasis is laid on organisation of such exhibitions in the backward and under developed areas of the State. Each Mobile Exhibition Unit will have a set of staff comprising one Exhibition Organiser, one Designer-cum-Artist, one Carpenter, one Helper, one Driver and one Attendant. The unit will also have one big vehicle, exhibits, generating sets, tools and camp equipments. The outlay proposed for the scheme during the Seventh Plan period is Rs. 75.00 lakhs.

#### **Mobile Unit for Audio Visual Publicity**

38.4 The scheme envisages strengthening of the Audio Visual Publicity Units by way of purchasing new vehicles, generators, amplifiers, etc. Most of the existing equipments are obsolete and have out-lived their time period. The objective of the scheme is to ensure uninterrupted public contact in the rural area through audio visual media by way of projecting before the people the developmental programmes, anti-poverty measures and the 20-Point Programme activities with better and adequate number of equipments, a sense of confidence and enthusiasm could be created in the minds of the concerned officers. They can also cover more areas to create the required awareness in the people. Both replacement and new purchases of vehicles and equipments have been contemplated. Besides the regular publicity units, a new scheme titled as "Mobile Communication Unit" has

also been proposed. Under this scheme four self contained complete communication units are proposed to be organised and stationed at State headquarters and at the three Joint Director, Zones. These units will function as "ever ready" units and they will not only cover projection of Governmental activities, but also function as a base production unit and feed back centre in respect of success achieved and peoples reaction. It is proposed to provide Rs. 60.00 lakhs for these programmes in the Seventh Plan.

#### **Community Listening Scheme in Tribal Area**

38.5. High percentage of illiteracy and isolation for want of proper road communication are the two major constraints for effective communication with the people in the remote areas of the State. Without effective mass communication, developmental works get a set back. Though television media has a great impact on the audiences, it will take a long time to reach nooks and corners of the State, not only due to financial constraints but also due to want of electricity. It is therefore, proposed to continue the Community Listening Scheme during the Seventh Five-Year Plan. There are 50,000 inhabited villages out of which only 25% could be covered so far. Limiting the operation of the scheme in the tribal belts of Sundargarh, Phulbani, Koraput, Kalahandi, Mayurbhanj and Keonjhar districts only, it is proposed to install 1,000 community listening sets in each district. Cost of 1,000 C. I. set comes to Rs. 5.00 lakhs. Maintenance will be taken care of by the existing organisation.

#### **Community Viewing Scheme**

38.6. The object of the scheme is to maintain 260 V. H. F. T. V. sets installed in the district of Sambalpur and 400 D. R. S. T. V. sets installed in the districts of Bolangir and Dhenkanal during Seventh Five-Year Plan. The cost of maintenance of one V. H. F. T. V. set is approximately Rs. 750 per annum and it is about Rs. 2,800 per D. R. S. T. V. set per annum. The total cost of maintenance of these sets comes to Rs. 65.75 lakhs. Besides, the supervision works taken up during last year of the Sixth Plan would be continued for which Rs. 9.25 lakhs will be required aggregating the total requirement to Rs. 75.00 lakhs during Seventh Plan.

#### **Television News Production Programme**

38.7. With the massive expansion of T. V. Media, the State Government have decided to set up its own T. V. news production programme for proper exhibition of the Government activities through National Telecast. Government of India have impressed upon the State Government to set up their T. V. news production unit for feeding the Doordarshan. The State Government have already approved the scheme of expanding the T. V. news production programme. In accordance with that, T. V. equipments worth Rs. 8.41 lakhs have been purchased during the year 1983-84. Another unit is being purchased during the year 1984-85. All these units will be pressed into service for adequate coverage of the State's activities for proper projection through Doordarshan. As T. V. news production programme is artistic and creative nature of work, this is proposed to be handled through specialised persons trained in Poona Institute of Television. Unless the news is properly edited and fed to Doordarshan, it cannot get coverage in the Doordarshan. In view of this, in addition to expansion of production unit, one editing unit has to be set up at the State Headquarters. For this, the required equipments has to be installed. As the need for setting up editing unit is urgent, this is proposed to be set up during the first year of the Seventh Five-Year Plan, i.e., 1985-86. The requirement during Seventh Plan has been estimated to be Rs. 30.00 lakhs.

#### **Publicity through song and drama and seminars**

38.8. The object of this scheme is to carry effectively the message on different developmental programmes of the State Government to the rural people by direct group contact through traditional folk programmes like Palla, Daskathia, Drama, etc. To make this scheme effective, it is required to organise 36 such programmes in each district with an average payment of Rs. 300 per programme. Thus, the total requirement under this scheme will be Rs. 10.00 lakhs during Seventh Plan and Rs. 2.00 lakhs in 1985-86.

### **Extension and Improvement of Photo Publicity**

38-9. Photo Publicity helps in providing documentation of growth and social change in the State and provides visual support required in the activities of other media units like press (Newspapers and journals) Publications (Departmental Journals, Utkal Prasanga and Orissa Review, Bartaman, Ama Orissa) and to various Departments of Government and Doordarshan. Photographs are also supplied to renowned publishers and authors for illustration purpose. Copies of official photographs are also supplied to Government Departments, Corporations and to members of the public either free of charge or on payment as the case may be.

38-10. During the Seventh Plan period, the photo section needs to be further strengthened to meet its growing demand for proper projection of the State activities. The dimension of developmental activities in the districts have increased manifold. Due to inadequate staff, proper photographic documentation of the activities in the districts has not been made. Considering this, it is proposed to post a photographer with a camera in each district in a phased manner. The function of the photographer will be to attend to all functions sponsored by Government and take photographs of projects and schemes. Land and people, places of archival and historical importance, etc., for future record and use for various media. It has been proposed to post photographers in Sambalpur, Koraput and Mayurbhanj districts during the year 1984-85. Other districts will be covered during the Seventh Plan period. In order that the negatives exposed by the photographers in districts are properly indexed and documented for future use, these negatives will be preserved. For this purpose, it is proposed to set up three dark rooms, one in each Zonal Office with supporting equipment and staff during the Seventh Plan period. At present there is one dark room with no exclusive staff for the dark room at headquarters. The work-load in the dark room has increased threefold. In view of this, it is proposed to expand the existing dark room with latest equipment and staff during the Seventh Plan period.

38-11. With introduction of multi-colour off-set printing press in the country, most of the journals and national newspapers have switched on to printing of colour photographs for better visual effect. In view of this, the department proposes to install a laboratory for processing colour photography. Already some indigenous equipments have been procured, but these equipments will not produce better results. Imported equipments are proposed to be procured for this purpose in consultation with the Photo Division, Government of India. Keeping the above aspects in view, the Seventh Plan requirement has been assessed at Rs. 20.00 lakhs.

### **Display Advertisement on Plan and Development Activities**

38-12. The aim and object of the scheme are to release advertisements to newspapers and periodicals for conspicuous display of development activities for effective coverage. This scheme enables the communication process to bring to public notice the concepts, aims, objectives and achievements of various plan programmes and development activities in such a manner as to induce the people to participate in the main stream of national development and in attainment of national aims.

38-13. During the Sixth Five-Year Plan Rs. 82.79 lakhs would be spent to issue 2,758 advertisements regarding implementation of development schemes in the State. Besides, special supplements were sponsored on developmental activities in different newspapers. In the Seventh Five-Year Plan, it is proposed to implement the scheme in an effective way for which some gazetted and non-gazetted staff are required to be appointed for preparation of suitable texts, layouts, designs, etc., A sum of Rs 100.00 lakhs is required during the Seventh Five-Year Plan for release of 2,325 display advertisements and 13,600 classified advertisements.

### **Opening of Information Centres**

38-14. Information Centres are effective media to disseminate information not only on the plan, policies, programmes, development activities and achievements of the Government, but also on the life and culture of the State. Library and Reading Room facilities are provided to the general public in these information centres. At present there are only 36 information centres, which are functioning at Sub-divisional headquarters and at growth centres of the State. It is proposed to open ten information centres at Sub-divisional headquarters and at growth centres of the State. For maintenance and improvement of the existing thirty-six information centres alongwith ten information centres to be opened it is suggested to provide Rs. 37.00 lakhs during the Seventh Plan period. The expenditure to be incurred for opening of these information centres include] payment of salary to the staff as well as other miscellaneous expenses like purchase of books, newspapers, journals, radio and television sets and furniture, etc.

### **Production and purchase of films**

38-15. Film is one of the most powerful media through which message of Government and achievements made in various development programmes in the State can be carried out and conveyed to the mass. During the Sixth Plan period an amount of Rs. 18.24 lakhs has been provided. With this, 30 news reels and 4 documentary films on different developmental activities were produced and 21 full length and 25 documentary films were purchased for rural screening, to educate the people. An amount of Rs. 4.55 lakhs have been spent for furnishing and equipping the Preview-cum-Recording Theatre. Besides an amount of Rs. 4.01 lakhs has been provided for air-conditioning of the same theatre hall. During the Seventh Plan period, an amount of Rs. 90.00 lakhs is required for execution of the scheme.

### **Research and Reference Division**

38-16. Through this wing varieties of information are made available within easy reach of officials attached to different publicity media units, in the pattern of Research and Reference Division under Ministry of Information and Broadcasting of Government of India. Besides, information and data sought for by publishers and research scholars are also provided. During the Seventh Plan period it is proposed to strengthen the library attached to the wing with more books, newspapers and journals etc., appointment of trained librarian, indexing and cataloguing of reference books on scientific methods and purchase of furniture which are quite essential for the reference library. During the Sixth Plan period a sum of Rs. 3.66 lakhs has been spent mainly for purchase of reference books and towards payment of salary to the staff. During the Seventh Plan period, it is suggested to provide Rs. 6.00 lakhs for payment of salary to the staff and purchase of books, newspapers, magazines, and furnitures, etc.

### **Construction of Buildings for Office and Information Centre**

38-17. The object of the Scheme is to provide permanent accommodation for the Offices, Information Centres, Reading Room, etc., under Information and Public Relations Department for efficient and smooth functioning of the organisation. Most of these Offices are currently functioning in rented accommodation and as a result thereof, some Offices and Centres are located not in a conspicuous place of the towns and cities but in a corner, as a result, people intending to go to these places are not in a position to obtain desired results conveniently. During the Sixth Five Year Plan, funds were provided for completion of preview theatre at Bhubaneswar, remodelling of Deogarh Reading Room, purchase of ready-made building for accommodation of District Information and Public Relations Office at Puri, air-conditioning of Preview Theatre at Bhubaneswar, construction of Information Centre at Lion's Gate, Puri, construction of functional building of I. & P. R. Department and construction of permanent pavilion at Pragati Maidan, New Delhi.

38-18. The Construction work of pavilion at New Delhi and functional building of I. & P. R. Department will be completed during first year of Seventh Plan. There is a huge requirement of funds to build up the infrastructure for publicity. However, due to limitation of funds an outlay of Rs. 8.00 lakhs is proposed under the scheme for the Seventh Plan and 2.00 lakhs for the year 1985-86.

### **Organisation of Tele-Clubs**

38.19. A new measure proposed is the formation of tele-clubs in the 660 Community Viewing Centres in the districts of Sambalpur, Dhenkanal and Bolangir. This will call for creation of three posts of Zonal Organisers of Tele-Clubs. With phase-wise installation of more T. V. sets, creation of more posts of Zonal Organisers will be necessary. Fund requirement for organising seminars and towards salary of staff has been estimated to be Rs. 5.72 lakhs during the Seventh Plan.

### **Organisation of Radio Rural Forum**

38.20. The Objective of the Scheme is to organise people's involvement in developmental programmes by forming listening-cum-discussion-cum-action groups known as Radio Rural Forums. Many R. R. Fs. had been organised in the State and annual seminars were also conducted in the past with multi-media approach. But due to constraints on resources and also due to technological advancement in the field of mass communication, there was a set-back in proper functioning of the forums. The present scheme envisages intensification of forum activities especially in the backwards and under developed areas. At present there are two Regional Organisers for organising forum activities stationed at Sambalpur and Jeypore. But these Offices are not adequately staffed nor there is any vehicle with them to organise forum meetings and forum seminars in the rural areas. It is, therefore, proposed to strengthen these Offices by providing a vehicle each. The fund requirement for this will be to the tune of Rs. 2.76 lakhs.

38.21. For Radio Rural Forums there are at present five Zonal Organisers distributed in three A. I. R. Zones. With another A. I. R. Zone coming up at Keonjhar, there will be need for one more Zonal Organiser. It is proposed to organise 9 District Level R. R.F. seminars each year at the rate of 3 per R. R. F. Zone. Besides, one State Level Seminar is also proposed to be organised each year. The total Seventh Plan requirement will be of the order of Rs. 3.80 lakhs.

## CHAPTER 39

### LABOUR WELFARE AND CRAFTSMAN TRAINING

#### (A) Labour and Labour Welfare

39.1. With progressive industrialisation, there has been progressive concentration of labour force in industrial growth centres with concomitant problems relating to health, hygiene, education and other socio-economic needs. The welfare of the labour force is indispensable for maintaining production and sustained economic growth. There should be healthy participation of workers in decision making at different levels namely shop level, plant level and corporate level to ensure industrial harmony.

39.2. With a view to effectively implementing Labour Laws to foster maintenance of industrial peace and harmony, to ensure social security protection, safety, health and welfare of workmen and to channelise the employment opportunities to the unemployed persons in the State and to groom them in right direction for taking to self employment, the State Government have formulated the following schemes to be implemented under the three broad programmes such as (a) Labour Administration (b) Factories Inspection (c) Employment service under the head of Development 'Labour and Labour Welfare'.

39.3. Agricultural labour which forms bulk of labour force and other workers engaged in small trade and allied avocations are generally unorganised. Agricultural labour has so far not received the same level of attention as industrial labour. Ameliorative measures for the rural labour mainly agricultural labour are to be intensified. An effective strategy for development would require adequate appreciation of the problem which have hindered the progress of the rural workers. Besides, it is necessary to strengthen labour enforcement machinery particularly in the rural sector in order to effectively implement the provisions under the Minimum Wages Act in the agricultural sector, which is one item of the 20-Point Economic Programme.

39.4. The Labour Directorate administers the Inter State Migrant Workmen Act. It registers and grants license to the agents who draft migrant labour (commonly known as Dadan labour) to work outside the State. It also looks into the complaints received against the labour contractors alleging harrasment, torture, non-payment of wages and compensation, etc.

39.5. Special attention would be given to the welfare programmes for women workers. Implementation of the law relating to equal remuneration is intended to eliminate any discrimination in the matter of wage payments for work of same or similar nature. Special attention would also be devoted to the problems of child labour and prevention of their exploitation.

39.6. Social security measures have so far been confined to the Industrial employes leaving aside the workers in the unorganised sector which constitute nearly 80 per cent of the work force who are in disadvantageous position in the matter of wages and employment and have no social security and protection. It is imperative that these sectors receive special attention. Steps have been taken during the Sixth Five Year Plan period for organisation of unorganised rural labour.

39.7. Factories and Boilers Inspection and labour machinery would be suitably expanded and strengthened for ensuring safety. Health and welfare of workmen besides promoting industrial peace and harmony. One of the main objectives of the Seventh Plan is industrialisation in rural areas to eradicate un-employment among the vast rural population as also to reduce congestion in and around metropolitan centres. Such rapid industrialisation would bring with it associated occupational hazards and would throw on the factories and boiler inspection services a responsibility many times more than the present one. At present, the strength of the factories and boiler's inspection service is much below the requirement even on accepted yardstick basis. The manifold increased responsibilities as anticipated would aggravate the situation further. Another point that needs to be considered in the context is that the main bulk of the working force is drawn from the rural sector having little or grossly inadequate education and making itself extremely vulnerable to hazards. Industrial accidents

are thus on the increase. Concern has been expressed at the Centre and also in States to mitigate the sufferings of the victims and their dependants by bringing down the accidents. Besides, a sound safety programme would also maximise the production and productivity by preventing loss of skilled workmanship. It is, therefore, necessary that a suitable pre-employment safety education is imparted to workers followed by subsequent training on the job.

39.8. In the context of new-employment strategy and the plan objective, the employment service in the State needs to be expanded and the Employment Exchanges machinery strengthened for compiling employment information and other necessary data and undertaking surveys and studies in the field of employment and for maintaining and evaluating the progress that would be achieved. Hitherto, the activities of the employment service have mainly been directed towards registration and submission of jobseekers mostly in urban areas. With the strengthening of employment machinery, the employment service would be geared up to cater to the needs of semi-urban and rural areas and backward regions. It has also to take active role in implementing self employment schemes. Accordingly, different continuing and new schemes under employment service have been prepared for implementation during the Seventh Plan period.

39.9. The Sixth Plan outlay under the head of development Labour and Labour Welfare is Rs. 90 lakhs. The proposed tentative Seventh Plan outlay for 'Labour and Labour Welfare' is Rs. 227.00 lakhs. Achievements in the Sixth Plan and objectives and targets for the Seventh Plan and outlays proposed for different schemes are discussed in the following paragraphs.

#### **Labour Administration**

39.10. Notable achievements during Sixth Plan period are: (1) Two Zonal labour offices and 11 unit offices have been opened for effective enforcement of labour laws relating to minimum wages, beedi and cigar workers and motor transport workers which covers unorganised rural labour. (2) A cell was created for workers participation in management Labour Directorate. (3) Eleven Labour unit offices were opened to regulate the employment and service conditions of the employees engaged in shops and commercial establishments. (4) A publicity and propaganda wing was created in the Labour Directorate to educate and enlighten the labourers about their privileges under various labour laws. (5) An implementation and Evaluation wing was created in the Labour Directorate for implementation of the code of discipline, code of conduct, labour enactments, for arranging meetings of implementation committee at regular intervals, prompt preventive action to avert strikes and lock-outs. (6) Additional staff were created in the Labour Directorate for strengthening of statistical wing, registration of trade unions and workmen's compensation wing.

39.11. The State Labour Directorate has been assigned the dual responsibility of enforcing and administering 46 labour regulations on the one hand and maintenance of industrial harmony on the other. The task of ameliorating the lot of industrial labour working both in the organised and unorganised sectors has assumed much importance. The role of the Directorate and resultant work load in fixation and revision of minimum wages in respect of scheduled employments and ensuring payment of minimum wages fixed by Government and worker's participation in the management of industries have been increased manifold. In order to continue and to meet the additional work load following schemes will be implemented in the Seventh Plan.

39.12. As a spill over scheme of strengthening of Labour Directorate, Zonal Labour Offices at Angul and upgradation of Assistant Labour Office at Bhadrak will be continued. New schemes proposed to be implemented are (1) Strengthening of Labour Directorate—creation of one post of joint labour Commissioner in Labour Directorate and allied staff (2) Opening of three Zonal Labour Offices (3) Creation of Labour Divisions (4) Opening of 8 Labour unit offices for enforcement of various labour laws. (5) Construction of office building and staff quarters (6) Organisation of unorganised rural labour, holding of training camps (7) Enforcement of minimum wages act for agricultural labourers

(8) Strengthening of Industrial Tribunal, Establishment of one Labour Court at Jeypore, (9) Monitoring and Evaluation Cell for Industrial relation at the headquarters and (10) Monitoring and Evaluation Cell for 20-Point Programmes at the headquarters.

#### **Factories Inspection**

39-13. The Factories Inspectorate is entrusted with the enforcement of provisions under Factories and Boilers Acts, Rules and Regulations relating to safety health and welfare of the factory workers. Achievements during the Sixth Plan period include (1) Strengthening of Factories Inspectorate and purchase of vehicles for effective implementation of laws relating to factories and boilers, (2) Strengthening of safety cell. (3) Opening of permanent safety museum, (4) Establishment of industrial hygienic laboratory. (5) Institution of short term training camps for the factory workers and supervisors (such training are imparted through seminars, symposium, safety exhibition, audio-visual demonstration and organised competition) and (6) Construction programme under factories directorate.

39-14. To meet the present deficiency and the projected demands, revamping of the factory inspectorate is imperative. The following proposals are suggested for the Seventh Plan to meet only the barest minimum requirement. As part of the spill over scheme, provision for completion of incomplete buildings, external P. H. at Balasore and Rayagada would be made. New schemes proposed are strengthening of Factories and Boilers Directorate, safety education for workers and construction of buildings.

#### **Employment Service**

39-15. The employment service in Orissa is a social development organisation to cater to the needs of employment seekers and employers. It also renders vocational guidance to the unemployed personnel for their future carrier study and training etc. Besides, it collects employment data and conducts survey for formulation of manpower planning. In order to appreciate the matter in its proper perspective the following achievements have been made during the Sixth Plan period. (1) Opening of 11 employment sub-offices and 4 rural employment bureau at Jharsuguda, Pallahada, Patnagarh, Mukhiguda, Khatiguda, Umerkote, Gunupur, Athamallik, Hindol, Dharmgarh, Kiriburu, Narayanpatna, Bangiriposi, Thuamulrampur and Kuchinda. (2) Research and Statistical Cell at Sambalpur and Employment Directorate. (3) Job development and enforcement cell at Directorate. (4) Special employment exchange for physically handicapped persons at Bhubaneswar. (5) Strengthening of vocational guidance units at Balangir and Directorate and vocational guidance unit at Balasore. (6) Strengthening of E. M. I. Units at Directorate, Baripada, Phulbani, Sambalpur and Bhubaneswar. (7) Upgradation of 3 Employment sub-offices at Jharsuguda, Angul and Paradeep. (8) Strengthening of employment sub-offices at Jajpur, Kendrapara, Bargarh, Bhadrak, Nilgiri, Nowrangpur and Jeypore and (9) Construction of Departmental office buildings at Koraput, Phulbani and Balangir.

39-16. Over the successive Five-Year Plans, attempts were made to provide increased employment opportunities, but the unemployment continues to remain a baffling problem. The various expansion programmes, it may be admitted have practically made no appreciable impact on the employment situation. In contrast to this, there has been an over increasing number of persons from coming out of the educational institutions, it has become a hard task to provide them employment. With a view to ensuring the National Employment Service in Orissa develop into a well organised institution, implementation of the following new schemes during the Seventh Plan period is considered essential. Spill over schemes include continuance of Employment sub-offices at Athamallik, Hindol and Dharmgarh and continuance of V. G. unit at Balasore. New schemes are (1) Establishment of Inspection and Evaluation Cell in Employment Directorate. (2) Upgradation of District Employment Exchanges. (3) Provision of vehicle with drivers. (4) Construction of office buildings and staff quarters (5) Strengthening of V. G. Units at District Employment Exchanges for self employment. (6) Opening of special cell for physically handicapped persons, District Employment Exchange and (7) Strengthening of existing Employment Exchanges (E. M. I Unit) as per yardstick.



39-17. A sum of Rs. 227.00 lakhs has been proposed to be spent under the head of Development "Labour and Labour Welfare" during Seventh Plan period out of which sum of Rs. 59.59 lakhs and 32.91 lakhs have been earmarked to be spent under Tribal Sub-Plan areas and Schedule Caste Component Plan respectively. A sum of Rs. 40.00 lakhs has been proposed to be spent during the year 1985-86 under various schemes under this head of Development. Out of which sums of Rs. 7.87 lakhs and Rs. 2.40 lakhs have been proposed to be spent under Tribal Sub-Plan areas and Scheduled Caste Component Plan respectively.

#### **(B) Craftsman Training**

39-18. When relentless effort is made to accelerate production in every sphere in order to keep pace with the ever growing need, and the lure of an easy and comfortable life have embraced mankind, man's cry against the machine has become a thing of the past and both have become complementary to each other. Through the stepping stone of a dynamic Industrial Policy adopted during the Sixth Plan a new era has ushered in the industrial horizon of the State and a number of industries, small, large and medium have come into existence. To cater to the needs of these industrial units, production of skilled workers and technicians have become an inescapable necessity. So the Seventh Plan aims at getting up a strong base for production of accomplished mechanics and Craftsmen.

39-19. Before deriving into the Seventh Plan it is necessary to have a look back and the achievements made during the past years especially in the Sixth Plan period. Two new Industrial Training Institutes (I. T. Is.) in the backward districts of Balangir and Phulbani have been established. Popular trades were introduced in the existing I. T. Is. Tools and equipments were purchased to improve the standard of the training which no doubt has shown a positive trend, but still has miles to go. So instead of venturing into anything new save in the most needed sphere, the main target of the Seventh Plan is to make an improvement upon what we already have. With this emphasis in view, the programmes for the Seventh Plan have been formulated.

#### **Strengthening of existing I. T. Is.**

39-20. As mentioned earlier two new I. T. Is. were opened in Balangir and Phulbani during the Sixth Plan. It was contemplated to provide 224 seats in each of the above I. T. Is. Paucity of funds stood on the way of materialising the contemplation and as such 112 seats were introduced in Phulbani and 128 seats could be provided in Balangir. So, during the Seventh Plan, it is proposed to complete the incomplete work by raising the intake capacity of these two institutions to their full capacity of 224 seats each. It will require Rs. 84.79 lakhs during the Seventh Plan period, i.e., Rs. 31.77 lakhs will be spent for Balangir I. T. I. and Rs. 53.02 lakhs for the Phulbani I. T. I.

39-21. The existing eleven I. T. Is. also need immediate reorganisation so as to upgrade the standard of training. During the Sixth Plan, 26 units in popular trades like electrician, wireman, etc. were introduced resulting in creation of 26 posts which could not be filled up due to want of funds. Similarly, administrative approval for Rs. 56.66 lakhs have been accorded for construction of buildings, funds for which could not be provided during the Sixth Plan. A sum of Rs. 4.80 lakhs will also be needed for equipments. Thus, a total amount of Rs. 75.96 lakhs is proposed for this purpose during the Seventh Plan.

#### **Modernisation of I. T. Is. Workshops**

39-22. A bad workman quarrels with his tools. To put it in other way round bad tools do not produce good workman. Government of India are insisting upon raising the standard of the training imparted in the I. T. Is. and are also agreeable to bear 50% cost for the purpose. The tools and equipments, most of which have been purchased long before need improvement and modernisation mostly by replacements. It has been estimated that an amount of Rs. 50.00 lakhs will be necessary for this purpose.

### Introduction of New Trades

39-23. As mentioned earlier various types of Industries have come up in the State during the Sixth Plan and to cater to its need new trades like printing, electronics, building constructions etc. are proposed to be introduced during the Seventh Plan. The total cost estimated for this purpose is Rs. 25.00 lakhs which includes Rs. 3.00 lakhs for building, Rs. 17.00 lakhs for tools and equipments and Rs. 5.00 lakhs for recurring expenses.

### Participation of Women

39-24. In the 'Approach paper' for the Seventh Plan much stress has been laid upon equal participation of women in every sphere. To provide facility for the women the following programmes have been proposed in the Seventh Plan.

(i) A Government Tailoring Institute was started at Cuttack during 1962 as a 'Training-cum-Production Centre'. In due course, it was observed that it does not serve the desired purpose. So new trades like Stenography, draftsman, radio and television etc. have been introduced gradually. It is proposed to upgrade the said institute to an I. T. I. for women with an intake capacity of 160. The cost will be Rs. 27.00 lakhs.

(ii) In the tribal district of Sundergarh near Panposh a sizeable area with number of buildings thereon have been surrendered to the State Government by the TISCO. So, with the buildings already available, it is proposed to open a new I. T. I. for women at this place to benefit the tribal women. It will also remove the regional disparity of not having a single I. T. I. for women in the western part of the State. Funds required for this purpose have been calculated to be Rs. 35.00 lakhs.

(iii) During the last year of the Sixth Plan, a provision of Rs. 2.00 lakhs was made for women I. T. I. at Bhubaneswar. A beginning has been made and it is proposed to complete it during the Seventh Plan with an estimated cost of Rs. 60.61 lakhs.

### Grant-in-Aid

39-25. It was decided by the State Government to establish one Master Craftsman Training Institute at Panposh in a portion of the building complex handed over to State Government by TISCO. A Society with the Minister of State, Industries as the Chairman has already been registered for its management. It was proposed to provide grant-in-aid to the extent of Rs. 25 lakhs during Seventh Plan period. Further Government have already decided to provide grant-in-aid to a maximum of Rs. 2.00 lakhs to I. T. F. T., Kansbahal. So it is proposed to provide Rs. 10.00 lakhs to I. T. F. T. Kansbahal and Rs. 25.00 lakhs to M. C. T. I. Panposh as grant-in-aid during the Seventh Plan.

### Strengthening of Head Quarters Organisation

39-26. The State Council for Vocational Training is responsible for conducting the All-India Trade Test (A. I. T. T.) for craftsman (both institutional and private) twice in a year. They are also conducting A. I. T. T. for apprentices for both State Sector and Central Sector establishments twice in a year. In addition to the above, State level skill competition for the passed out Craftsman is also conducted. The total strength of such training will be about 4,500 every year. In view of the work-load, the existing staff strength is very much insufficient. So creation of additional posts of one Section Officer, one Senior Assistant and a Peon have been proposed to be created. The total recurring expenditure shall be Rs. 2.60 lakhs.

### Strengthening three zonal R. I. Centres at Choudwar, Aska and Rourkela

39-27. As provided in the Apprentices Act, 1961 and rules framed thereunder, it is a statutory obligation of the State Government to conduct R. I. classes for the apprentices engaged in Private and State Sector establishments. Since the arrangement of conducting R. I. classes in I. T. Is. beyond normal working hours did not bring the desired result, three zonal R. I. centres at Choudwar, Aska and Rourkela have been established

during the Sixth Plan period. Those three R. I. centres are at present imparting R. I. to 1,712 nos. of apprentices per year. Apart from the Assistant Apprenticeship Advisors, 25 numbers of apprentices including 12 numbers of diploma holders are at present working in the above R. I. centres on basis on *ad hoc* payment of a lump-sum amount of remuneration per month. The number of apprentices are increasing day by day and it is expected that these centres would impart related instructions to nearly 2,000 apprentices during the Seventh Plan period. It is therefore, proposed to strengthen these centres by posting regular diploma holder lecturers during the Seventh Plan period. Total requirement of funds for creating posts at least three lecturers to each of the centres and also to meet the cost of furnitures during the Seventh Plan period will be of the order of Rs. 10.00 lakhs.

#### **Basic Training Centre at Rourkela for Chemical Group of Trades**

39.28. A number of seats were lying vacant for want of basic training facilities in chemical group of trades. With a view to improving the engagement position, the S. A. C. recommended to establish a basic training centre at Rourkela for chemical group of trades utilising the physical facilities available in the S.T.I., Rourkela. Out of a requirement of eight staff members, six have been appointed and the rest two could not be taken during the Sixth Plan period for want of plan allocation. The total requirement to run this scheme full fledgedly during the Seventh Plan period comes to Rs. 1.75 lakhs.

#### **Re-structuring of Apprenticeship Organisation in the State**

39.29. Government of India are keen on re-structuring the staffing pattern of the apprenticeship training programme for proper supervision, inspection and monitoring of training for improvement of quality. They are desirous to couple the man-power assessment with the subsequent placement of apprentice in jobs. The Vocational training at +2 stage has also to be tackled for training and placement during the Seventh Plan period, which would increase the number of apprentices exorbitantly. This will result in extra load of work and some posts are to be created for this purpose. It has been estimated that Rs. 10.10 lakhs will be necessary on this account.

39.30. Thus the total outlay for the Seventh Plan has been proposed to be Rs. 4,17.81 lakhs. For the 1st year, i. e., 1985-86, an amount of Rs. 50.00 lakhs has been proposed.

#### **(C) Rehabilitation of Bonded Labour**

39.31. Bonded labour is a social evil. Besides, the evils of indignity and exploitation involved, the system of bonded labour has placed certain sections of the population in perpetual poverty, backwardness and dependence. The abolition of the system by a Central act called 'the Bonded Labour System (Abolition) Act, 1976' was introduced in the year 1975-76. In pursuance of this Act, efforts were taken for the social and economic rehabilitation of the freed bonded labourers by making available opportunities for gainful employment and self-employment.

39.32. The scheme of Rehabilitation of Bonded Labour which is a Centrally-sponsored Scheme, is being implemented in the State from 1978-79. The funding of the scheme is shared on 50:50 basis by the Centre and the State. In order to identify the Bonded Labour quickly and to accelerate the progress of rehabilitation, the Centrally-sponsored Scheme has been dovetailed with the State Government Scheme of Economic Rehabilitation of Rural Poor (E.R.R.P.).

39.33. Since, the inception of the scheme in the State, 35,703 bonded labourers have been identified upto 30th September 1984, out of which 21,980 have been rehabilitated. During the year 1983-84, only 6,366 bonded labourers have been rehabilitated against the target of 7,500 bonded labourers.

39.34. It may be mentioned here that practice of bonded labour is not confined only to the agricultural labourers in the tribal tracts of the State. The criteria for identification of Bonded Labourers contain the element of debt bondage and forced labour, the practice remains in the concealed form in all parts of the State, which was hitherto undetected. The State Government are aware of the findings of the joint survey of the

National Labourer Institute and the Gandhi Peace Foundation. According to their estimation there are about 3.5 lakhs bonded labourers in Orissa. Thus, the identification of bonded labourers and rehabilitation of freed bonded labourers under this scheme have become a continuous process. In view of this, it is contemplated to continue the Centrally sponsored Scheme of rehabilitation of bonded labourers in the Seventh Plan.

39.35. At present, the maximum permissible expenditure under the Centrally sponsored scheme is Rs. 4,000 per beneficiary. This amount is not adequate to provide gainful employment for rehabilitation of a freed bonded labourer. Hence, it is suggested that the Government of India may consider increasing the financial limit during the Seventh Plan period. Pending such an increase, the Seventh Plan proposals have been formulated on the basis of the existing financial limit.

39.36. During the Seventh Five Year Plan period, it is proposed to rehabilitate 37,500 beneficiaries under the scheme at the rate of 7,500 beneficiaries per year. Hence, the total requirement for this programme will be Rs. 15.00 crores out of which, the State Government share will be Rs. 7.50 crores. For the year 1985-86 an outlay of Rs.150.00 lakhs has been suggested for the State Plan with a target of rehabilitating 7,500 bonded labourers. In implementing the scheme, preference is given to Scheduled Tribe and Scheduled Caste and funds are allocated at the rate of 40 per cent each to Scheduled Caste and Scheduled Tribe and the remaining 20 per cent to others.

## CHAPTER 40

### DEVELOPMENT OF BACKWARD CLASSES

40.1. The first step in preparation of a Five-Year Plan is to spell out a broad approach for development in the Plan period, keeping in view the experience of the previous Plan, the response of the economy to the various developmental inputs and the general financial situation in the Country. While the general direction of our Plan effort has continued to be guided by the motto of "growth with social justice", the main thrust and emphasis have been changing from one Plan to another, depending on the pressing problems of the time.

40.2. During the Seventh Plan period, the Planning strategy for tribal development will continue to be a mix of beneficiary oriented and infrastructure and human resource development programmes. Special emphasis will be laid on development of such infrastructure schemes which will support the beneficiary oriented programmes like minor irrigation, soil and water conservation, co-operation, rural roads and Land reforms. In the social Service Sector, the emphasis will be on drinking water supply, general education, technical education and health. In the production sector the emphasis will be on agriculture, animal husbandry, dairy development, fisheries, small village and cottage industries.

40.3. Measures for protection of scheduled castes and scheduled tribes and other weaker sections from inequitable practices leading to alienation of their land will have to be strengthened. The strategy for the Special Component Plan for the development of Scheduled Castes aims at economic and educational development and bringing about improvement in their working and living conditions towards their social advancement. The pace and quality of its implementation need to be considerably geared up and intensified through (a) beneficiary oriented programmes to raise the incomes of those below the poverty line, (b) basti oriented schemes, (c) elimination of scavenging, (d) educational development and (e) administrative and personnel reforms.

40.4. In Orissa the Tribal sub-Plan approach has been conceived from the beginning of the Fifth Plan for bringing about transformation in the socio economic conditions of the tribals and other indigent people living in the sub-plan area. While promoting the economic well-being of the individual tribal and other indigent families, due emphasis is given for development of basic infrastructure which will pave the way for meaningful implementation of beneficiary oriented programmes. A total number of 118 Blocks out of a total of 314 C. D. Blocks in the State, each having 50 per cent or more of tribal population are covered by 21 Integrated Tribal Development Agencies (I. T. D. A.). Besides, for development of primitive tribes, 9 Micro Projects are also functioning in the tribal areas for the development of the Bondas, the Lanjia Sauras, the Kutia Kondhas, the Souras, the Dongria Kondhs, the Paudi Bhuyans and the Luangs. In addition Government of India have approved three Micro Projects for development of Lodhas of Mayurbhanj district who belong to an ex-criminal tribe, Bihors of Sundargarh district, and Didiyi's of Koraput district. While the action to implement the project for Lodhas has already been taken, the other two projects are likely to be grounded during this year 1984-85. Proposals for development of five more primitive tribes namely, Godabae, Jadia Kondh, Enenga Kolh, Koya and Paraja are pending for approval of Government of India.

40.5. The outlay for the Sixth Plan under State Plan for the Welfare of Backward Classes in Orissa was fixed at Rs. 1400.00 lakhs against which the annual allocations made have been of the order of Rs. 1366.93 lakhs. The anticipated expenditure may reach the level of Rs. 1340.00 lakhs. The main thrust in the Sixth Plan was on promotion of education and removal of social and economic disabilities of the Scheduled Castes and the Scheduled Tribes. This was because of the fact that while implementation of Tribal Sub-Plan and Scheduled Caste Component Plan was intended for improving the economic standard of the weaker sections, the State Plan had to lay stress on educational programmes.

40.6. The Working Group on the Welfare of Scheduled Castes, Scheduled Tribes and Other Backward Classes set up by the State Government for preparation of Seventh Plan have recommended for giving emphasis on the educational development of Scheduled Castes and Scheduled Tribes to increase their level of literacy since, inspite of all possible efforts made during the previous Plan periods, the percentage of literacy among these weaker sections has not improved appreciably. The percentage of literacy among the Scheduled Castes and Scheduled Tribes is 22.41 and 13.95 as against 34.23 among the general population according to 1981 Census. It is therefore evident that there is still a wide gap between the level of literacy among the weaker sections and the general population. More concentrated efforts are required to be made in the Seventh Plan to bridge this gap. Approach to the Seventh Five-Year Plan 1985-90 as endorsed by the National Development Council lays emphasis on covering all the adult illiterates in the age group of 15—35 years by 1990 and full provision has to be made for total eradication of illiteracy in the social service sector. This may therefore be treated as an additive to the views expressed by the Working Group in respect of emphasis on educational development of Scheduled Castes and Scheduled Tribes to increase their level of literacy. Adequate care has been taken for giving priority to important ongoing programme/projects which may not suffer in the event of reduction in Plan size. In pursuance of the recommendations of the Working Group and the guide lines of the Planning Commission funds required for completion of buildings of educational institutions taken up in the Sixth Plan have been provided as spill-over expenditure in the Seventh Plan.

40.7. Considering the importance of this sector, a reasonable outlay of Rs. 2500.00 lakhs has been suggested for the Seventh Plan. Out of this, Rs. 500.00 lakhs has been proposed for the year 1985-86. Keeping the broad objective, i. e., priority on educational development of Scheduled Castes and Scheduled Tribes, in view, 70 per cent of the estimate which works out to Rs. 1750.00 lakhs has been earmarked for education as against 64 per cent, i. e., Rs. 896.17 lakhs in the Sixth Plan. The break-up of Rs. 2500.00 lakhs and Rs. 500.00 lakhs for the Seventh Plan and annual Plan 1985-86 respectively is given below :—

	(Rupees in lakhs)	
	Seventh Plan	Annual Plan 1985-86
(i) Restructuring of administration	107.50	22.40
(ii) Educational development	1,750.00	319.50
(iii) Other schemes	642.50	158.10
Total	2,500.00	500.00

40.8. The programme for restructuring of administration includes bifurcation of Cuttack district into two Welfare districts, creation of 314 Class IV posts to assist the Welfare Extension Officers, replacement of 5 diesel jeeps, strengthening of Statistical cell of the H. & T. W. Department, creation of a separate section for maintenance of C. C. Rolls of the employees working in headquarters as well as in the field.

40.9. The important educational programmes for which funds have been proposed include continuance of the schemes of awarding pre-matric stipends, distribution of nationalised text books, completion of incomplete hostels and school buildings, continuance of High Schools, Ashram Schools and residential Sevashrams, upgradation of L. P. /U. P. Sevashrams to residential Sevashrams, drinking water facilities in residential schools, electrification of educational institutions, special repair to educational institutions and maintenance of low cost hostels for primary students. New programmes suggested are supply of science apparatus, beds and utensils to residential schools, supply of library books, conversion of residential Sevashrams and Ashram Schools to Ashram Schools and High Schools respectively. The proposed outlay in respect of each of the aforesaid schemes both for the Seventh Plan and Annual Plan, 1985-86 has been shown in the Statement GN 2.

40-10. Pre-matric scholarships/stipend are being given to the students of Scheduled Castes and Scheduled Tribes in M. E. Schools and High Schools. During the first four years of the Sixth Plan, 2,16,967 Scheduled Caste and Scheduled Tribe students were awarded such scholarship stipends. During 1984-85, 90,431 Scheduled Caste and Scheduled Tribe students are likely to be benefitted through the award of scholarships stipends. It has been targeted to cover 5,42,731 Scheduled Caste and Scheduled Tribe students during the Seventh Plan period. In the first year, i. e., in 1985-86, it is proposed to cover 95,220 students. Other incentives are also given to the Scheduled Caste and Scheduled Tribe students in the shape of boarding facilities, grants, free supply of books and stationeries and uniform. During the first four years of the Sixth Plan period, 11,73,045 students belonging to Scheduled Caste and Scheduled Tribe were provided with such incentives. It is likely that 2,26,669 students would be benefitted through such incentives in 1984-85. It has been proposed to provide the incentives like distribution of books and stationeries, etc. to 10 lakh students during the Seventh Plan period besides providing boarding facilities for 64,280 students. In the first year, the target is to provide boarding facilities for 11110 Scheduled Caste and Scheduled Tribe students and to provide other incentives to about 2 lakh students. During the Sixth Plan period, 28 Ashram Schools have been started against the target of 20 Schools. It is proposed to start 18 new Ashram Schools during the Seventh Plan period. In the first year of the Seventh Plan 6 new Ashram Schools will be added, besides maintaining the 28 Schools already started. With a view to reducing the high rate of drop outs at the primary levels, it has been decided to construct 1200 low cost hostels at the rate of one hostel for each Grama Panchayat situated in the Tribal Sub-Plan area in a phased manner. Up to 1983-84, 835 residential hostels have been started, 80 more would be covered during 1984-85. During the Seventh Plan period, it is proposed to start 186 such residential hostels for the primary schools. The target for the year 1985-86 has been fixed at 62 hostels.

40-11. The other Welfare schemes include ongoing programmes like electrification of Scheduled Caste hamlets, poultry farm at State headquarters housing facilities to Scheduled Castes engaged in unclean occupation, compensation to victims of atrocities, legal-aid, managerial subsidy and share capital to Scheduled Caste and STDFCC enforcement of PCR Act and Research and Training. The only new programme suggested under this head of development is the "Housing facilities for Scheduled Castes and Scheduled Tribes" for which the Housing and Urban Development Department have drawn up a scheme envisaging construction of a house at an estimated cost of Rs. 5,000. Out of this amount, 50 per cent will be loan and 50 per cent be paid as subsidy. It is proposed to introduce this scheme during the Seventh Plan period and to construct houses for 140 Scheduled Caste and 140 Scheduled Tribe families every year. The requirement of funds for payment of subsidy during 7th Plan and Annual Plan, 1985-86 is Rs. 35.00 lakhs and Rs. 7.00 lakhs respectively.

40-12. The physical targets and achievements in respect of some selected schemes have been shown in the Statement GN-3. The Statement GN-6 shows the outlays and expenditure of the Centrally Sponsored Schemes (Central share). The total central share for these schemes has been worked out at Rs. 683.50 lakhs for the Seventh Plan and Rs. 161.20 lakhs for 1985-86.

40-13. The flow from State Plan to Tribal Sub-Plan during the Seventh Plan and Annual Plan (1985-86) has been estimated at Rs. 864.90 lakhs and Rs. 159.95 lakhs respectively representing 34.6 per cent and 32 percent. The details have been shown in the Statement TSP-1. The Statement TSP-2 shows the physical targets fixed and achievements made out of the State Plan schemes for the tribal sub-plan area.

## CHAPTER 41

### SOCIAL WELFARE

#### (a) Child Welfare

41.1. For smooth implementation of Special Nutrition Programme in balwadies in an integrated manner in rural areas, construction of buildings has been taken up since 1979-80. Till the end of 1984-85, it is expected that 365 buildings will be ready for this purpose, out of which 150 buildings were taken up during 1979-80 and the rest 215 buildings in the Sixth Plan period. During the Seventh Plan period, it is proposed to take up 100 more buildings in the rural areas. For construction of these buildings a sum of Rs. 60.00 lakhs will be required @ Rs. 0.60 lakh per building. During 1985-86 a sum of Rs. 8.49 lakhs is proposed for construction of buildings. These buildings will be utilised as field headquarters of the L. S. E. O., L. V. L. W., supervisors of I. C. D. S. Projects, L. H. V and A. N. Ms. from where they will undertake supervision of field works.

41.2. Child Welfare has to occupy prominent place in Social Welfare Plan. Balwadi Centres are opened in rural areas and Creche Centres in urban areas for the upliftment of children of working women. The scheme provides basic amenities to a child which is necessary for its physical, psychological and social development. The pre-school children are the most vulnerable and exacting segment of the total population from all counts nutritional, health care, socialisation and education. Aim is to open as many as Balwadied in 314 Blocks and Creches in Municipality / N.A.C. areas.

41.3. By the end of Sixth Plan period, 300 Balwadi Centres and 26 Creche Centres have been running. It is proposed to open 250 Balwadi Centres and 60 Creche Centres during the Seventh Plan period. For opening of these centres a sum of Rs. 20.15 lakhs will be required during the Seventh Plan period. During 1985-86 a sum of Rs. 1.97 lakhs is proposed to open 50 Balwadi and 6 Creche Centres.

41.4. A Centrally Sponsored Scheme for welfare of children in need of care and protection is being implemented in the State. Under the scheme grant is sanctioned in favour of Voluntary Organisations for maintenance of orphan / destitute children. Government grant is limited to 90% of the total estimated cost shared by Government of India and State Government on 50 : 50 basis and the remaining 10% is borne by Voluntary Organisation. The grant is released as per the rates prescribed by Government of India. Basing on the rates effective from 1st April, 1984 the provision has been made for the Seventh Plan period. During 1984-85, 810 children are being maintained. Funds required for maintenance of these children has been provided under Non-Plan as plan maintenance. In the Seventh Plan, it is proposed to maintain 500 additional children and to take-up construction of 20 Homes, Rs. 13.50 lakhs will be required representing State share. Thus a sum of Rs. 28.71 lakhs will be required during the Seventh Plan period, representing State share of expenditure. During 1985-86, a sum of Rs. 1.34 lakhs will be required for maintenance of 150 children and Rs. 2.70 lakhs for construction of four Homes, representing State share of expenditure.

#### I. C. D. S. Scheme

41.5. The national policy for children recognises the supreme importance of children programme in development of human resources which are vital for social and economic progress. The ICDS programme aims at providing an integrated package of services of health, nutrition and pre-school education to children and women in the most backward rural, tribal and urban slum localities right at their door steps. In order to give definite focus to the development of services for



early childhood, package of services containing, supplementary nutrition, immunisation, health check up, referral services, nutrition and health Services and non-formal education is provided under the scheme. These services are being supplemented with functional literacy for adult women.

41.6. During the Sixth Five-Year Plan it was proposed to open four ICDS projects under State Plan. But due to paucity of funds only one ICDS project could be opened under State Plan during 1981-82 and is continuing. It is found difficult to maintain the project with limited fund provided by the State Government. Moreover, it is also not possible to keep parity with the Central Sector projects. Hence, it was felt necessary to transfer the existing State Sector project to the Central Sector. Accordingly correspondences were made with Government of India and they have agreed to take over the project from 1st November 1984.

41.7. Regarding opening of ICDS projects under Central Plan during Seventh Five-Year Plan period, it may be mentioned here that it was a proposal in the Social Welfare Ministers and Secretaries Conference held on 27-28 September 1984 that 2,000 ICDS projects will be opened during Seventh Five-Year Plan throughout the Country. If 2,000 ICDS Projects will be opened during Seventh Plan in the country, our State will get 134 ICDS projects as proposed in the Conference. Out of which, 78 projects will be implemented in rural areas, 55 projects in tribal areas and one project in the urban slum localities. It is also proposed that 27 ICDS projects will be sanctioned during 1985-86. Besides 44 ICDS projects sanctioned during Sixth Plan will also continue during Seventh Plan. Hence for opening of 134 ICDS projects during Seventh Plan and for maintenance of 44 existing projects a total sum of Rs. 2,807.60 lakhs will be required in the Central Sector Plan.

41.8. Further, the continuance of the FLAW programme in 28 ICDS projects during Seventh Plan, a sum of Rs. 170.00 lakhs will be required and for conducting training of Anganwadi Workers and Supervisors of the new projects during Seventh Plan period a sum of Rs. 189.43 lakhs will be required.

#### (b) Women Welfare

41.9. Setting up of women training centre for vocational training and rehabilitation of women in distress (Destitute Home), is a Centrally Sponsored Scheme, implemented in the State under the State Plan and Centrally Sponsored Plan through the voluntary organisation / institutions. The voluntary organisation/institution are allowed to set up women training centre (Destitute Home) for welfare of women. The scheme is subdivided into three categories as (a) Destitute Home, (b) Protective Home, (c) Destitute Home under Central Sponsored Scheme.

41.10. The aim and objective of the Destitute Home Scheme is to provide vocational training for a period of six months to the women in distress in tailoring, embroidery, fibre works, etc. to enable themselves supporting. During the Sixth Plan period, 4 Women's Training Centre (Destitute Home) have been opened and now continued in the State under voluntary organisation by utilising funds of Rs. 1.20 lakhs per year for taking up one batch training consisting 25 women for a period of six months under the State Plan. During the Sixth Plan period 427 destitute women have benefitted under the scheme. The above scheme and funds of Rs. 1.60 lakhs earmarked for maintenance for Destitute Home already set up has been reflected in the Non-Plan side for expenditure during 1985-86. This amount is meant for maintenance grant of 4 destitute Home for period of six months and one Protective Home for period of one year during 1985-86 which is insufficient for two batches trainees. The duration of training covers only 6 months and the funds required for the above training, has been reflected in Non-Plan side.

41.11. To maintain the home for one year, it has now been proposed to continue the training programme for rest 6 months and as such an amount of Rs. 1.22 lakhs is required. It is now proposed that this extra amount of Rs. 1.22 lakhs should be provided from the Plan side to implement this new programme. Besides, it is observed that the growth rate of destitutes is

quite high in Orissa. To combat such a situation in the State, it is now proposed to open 2 new centres during the Seventh Plan period and for opening the above 2 centres an amount of Rs. 1.78 lakhs and their maintenance and maintenance of existing 4 centres for six months comes to Rs. 10.00 lakhs which will be required during the Seventh Plan to rehabilitate 775 destitutes.

41-12. For the year 1985-86, it has been aimed to open one centre to rehabilitate destitute women. As such, an amount of Rs 0.90 lakh is proposed for expenditure in the Plan side for the new centre. Adding the requirement of Rs. 1.22 lakhs for maintenance of 4 existing centres for six months more, the total requirement under the scheme for the year 1985-86 comes to Rs 2.12 lakhs and 150 women will be rehabilitate under the Plan side.

41-13. There is one Protective Home running in the State set up during the Sixth Plan period for rehabilitating 10 women per year, rescued by the police from immoral traffic. The maintenance cost of Rs 1.60 lakhs of the said Home has already been reflected in Non-Plan side. The growth rate of destitutes is on the increase. To cater to the needs of the hour and to combat the destitute problems of the State, it has been proposed to open a new protective Home with a capacity of 20 inmates. For the purpose, the requirement of funds for the year 1985-86 has been estimated at Rs. 1.36 lakhs both for opening and maintenance. During the second year of the Seventh Plan two more centres would be opened and these two centres would be maintained in the Seventh Plan. For opening and maintenance of these centres, Rs. 5.58 lakhs is required in the Seventh Plan.

41-14. The aim of the scheme Training Centre for rehabilitation of women in distress is to rehabilitate the women in distress through the residential care and vocational training for a period of six months. The scheme is financed by the State Government, Central Government and Voluntary Organisation on the ratio of 45:45:10. Under this head, provision is made in the State Plan representing the State share only. During the Sixth Plan period, two Houses (K. G. N. M.) at Cuttack and Paikmal of Sambalpur districts are running with a provision of Rs. 1.20 lakhs (Both State share and Centre share) per annum with an aim to rehabilitate 260 destitute women. A sum of Rs. 7.26 lakhs has been proposed for expenditure during the Seventh Plan period with an aim to rehabilitate 1520 destitute women under the scheme. It has been proposed to open two new centres during the Seventh Plan period to rehabilitate 1520 women more during the period. The requirement of funds for opening grants, and maintenance charges of the above two centres comes to Rs. 7.26 for the plan period towards State share only. For the year, 1985-86, requirement of funds for maintenance of the existing two centres and for opening one Centre has been estimated at Rs. 1.08 lakhs for the State share only.

41-15. Associated Women Workers Training Scheme has been started with a view to acquainting the rural women with schemes and programmes undertaken for welfare of women and children. Training camps are organised at Block levels to impart training to the active members of the Mahila Samitis including President and Secretary. During the Sixth Plan period a sum of Rs. 7.90 lakhs has been provided for implementation of the scheme and with an expenditure of Rs. 4.57 lakhs, 1,458 women have been trained so far under the scheme. In order to implement the scheme more vigorously during the Seventh Plan period an amount of Rs. 5.00 lakhs has been proposed. For the year 1985-86 an amount of Rs. 1.80 lakhs have been proposed for continuance of the scheme under the State Plan.

41-16. The objective of the scheme "Sale Centre for Mahila Samiti Products" is to provide marketing facilities for the products of prepared by the women members in rural areas. During the Sixth Plan period 10 centres have been established in the State through the Government effort and Voluntary Organisations. For the maintenance of the 10 centres, already opened, proposal for provision of funds have been submitted separately under Non-Plan sector. It is proposed to open eight more centres

during the Seventh Plan period for which Rs. 5.51 lakhs is required. Accordingly, it is proposed to open three new sale centres during the year 1985-86 for which the requirement of funds would be of order of Rs. 1.20 lakhs.

41-17. Income Generating Scheme for Mahila Samitis has been started to develop social and economic condition of the rural women providing them in the productive schemes for self support which will ensure significant and productive supplementary income as a means of livelihood at the advent of industries, modern marketing system, cottage industries, and crafts, etc. In Orissa, there are 15,000 Mahila Samities functioning in 314 Blocks. They should be given financial assistance for income generating activities. The sum of Rs. 4.16 lakhs provided during the Sixth Plan is quite insufficient to bring all Mahila Samities under the scheme. For the Seventh Plan, an amount of Rs. 8.00 lakhs has been proposed to cover up 160 Mahila Samities. An amount of Rs. 2.00 lakhs has been proposed for expenditure during 1985-86 to cover up 40 Mahila Samitis and each Mahila Samiti will be given Rs. 5,000 as grants-in-aid.

41-18. Dowry Prohibition and Legal Aid Scheme is implemented to help the women in need of defence and protection. The women on being divorced or on being widow, in order to assert their right to their husbands property for their maintenance, they are in utter need of funds. The State Government also have taken up anti-dowry campaign programme in the State. Provision under the scheme is required to give legal aid to needy women to establish their right in competent legal forum. For the year 1985-86, a sum of Rs. 1.50 lakhs is proposed to take up anti-dowry campaign programme through Schools/Colleges and voluntary organisation as well as to extend legal aid to the needy women.

41-19. To provide the working women with accommodation facilities, the State Government have proposed to construct five working women hostels under a Centrally Sponsored Scheme on 50:50 sharing basis and the requirement of funds for the State share for the Plan period has been estimated at Rs. 15.00 lakhs. As against requirement of Rs. 15.00 lakhs during the Plan, for the year 1985-86, a sum of Rs. 1.59 lakhs has been proposed for expenditure in the State Plan.

41-20. Mahila Samitis have been organised in all the Blocks for around development of rural women and schemes/programmes are being implemented through the Mahila Samitis, for the welfare of women and children like Nutrition, Feeding, Balwadi, Creche, Family Welfare, Health Care, Small Savings, Storage of grains and Income Generating activities, etc. With a view to encouraging Mahila Samities for such activities, incentive awards are being given to the best Mahila Samities of the Block under a scheme. During the Sixth Plan period, an amount of Rs. 3.70 lakhs has been spent and 1,445 Mahila Samities have been awarded.

41-21. An amount of Rs.5.00 lakhs has been proposed for expenditure during the Seventh Plan period to give 500 awards @ Rs. 1,000 each. For the year 1985-86 an amount of Rs. 1.40 lakhs is proposed for expenditure to give 140 awards.

41-22. Under the scheme, grants to voluntary organisation, financial assistance is given to the voluntary organisations who are involved in Women and Children Welfare Programmes. Under the scheme, a sum of Rs. 1.00 lakh has been provided during the year 1984-85. It has been proposed that a sum of Rs. 5.35 lakhs will be required during the Seventh Plan period. An amount of Rs. 1.35 lakhs is proposed for expenditure during the year 1985-86.

#### **Strengthening of Social Welfare Directorate**

41-23. During the Sixth Plan period 5 posts (One Dy. Director-cum-Dy. Secretary, one Assistant Director-cum-Assistant Secretary and 3 three posts of Peon) have been created for supervision of Women and Children Welfare Schemes. For continuance of the above posts during the Seventh Plan period, funds have been proposed in the Non-Plan head. During the Seventh Plan period, there is a proposal to strengthen the Social Welfare Directorate by creating four more posts (One Director of Social

Welfare, two posts of Peon and one post of Stenographer). The requirement for the purpose during the Seventh Plan period has been calculated at Rs. 5.00 lakhs. As such an amount of Rs. 1.40 lakhs has been proposed for expenditure during 1985-86.

**(c) Handicapped Welfare**

41-24. According 1981 Census, the disabled population of totally deaf, totally blind and totally crippled has been estimated at 61,298, of which 27,625 are blind, 19,911 crippled and 13,762 deaf. Though 1981 Census has taken account of the totally disabled persons, the partially deaf, the partially blind and the partially orthopaedically handicapped have been lost sight of. Taking into account of different categories of disabled persons both partial and total, the number of disabled persons who would need special care in education, training, employment and provision of other benefits/concessions for bringing them to the mainstream of the society is enormous. Efforts are being made to take up different activities for the welfare of the disabled in a systematic manner from 1976 onwards when the programme was handled by the Social Welfare Wing of C. D. & R. R. Department. But due to the limited resources in Plan allocation, the activities could not make much head ways during the Sixth Plan period though an momentum has been created. Taking into consideration of the achievement of the Sixth Plan period and with a hope of allocation of more funds for the welfare of the handicapped, the weaker section of the society, the formulation of Seventh Plan has been made for continued activities and on some new schemes.

41-25. Under the scheme assistance to voluntary organisations for the education of the disabled, voluntary organisations are given grant-in-aid to promote the education of the disabled. During the Sixth Plan period three institutions one for the blind, one for the deaf and the other for the mentally retarded children, were given financial assistance to the tune of Rs. 3.20 lakhs for their maintenance from 1980-81. Due to the impact of the International Year of the Disabled (IYDP), 1981 and growing of the public interest in helping the disabled, more number of voluntary organisations have now come up to educate the disabled persons. But these voluntary organisations are facing hardship for maintaining their institutions as public donations are very meagre to meet their need. It is, therefore, proposed to extend Government help in maintenance of the School/Institutions for the blind, deaf and mentally retarded who have had their beginning in the Sixth Plan period. In order to strengthen those institutions and meet their fare necessity, which has not yet been met whith, a sum of Rs. 20.00 lakhs has been proposed in the Seventh Plan. During 1985-86, a sum of Rs. 4.00 lakhs will be required for maintenance of the institutions.

41-26. This Department has been giving financial assistance to physically handicapped to provide hearing aids, orthotic and prothetic aids since 1979-80. The main objective of the scheme is to assist the poor and needy handicapped persons in procuring aids and appliances and promote their physical, social and psychological rehabilitation. The handicapped persons with their aids over-come their disability to a great extent. In the developed countries supply of sophisticated and scientific aids is a social obligation and everybody is supplied with the aids heshe needs. But due to paucity of funds and limited plan provision it has not been possible to extend this facility to all concerned. But with a humble beginning so far, 109 beneficiaries have been covered. This scheme has been transferred to district level to cover more beneficiaries. Hence, besides the non-plan provision of Rs. 0.20 lakh per year, a sum of Rs. 9.00 lakhs has been proposed for the Seventh Plan period to cover average 1,200 beneficiaries for different types of special aids. During 1985-86, a sum of Rs. 2.00 lakhs will be required for supply of special aids.

41-27. Economic rehabilitation of the disabled persons through employment is one of the most difficult problem for the disabled. Due to their disability, the handicapped persons are unable to compete with normal persons in technical, vocational and other employment generating schemes. Therefore steps have been taken to cover a part of disabled population in education with technical and vocational training in the institutions. But training for adult disabled persons in vocational and technical subjects for which they are suitable has not made much head-way. It is essential that adult

disabled persons should be trained in some vocations so that they can be employed or take recourse to self-employment for their living. With a view to cover more adult disabled persons, the State Level Committee on I.Y.D.P. decided to have a Vocational Training Centre-cum-Sheltered workshop in each district. To start with, a Centre has also been started by Orissa State Council for Child Welfare at Barang for which about Rs. 100 lakhs has been spent since 1980-81 and there is a provision of Rs. 100 lakh for the Centre this year i.e. 1984-85. The provision for this Centre 1985-86 has been recommended to non-plan sector. There is also another training Centre called Louis Braille Vocational Training Centre for the Sightless run by Indian Red Cross Society, District Branch, Ganjam at Berhampur. In order to strengthen these Training Centre and to start new Centres at district levels a sum of Rs. 32.00 lakhs has been proposed in the Seventh Five-Year Plan. During 1985-86, Rs. 3.70 lakhs will be required for this scheme.

41-28. A scheme of self employment for disabled persons has been decided to be operated against Bhubaneswar Block and Rangailunda Block. The scheme envisages 50% Bank loan and 50% subsidy to be given to the individual disabled persons to start different suitable trades for their self-employment. A sum of Rs. 1.45 lakhs has already been spent by the end of 1983-84 and Rs. 50,000 has been provided during 1984-85. A sum of Rs. 50,000 has been recommended to be kept in Non-Plan sector from 1985-86 onwards. But it has been contemplated to take up this programme both in urban and rural areas. So, during the Seventh Plan period, it is proposed to take up more Blocks in different districts. A sum of Rs. 5.00 lakhs has been proposed in the Seventh Plan period to cover 10 more schemes in different districts in Plan sector over five years @ Rs. 50,000 per Block per scheme. During 1985-86, a sum of Rs. 1.00 lakh is proposed for this scheme.

41-29. Public education about potentiality and ability of handicapped persons is very much important to arouse public interest for different activities of handicapped welfare. It is, therefore, proposed to conduct seminars, sports and build up literature, demonstrate different activities of handicapped persons, their ability etc. and to help the Association for the Blind, Association for the Deaf, and Association of the Orthopaedically Handicapped to conduct seminars sports of different types of disabled persons so that general public may be interested to take up different activities of the welfare of the handicapped which may enlarge scope of service for the disabled. A sum of Rs. 0.51 lakh has been spent by end of 1983-84 and there is a provision of Rs. 20,000 during 1984-85. A sum of Rs. 20,000 has been recommended to be kept in Non-Plan sector from 1985-86 onwards. But this seems to be insufficient for the purpose. Hence, a sum Rs. 2.00 lakhs has been proposed during the Seventh Plan period @ Rs. 40,000 per year to assist three Associations for the Deaf, the Blind and Orthopaedically Handicapped to conduct seminars, sports etc. and to build up some literature at Government level. A sum of Rs. 0.50 lakh is proposed for the year 1985-86.

41-30. Education and training of disabled persons play a vital role in the socio-economic rehabilitation of handicapped. Many parents of the handicapped children are still hesitant to give education to their disabled children as they are doubtful about their future. In order to encourage the parents of the handicapped children and to bring more handicapped persons into the educational fold State Government have been awarding scholarship to the disabled students in their normal Professional, Technical/Vocational education. Basing on the income of the parents scholarship is awarded from Class I to University level. The scheme is in operation since 1978-79. During the Sixth Plan period, a sum of Rs. 3.00 lakhs has been spent by the end of 1983-84 and a sum of Rs. 3.00 lakhs has been provided in the Budget during 1984-85. This provision of Rs. 3.00 lakhs has been recommended to Non-Plan sector from 1985-86 onwards. But as the scheme has been transferred to district level from the current financial year and it is expected that the number of beneficiaries will be more due to more publicity at district level. A sum of Rs. 12.00 lakhs has been proposed during Seventh Five-Year Plan. During 1985-86 Rs. 2.00 lakhs has been proposed for the scholarship and stipend.

41-31. A Braille Press has been started at Berhampur by the Indian Red Cross Society, District Branch, Ganjam. This press has received as gift from the German Republic. In order to activate this Press and to produce braille literature to meet the needs of the blind students in the State, a sum of Rs. 50,000 has been donated to this Press from the sales proceeds of the empty containers as there was no budget provision for this purpose. But this press needs some financial assistance for its yearly maintenance. A sum of Rs. 5.00 lakhs has been proposed during Seventh Plan period. During 1985-86, a sum of Rs. 0.50 lakh has been proposed for this scheme.

41-32. At present, there are 3 State Level Associations for the Handicapped, one for the Deaf, one for the Blind and one for the Orthopaedically handicapped. These associations are trying to take up different welfare activities of the disabled. For example, the association for the Blind has started a Vocational Training Centre for Adult Blind, the association of the Deaf has started a Tailoring Training Centre for the Deaf and the Orissa Association for the Orthopaedically handicapped, which has come up recently has also aimed at starting a Training Centre for the Orthopaedically handicapped and take up other activities. These associations are unable to expand their activities for want of funds. They need to be strengthened with Government assistance both from the State and Centre. But central assistance for different scheme for the welfare of the disabled is given to the extent of 90 per cent recurring and non-recurring expenditure and Rs. 3.50 lakhs for the building when either the Association or the State Government is willing to bear 10 per cent of the expenditure under the scheme of assistance to organisation for the disabled persons. In order to assist these three associations in expansion of their activities and secure Central Assistance, a sum of Rs. 15.00 lakhs has been proposed in Seventh Plan. During 1985-86 a sum of Rs. 3.90 lakhs has been proposed for this scheme.

41-33. At present, there are seven institutions for the blind, two for the deaf and one for the mentally retarded children run by voluntary organisations. These institutions are not giving training properly to the disabled persons for want of trained teachers. It is needless to say that disabled students of different categories are to be trained specially in view of the disability. The teachers need to be specially trained for this purpose. But there is no training centre for training the teachers of the deaf, the blind and the mentally retarded in the State. The teachers need to be trained in outside the State. It is proposed to train 20 teachers. In order to train 20 teachers, the teacher under training will be given Rs. 100 allowance to meet the extra cost of living outside the State and the substitute teacher in his place will be paid salary and allowance as admissible. The teacher under training will get his salary from the institution concerned. Taking into consideration of the deputation allowance of 20 teachers and appointment of substitute, a sum of Rs. 5.00 lakhs has been proposed in the Seventh Five-Year Plan. During 1985-86, a sum of Rs. 1.00 lakh has been proposed for this scheme.

41-34. The Hind Kustha Nivaran Sangh is looking after some of the welfare measures for the cured leprosy patients. This Department is assisting the H. K. N. S. in rehabilitation of cured leprosy patients. At present, the organisation has taken the management of the training and rehabilitation programme at Puri and Hatibadi Health Home, Sambalpur, Maharaj Diamond Leprosy Clinic at Paralakhemundi and Louis Braille Rehabilitation Programme of Cured Leprosy at Bhalasore. A sum of Rs. 7.15 lakhs has been given to H. K. N. S. for management of this organisation since 1980-84. A sum of Rs. 7.03 lakhs is proposed to be given during the current financial year. This scheme has been recommended to non-plan sector since 1985-86. A sum of Rs. 50.00 lakhs has been proposed in the Seventh Plan Period to increase the grant-in-aid to H. K. N. S. for its different new activities in welfare of the cured leprosy patients. During 1985-86, a sum of Rs. 1.50 lakhs has been proposed for this scheme.

#### **Rehabilitation Programme for the cured leprosy patients**

41-35. Orissa is included among the high endemic State in leprosy. There are 3.02 lakhs of leprosy patients of whom, 80,000 are in lepromatus stage. The percentage of cured leprosy patients with reference to the total leprosy patients in the State is 11%. While the total population of the State is

2.63 crores, the total number of cured leprosy patients are figured out to be 32,158. This figure with reference to the State's population is 0.08%. Taking into consideration the beneficiaries to be brought under different schemes, the total population that have to be looked after under different schemes is 31,275. In order to rehabilitate the cured leprosy patients, it has been proposed to establish 80 bedded homes in each district excluding the districts of Puri and Sambalpur, where the programme has already been started. The programme of rehabilitation has been divided into two parts, viz. (i) provision of 80 bedded homes for rehabilitation of cured leprosy patients and (ii) Management of the 80 bedded home including the 2 institutions at Hatibadi and Puri.

41-36. The scheme envisages provision of a 80 bedded home to house the cured leprosy patients who will be trained in gainful employment in the scheme like candle making, coir rope making, shoe making, basket making, weaving, sericulture and match box and match industry. The programmes have been approved by the Industries Department, Rehabilitation of vagrant lepers numbering approximately 30,000 should call for a long term strategy and approach. In the context of social customs prevalent, patients who are completely cured and the deceased who are left with tell-tale signs of deformity cannot go back to their villages as they are not even acceptable to their own families. It is, therefore, necessary that rehabilitation facilities on an extensive scale are provided for cured leprosy patients. At present, such facilities are extremely inadequate and meet the requirement of hardly 1% of the needy population. The entire responsibility rests with the State Government for rehabilitation of leprosy patients. The need for rehabilitation in each district may vary between 1,000 and 2,000 persons. Each rehabilitation centre may have a training-cum-production centre providing opportunities for gainful employment to the inmates. The programme of construction of 80 bedded homes is proposed to be taken up under three phases, namely (i) providing infrastructural development @ one building each in the districts of Koraput, Phulbani and Ganjam, (ii) provision of one rehabilitation centre @ one each in the districts of Sundargarh, Kalahandi and Keonjhar and (iii) provision of one 80 bedded home in the districts of Balangir, Mayurbhanj and Dhenkanal.

41-37. Thus, an amount of Rs. 100.00 lakhs would be required during the plan period for providing infrastructural facilities in the districts in a phased manner to accommodate cured leprosy patients for gainful rehabilitation.

#### **Social Defence**

41-38. Changes affecting peoples customs under the influence of technological, economical and social factors have a wider appeal, if they are strengthened and backed by law. Broadly speaking, Social Defence signifies integration of the services of the law enforcement agencies and the social services which will function successfully keeping in view the two objectives of protecting the society and saving the criminals. The fast resulting in personal and social disorganisation are manifested in the form of delinquency, juvenile vagrancy, drug addiction, alcoholism, immoral traffic in women and girls and the like. In order to curb them, number of special schemes for welfare, correction and rehabilitation of mal-adjusted individuals are being operated, besides preventive measures. Most of the Social Defence measures are operated within the frame-work of legislation and are implemented by the State Government subject to over-all guidance of the Union Ministry of Social Welfare. The State Government have enacted Orissa Childrens Act, 1981 wherein specific measures like Child Welfare Boards, Childrens' Homes, Observation Homes, Special Schools for delinquent children and after care services have been provided. The need for welfare services involving guarantee of basic human right under social legislation are to be strengthened and therefore, the following schemes have been proposed, at the first instance to be taken up during 1985-86.

41-39. Prohibition of Alcoholism and Drug Abuse, Prohibition of intoxicated drinks and of drugs except for medical purposes is a directive principle of State policy under Article 47 of the Constitution. Therefore, the responsibility for fulfilling the constitutional obligations in regard to prohibition largely rests with the State Government. Mass Education plays a vital role to create

awareness of an idea or to build interest in it. Simple, attractive posters, in large numbers at the right location, will call attention to new ideas. Photographs on bulletin Boards and wall news paper will carry the idea to thousands of people. Illustrated circular letters, leaflets and bulletins will be of immense help. Projected aids such as, motion pictures, slides and film strips will give rise to emotions. They can intensify the interest of the audience. Therefore, an amount of Rs. 0.20 lakh has been proposed to be kept under this item of "Prohibition of Alcoholism and Drug Abuse" to propagate ill effect of the same. The Extension Officers of the Blocks are trained in skillful operation and used of Audio-Visual aids. An outlay of Rs. 1.00 lakh is proposed in the Seventh Plan for the purpose.

41.40. Special Schools for Neglected Children, the Orissa Children's Act, 1981 spells out establishment and maintenance of Special Schools as may be necessary for reception of delinquent children under this Act. Every special schools to which a delinquent child is sent, shall not only provide the child with accommodation, maintenance and facilities for education, but also provide him with facilities for the development of his character and abilities and give him necessary training for his reformation and for becoming self reliant and shall also perform such other functions as may be prescribed to ensure all round growth and development of his personality. Due to growth of industries in the State, there is gradual increase of juvenile delinquencies in the industrial belts, especially in the industrial towns like Rourkela, Talcher, Balangi, Paradeep, Gopalpur Port Area, Sunabeda, Bhadrak, Damanjodi and Bhubaneswar. Initially, it is proposed to establish a "Special School" for the delinquent children and the total amount projected under Seventh Five-Year Plan is Rs. 20.00 lakhs. An amount of Rs. 5 lakhs has been proposed for development of infrastructural facilities for a special school for delinquent children to be started agains a place suggested above. This being a new venture in the State, it would perhaps be appropriate to start a special school providing infrastructural facilities to the neglected children during the year 1985-86.

41.41. *Observation Home*—The Children's Act, 1981 provides establishment and maintenance of Observation Homes for temporary reception of children during the pendency of enquiry under the purview of the Act. This is otherwise known as 'Remand Home' which signifies a place of detention for children on remand or awaiting trial. Three Homes under the nomenclature of 'Remand Homes' have already been taken up at places like Cuttack, Sambalpur and Balasore. The building at Cuttack has already been completed at an estimated cost of Rs. 1.50 lakhs. The building at Balasore has already been taken up and the estimated cost is kept at Rs. 1.30 lakhs. An amount of Rs. 1.10 lakhs has been provided during the year 1984-85 for Sambalpur. As the building cost at Sambalpur is Rs. 2.10 lakhs, an amount of Rs. 1.00 lakh is to be provided for Sambalpur during the year 1985-86. All the three homes will start functioning with effect from 1985-86. The running cost of a Home is calculated at Rs. 0.80 lakh per annum which includes provision of Superintendent, Clerks etc. The home will maintain 25 children in each unit. Thus, during the year 1985-86, an amount of Rs. 2.40 lakhs would be required for the purpose. Towards management of the Homes and including the cost of construction of building at Sambalpur, the total expenditure would be Rs. 3.40 lakhs.

41.42. During the Seventh Five-Year Plan, it has been proposed to have six Homes in six places adding three more Homes at Berhampur, Rourkela and Puri. Altogether, six Homes will, thus, be kept under the nomenclature of 'Observation Home' for the children under the purview of the Act. The estimated cost of one building is kept at Rs. 3.00 lakhs during the Seventh Five-Year Plan due to rise in prices in building materials. The total cost of remaining three Homes will be Rs. 9.00 lakhs. To manage all the six homes during the Seventh Five-Year Plan, an amount of Rs. 4.80 lakhs @ Rs. 80,000 per Home per year would be required. Therefore, the total outlay proposed for the Seventh Plan is Rs. 15.00 lakhs to construct three more building, at the places like Berhampur, Rourkela and Puri and maintain Six Homes at Cuttack, Balasore, Sambalpur, Rourkela and Puri.



41-43 *Grants in-aid to Voluntary Organisations in the field of Social Defence*— Building up of frame-work of activities of the Voluntary Organisations is the crux of Social Defence Programme. Unless voluntary organisations are strengthened, it may not be possible for the Government to take up programmes in a fortified manner. Transfer of activities at a stage for management by the Voluntary Organisations is the theme of social welfare programmes. With this end in view, Government of India have established Central Social Welfare Boards and also other agencies to build up Social Welfare Voluntary Organisations. The Voluntary Organisations organising activities for Observation Homes Special Schools for neglected children will be given assistance in the field of Social Defence to supplement their resources. Registered Voluntary Organisations under Societies Registration Act will be considered under the purview of the scheme. An amount of Rs. 5.00 lakhs been projected under the Seventh Five-Year Plan and during the year 1985-86 it is proposed to provide Rs. 1.00 lakh initially to start with the scheme for furtherance of activities

#### **Welfare of the aged**

41-44. Family disintegration during the present day calls for a long term strategy to provide accommodation and shelter to the aged who are completely neglected in the family. The major programmes are such as family life education, counselling services for the benefit of mal-adjusted wife/husband/parents. It is proposed to establish a "Home for the Aged" in each District completely managed by the voluntary organisations/N.A.C. or Municipalities during the Seventh Five-Year Plan for which a projection has been made for Rs. 5.00 lakhs for provision of infrastructural facilities. Rules are to be framed for "Home for the Aged". Certain entry funds is to be kept for the aged for entry to the 'Home for the Aged'. Welfare of the Aged is a problem which has also attracted the attention of United Nations on the subject of "World Assembly on Aging" organised from 26th July to 6th August, 1982 at VIENNA. Initially, the proposal may be given a start as it is as important institution of the Social Defence Programme.

#### **Probation Services**

41-45. Keeping in view the recommendations of Government of India in the Department of Social Welfare to expand probation service by way of appointment of one Probation Officer for two of the Courts and keeping in view the meagre allocation of funds from the State Plan, it has been decided to provide one Probation Officer at each subdivisional headquarters in a phased manner. By the end of Sixth Plan, seven subdivisions were provided with one Probation Officer each in Rairangpur, Rayagada, Khurda, Bhanjanagar, Baragarh, Bhadrak and Jajpur subdivisions. It is proposed to cover some more subdivisions during the Seventh Plan for which a sum of Rs. 10.99 lakhs has been proposed inclusive of Rs. 2.00 lakhs for the year 1985-86.

## CHAPTER 42

### NUTRITION

#### Special Nutrition Programme with local food for Pre-school children nursing and expectant mothers.

42.1. It has been roughly calculated that by the end of Sixth Plan, the population below the poverty line in Orissa will be of the order of 145.57 lakhs. According to the demographic norms., the vulnerable segments of the community will be calculated as follows :

1. Population below poverty line by the end of Sixth Plan	145.67 lakhs
2. Pre school children at the rate of 17 per cent of the above population-24.74 lakh minus 1/6th strength of such children below one year. (—) 4.12 lakhs	20.62 lakhs
3. Nursing mothers at the rate of 16.25 per cent of pre-school children (24.74 lakhs)	4.02 lakhs
4. Expectant mothers at the rate of 4.5 per cent of the population below poverty line	6.55 lakhs
<b>Total</b>	<b>31.19 lakhs</b>

42.2 These 31.19 lakhs people require supplementary nutritional feeding, against which the Sixth Plan coverage is expected to be of the order of 14.05 lakhs. Thus there is a balance of 17.14 lakhs vulnerable population yet to be covered. Of them, it is proposed to cover 6.00 lakh persons during the Seventh Plan under Special Nutrition Programme with local food. During 1985-86 it is proposed to cover 1,52,600 beneficiaries only, which is slightly more than the coverage in the last year of the Sixth Plan i.e. 1,50,000 under the programme.

42.3 The present provision under Plan is made towards cost of food only, the incidental expenses are being charged under the Non-Plan sector. But as the Non-Plan budget is already too heavy to shoulder any more burden, it has been proposed to provide towards incidental expenses of plan feeding schemes in the Plan Budget. During the Sixth Plan, budget provision per beneficiary for 300 days feeding in a year is made at the rate of Rs. 75 or at the rate of Re. 0.25 paise per day. This being quite inadequate to supply the prescribed ration to a beneficiary, it has been proposed to provide at the rate of 60 paise per beneficiary per day with 15 per cent trend increase every year on cost of food plus incidental expenses at the rate of 5 paise. Besides, the differential unit cost of 3,69,000 Non-Plan beneficiaries at the above rate is to be provided under State Plan. On the above basis, the Seventh Plan requirement has been projected at Rs. 7,808.60 lakhs and the outlay for 1985-86 has been proposed at Rs. 297.57 lakhs.

#### Mid-day-Meal programme with local food

42.4. This programme is intended to provide mid-day-meal to the primary school children of the age group 6-11 years. As per the decision of the Government of India, if CARE will withdraw their school feeding programme from a particular area, the State Government will have to undertake mid-day-meal programme with local food out of Plan resources in that area. It was contemplated that CARE would gradually reduce their school beneficiary by 3.50 lakhs during the Sixth Plan period. But during 1982-83, only 97,000 beneficiaries were withdrawn by CARE. As this exercise remained incomplete, it is proposed to provide for the entire 3,50,000 beneficiaries under mid-day-meal programme during the Seventh Plan in a phased manner. During 1985-86 the proposal is to cover about 1,80,000 beneficiaries. The total number of feeding days prescribed under the programme is 15 days in a month and not more than 180 days in a year. The daily ration prescribed is the same as under Special nutrition Programme. The Plan outlay has been proposed at the rate of 40 paise towards cost of food, plus 5 paise as incidental expenses per beneficiary per day. The total requirement for the Seventh Plan works out to Rs. 1,166.40 lakhs and the outlay for 1985-86 is proposed at Rs. 127.20 lakhs.

#### Upgradation of S. N. P

42.5. As per the instructions of the Government of India, the present status of the feeding centres will be upgraded to the level of Integrated Child Development Services, where in the Anganwadi Centres health check-up immunisation, pre-school education etc. are available to the beneficiaries alongwith supplementary

feeding. The upgradation of SNP centres programme has been taken up in Mayurbhanj, Keonjhar and Kalahandi districts and it is proposed to be gradually extended to other districts during the Seventh Plan period. This is a co-ordinated programme in which various Government Departments of the State Government and international voluntary organisation like CARE, WFP, UKAID and UNICEF are associated. The Health and Family Planning Department are responsible for the health aspects and Housing and Urban Development Department for providing safe drinking water facilities to the feeding centres and Education and Youth Services Department for pre-school education. The CARE and WFP are mainly responsible to supply food materials free of cost to the beneficiaries in their programme area. Besides, they are at liberty to provide other kinds of non-food assistance under the programme with the permission of Government of India. The UNICEF is providing vehicle, equipments educational kits to the trainees and also bear the expenses of the training imparted to the Health and C. D. personnel, Mahila Samiti members, associated with the programme.

42.6. According to the financial pattern in the normal feeding programme, the Mahila Samities, for organising feeding at the feeding centre level, are to get remuneration at the rate of Rs. 30 per month each from the non-plan budget. But due to dearth of non-plan provision, this amount is not paid regularly to the Mahila Samities. Under the Scheme "Upgradation of SNP" the C. D. and R. R. Department is responsible to provide this remuneration of the Mahila Samities in the plan budget. As the members of Mahila Samities are being trained by the UNICEF in Nutrition Education it is expected that they would be able to organise feeding in a better and systematic manner. The monthly remuneration has been proposed at the rate of Rs. 40 per month per centre.

42.7. It is proposed to cover 6.00 lakhs beneficiaries of vulnerable population in addition to the coverage of 14.05 lakhs beneficiaries already covered up to Sixth Plan. Normally 100 beneficiaries can be given supplementary feeding in a centre. At this rate, for 20.05 lakhs beneficiaries we would require 20,050 SNP centres. For upgrading 20,050 centres in a phased manner, the C. D. & R. R. Department will have to pay remuneration to the organisers and helpers of feeding (Mahila Samities) at the rate of Rs. 40 P. M. or Rs. 480 per annum per centre, which is a very nominal sum, just to encourage the mahila samities to extend their active co-operation to the feeding programme.

42.8. In the case of ICDS Projects, feeding is done through Anganwadi Centres for which no remuneration is necessary. The requirement for the Seventh Plan on the basis of phasing will be of the order of Rs. 449.13 lakhs. For 1985-86, the proposed outlay is only Rs. 16.80 lakhs.

## CHAPTER-43 ECONOMIC SERVICES

### A. Statistics

43.1. The principal organ for catering to the various statistical needs of planning has been the Bureau of Statistics and Economics, which, through its technical divisions, conducts research studies, State income estimation, Capital formation studies, Crop estimation surveys, Annual survey of Industries, Socio Economic surveys with N. S. S. collaboration, Census of Employees, manpower and employment surveys and routine collection, compilation and dissemination of various official statistics. During the Sixth Plan, in addition to its normal activities, the Department strengthened the Agency for Reporting Agricultural Statistics and the sample coverage was raised to 20 percent for building up estimates of area, yield rate and production of crops at lower geographical levels. The sample size was raised to about 10,000 villages for land use and crop area survey and about 40,000 C. C. experiments were conducted covering 13 important crops. For tabulation of data, a Direct Data Transfer unit (Mini computer) was set up in the Bureau of Statistics and Economics which started functioning since 1983-84.

43.2. Special emphasis was laid on undertaking various studies relating to growth of employment, magnitude of unemployment, employment norms in different sectors and activities, mobility of labour and the employment potential of various schemes. In order to meet the increasing need for statistical personnel, the Statistical Training Institute which was already set up earlier was strengthened during Sixth Plan and a new course of 'Econometrics' was introduced. Besides, a Central scheme for studying the comparative performance of mixed farming in Orissa was introduced on a pilot basis towards the far end of the Sixth Plan. The field work has started in the selected blocks.

43.3. In order to bear the additional work-load, the headquarters organisation was suitably strengthened and all the activities were streamlined during the Sixth Plan. Yet there has remained some important gaps in the field of Statistics which seeks to be removed during the Seventh Plan. The total expenditure under Statistics was of the order of Rs. 343.00 lakhs during Sixth Plan.

43.4. Not only the present activities of Bureau of Statistics and Economics will be continued during Seventh Plan but also those will be strengthened suitably so as to realise the objectives fully. The existing Centrally sponsored scheme 'Establishment of an Agency for Reporting Agricultural Statistics', an ongoing programme of Sixth Plan, will also be continued during the Seventh Plan as the Ministry of Agriculture, Government of India has agreed to share the expenditure on 50:50 basis.

43.5. The Scheme 'Comparative performance of mixed farming in Orissa' sponsored by Institute of Agricultural Statistics Research Institute during Sixth Plan will be continued during the first year of Seventh Plan. This is a time-bound pilot survey scheme and its further continuance or otherwise will depend upon the Technical Programming of I. A. S. R. I.

43.6. For completing the ongoing constructions of office building and staff quarters of the Sixth Plan about Rs. 9.05 lakhs will be necessary. Besides, additional funds to the tune of Rs. 26.00 lakhs has been proposed for new constructions of Range Offices, extension of D. S. Office buildings and construction of staff quarters in districts and State Headquarters.

43.7. In order to streamline the growing statistical activities and prepare micro-level data base in the context of multi level planning, it has been proposed to reorganise the existing set up and increase the number of Statistical districts to 26. The reorganisation will be brought about mainly by readjustment of the existing officers and staff so as to reduce the area of operation of the Statistical districts. It will be helpful not only in easy collection of micro-level data for decentralised planning but also for efficient supervision of field work under various surveys introduced in the district. Some marginal increase will be made in the number of technical and ministerial assistants. The Headquarters of the Bureau will also be strengthened to the required extent. For this purpose, an outlay of Rs. 88.00 lakhs has been provided under the scheme during the Seventh Plan.

43.8. At present there is no satisfactory arrangement for collection of information on urban local bodies. Data on income and expenditure, Assets, Transactions, construction activities, Education, Health and sanitation services, water supply and industrial activities etc. of the urban local bodies are either not available or are available to a limited extent. Since the Municipalities and N. A. Cs. do not have their own statistical staff due to limited resources it has been proposed to create some posts for the municipalities/ N.A.Cs. while a whole time statistical Assistant will be given to large municipalities for collection, compilation and reporting local body statistics for preparation of Municipal statistical year Book, it has been proposed that for smaller municipalities one statistical assistant may be put in charge of a group of municipalities/ local bodies. This will also help in assessing resources for drawing up district plan. The total cost has been estimated at Rs. 75.00 lakhs out of which Rs. 8.80 lakhs will be required during 1985-86.

43.9. With the development of Science and Technology, the application of Remote Sensing Technique of Sattelite Programme for crop forecasts has been recognised. For the purpose of improving crop forecast methodology, a programme has been drawn up to compare the estimates obtained by field surveys and that obtained through remote sensing technique on a pilot basis. The study will be taken up in liaison with the Department of Science, Technology and Environment of the State Government and the processing of data collected from both the sources will be done over a period of 5 years to finally adopt the more accurate method for timely crop forecast. As a part of this study, a sub-sample of the large sample covered under EARAS will be adopted as a repeat sample every year to undertake a further analysis of the change in the cropping pattern over years. The total cost of the scheme has been estimated at Rs. 30.00 lakhs during the Seventh Plan out of which it is proposed to incur an expenditure of Rs. 4.40 lakhs during 1985-86.

43.10. It has been proposed to introduce a scheme sponsored by Government of India for studying the constraints in the transfer of Technology for increasing agricultural production. It has been experienced in the past that the benefits from laboratories are not percolating down to the field or beneficiaries in right proportions. In order to identify the constraints and suggest remedial measure, the I. C. A. R. has sponsored the scheme on 50 per cent matching grant basis. The scheme will follow the technical programme and work pattern suggested by I. C. A. R.

43.11. The total outlay proposed under 'Statistics' during the Seventh Plan has been of the order of Rs. 687.00 lakhs out of which Rs. 454.00 lakhs have been provided for ongoing schemes of Sixth Plan and only Rs. 233.00 lakhs for the new schemes. The schemes 'Establishment of an Agency for Reporting Agricultural Statistics, (EARAS) study of comparative performance of Mixed farming technology, 'Improvement of crop forecasting Methodology' and 'Study of constraints in Transfer of Technology In Agriculture' are Centrally sponsored programmes and are entitled to sharing of cost by Government of India. The total outlay for the Seventh Plan has been fairly high since the large Central Scheme EARAS puts a heavy financial burden on State plan (about Rs. 4 crores is the State share).

#### **B. State Planning Machinery**

43.12. During the Sixth Plan, the work of Planning Machinery in the six functional cells were streamlined and various exercises were undertaken to meet the planning needs. It was experienced that the functional cells do not measure up to the task assigned to them in the absence of multi-disciplinary group of specialists to head the cells. Even though the skeleton functional cells are available, the activities could not be systematised. Therefore, it has been proposed to restructure the activities in the following 7 functional cells:—

1. Plan formulation & co-ordination
2. Perspective Planning Division
3. Plan information & Project appraisal division
4. Area Planning Division (District & Regional Planning)
5. Plan monitoring and cost management division
6. Evaluation Division
7. Manpower & Employment Planning division

43-13. At present, all the functional cells have been placed under a Director who is assisted by a joint Director and 2 Deputy Directors. In view of the specialisations needed for different cells, the present staffing does not appear adequate and therefore it has been proposed to provide a 'Chief' for each functional cell with adequate supporting staff. The total outlay needed during the Seventh Plan has been estimated at Rs. 85.94 lakhs out of which Rs. 17.92 lakhs will be required during 1985-86 for strengthening of the State Planning Machinery. The scheme is entitled to 66.43 percent central assistance.

43-14. With a view to introducing multi level planning process, it has been proposed to set up district planning cells. Although there is district planning in some form, its substance and true contents are yet to take a satisfactory shape. The Planning Commission has laid considerable stress on the need of strengthening and re-organising the District Planning Cells so that they develop the capacity of drawing up integrated (not merely aggregated) need and resource based district plans. Steps have already been taken to set up a District Planning Committee in each district under the Chairmanship of the Collector. It has also been proposed to constitute Subject Matter Working Groups to give technical support to District Planning Committee. The District Planning Cell will give secretariat assistance to the District Planning Committee and will finally prepare district plans. It has been desired to constitute the District Planning Cell by strengthening the existing nucleus cell with one Chief District Planning Officer and 5 medium level subject matter specialists drawn from the disciplines of Agriculture, Engineering, Social Science, Credit Planning and Cartography. Besides, the existing Assistant Director, District Plan will continue to discharge his functions in preparing data base on local needs and resources and undertaking selective monitoring and evaluation studies. The responsibility of the District Planning Cell will be to prepare long term perspective plans, Five Year Plans and operational Annual Plans. The total cost for strengthening District Planning Machinery has been estimated at Rs. 177.69 lakhs. The scheme is entitled for 50 per cent assistance by Planning Commission (MLP). Requirement of funds during 1985-86 will be about Rs. 34.19 lakhs out of which about Rs. 17.10 lakhs will be borne by State Government.

43-15. With the shift from routine law and order functions to development administration and with the increasing emphasis laid on decentralised planning, there has been a growing demand for introducing appropriate training institution in the State. In the field of Science, technology, management and administration a virtual explosion of new knowledge is taking place all over the world and it is therefore necessary that a development administrator gets acquainted with the latest developments in all fields so as to improve his skills, techniques and efficiency. In Orissa, the absence of such a Training Institution has been acutely felt. The miniature Training Institute functioning under the Planning and Co-ordination Department (Bureau of Statistics and Economics) has limited objectives of imparting long duration professional training to statistical staff of different levels. It has therefore been proposed to strengthen this Training institute and introduce short course development trainings such as training on Project Implementation Monitoring and Evaluation, Planning Methodology, Evaluation Methodology (including PERT and CPM), Decentralised Planning, Project Appraisal, Performance Budgeting, Material Management, Manpower and Employment Planning, Project identification and management and Benefit Cost Analysis etc.

43-16. While strengthening the existing Statistical Training Institute, necessary physical facilities including construction of Buildings and Hostels etc. are to be provided alongwith library and laboratory etc. Besides, the training aids, equipments, vehicles and furniture etc. are to be arranged. A 'Chief' assisted by 2 joint Chiefs and two Senior Research Officers are to be provided with a complement of supporting staff. This will be provided in addition to what is already available with the S. T. I. It has also been proposed to instal a Mini-Computer (Direct Data Transfer Unit) in the Training Institution so as to assist in tabulation of data obtained through field surveys, evaluation studies and monitoring. The total cost of the scheme has been estimated at Rs. 77.27 lakhs during the Seventh Plan out of which Rs. 22.45 lakhs will be required during the year 1985-86.

43-17. The total outlay required for Planning Machinery during the Seventh Plan has been estimated at Rs. 340.89 lakhs out of which Rs. 74.56 lakhs will be required during 1985-86. Since all the schemes are entitled to Central Assistance the State's liability is estimated at about Rs. 160.00 lakhs during the Seventh Plan.

#### **Weights and Measures**

43-18 This is a continuing scheme which help in maintaining uniformity and accuracy of weighments and measurements throughout the State. This organisation is responsible for enforcing the provisions of Orissa Weights and Measures Act, 1958 and packed Commodities Rules, 1967 as framed by Government of India. This is also a welfare scheme which is to safeguard the interest of consumers and producers at large. This organisation also helps to contribute regular revenue to the State exchequer by way of stamping fees and licence fees. In the interest of augmenting the revenue and ensuring better safeguards to the consumers, there is a proposal to expand the scheme during the Seventh Plan period. Under this scheme number of standard laboratories and testing units are in operation throughout the State for stamping of the measurements scales, weighment machineries and such other equipments to ensure standardisation and correct measurements. There are also field staffs to inspect the scale measurement, weighing machines etc. to ensure to the standard and prevent under-weighment. In view of the considerable expansion of trading activities in the State and population growth, the existing staff and laboratories are considered to be inadequate to achieve the desired result of the scheme. Hence it is proposed to re-organise and expand the scheme during the Seventh Plan period by opening three more laboratories at various vulnerable points. There is also a proposal to take up construction of laboratory buildings, establishment of survey chain testing units, packed commodities testing unit, Thermometer testing units and taxi meter testing units in a phased manner during the Seventh Plan period. In order to man these units and maintain the effective implementation and supervision it is proposed to create one post of Joint Controller, post of Deputy Controller and one post of Assistant Controller with the anekillary staff. There is also a programme to undertake expansion, education and demonstration programmes at different points of State so as to popularise the scheme and make people conscious about their rights in getting the proper quantity in return of payment. For the proposed expansion and re-organisation of the scheme, the total outlay during the Seventh Plan period has been estimated at Rs. 32.20 lakhs.

43-19 The proposed re-organisation is to be made in a phased manner but in the initial stage it has become necessary to establish two standard labrtories and some testing units with required staff in the beginning of the plan period. Also for better mobility and effective supervision, it is proposed to purchase a vehicle in the first year of the plan. Accordingly, the requirements for the Annual Plan 1985-86 would be Rs. 10 lakhs.

## CHAPTER 44

## GENERAL SERVICES

**(a) Printing, Stationery and Publication**

44.1. The Orissa Government Press undertakes all printing works of the State Government. It also supplies stationery articles to all State Government Offices. A plan scheme is now being implemented for acquiring new machineries for replacement and modernisation of the Press with adequate staff support. The scheme also aims at construction of some buildings both for office and residential purposes. This scheme is proposed to be continued during the Seventh Plan with an outlay of Rs. 444.10 lakhs.

44.2. The scheme primarily aims at reorganisation of the Government Press with a view to increasing its productivity through replacement of old and obsolete machinery by sophisticated machines and introduction of modern processes. The Government Press is functioning with a large number of old and obsolete machines belonging to the age-group of more than 10-30 years. There is an urgent need to replace these machines in a phased manner by modern and sophisticated ones. During the Sixth Plan period the Government Press have been able to absorb some modern trends and technology to a limited extent due to inadequate Plan allocation. During the Seventh Plan period, it is proposed to purchase machines at a total cost of Rs. 82 lakhs both by way of replacement and new acquisition.

44.3. Consequent upon the decision of State Government to introduce Oriya as official language a provision of Rs. 100 lakhs has been made for purchase of 2,200 Oriya typewriters during 1984-85. It has been assessed that requirement during the Seventh Plan period of such typewriters will be 8,000, involving total cost of Rs. 400 lakhs. It is proposed to purchase 2,700 Oriya typewriters at a cost of Rs. 135 lakhs during 1985-86 and 2,300 at a total cost of Rs. 115 lakhs during 1986-87.

44.4. Extension of 180 Type-II quarters at Madhupatna, Cuttack has been taken up during 1984-85 with a plan allocation of Rs. 6.40 lakhs. On the basis of the latest estimate for this work at Rs. 9.48 lakhs the balance amount of Rs. 3.08 lakhs is required to be provided during 1985-86. Although the Government Press is a vast Industrial Organisation with a staff strength of 2,500, only 267 quarters have so far been provided to them. Shortage of residential accommodation is creating discontentment among these employees. Such a situation is not conducive to efficient functioning of an industrial organisation like Government Press. In this connection, it is pertinent to mention that 42 acres of land acquired by the Government Press long since near Madhupatna, Cuttack could not be utilised due to inadequacy of funds for taking up any construction work. It is proposed to construct a number of staff quarters at a total cost of Rs. 84.02 lakhs during the Seventh Plan period.

44.5. Upgradation of Branch Press has been felt on urgent need. At present there is much pressure on the Government Press to cope with the demand for printing of different jobs and supply of stationery articles to Indenting Officers of the State. It has been decided to decentralise the work and upgrade the important Branch Presses at Bhubaneswar, Balangir and Keonjhar so as to cater to the demand on Zonal basis with efficiency and promptitude. The existing Branch Press at Bhubaneswar plays a vital role in the execution of most immediate and confidential jobs of the Departments and Heads of the Departments located at Bhubaneswar. It has been decided to entrust the production of publicity literature of this Press. The Branch Presses at Balangir and Keonjhar also need to be upgraded. A sum of Rs. 15 lakhs at the rate of Rs. 5 lakhs for each of these three Presses and Rs. 10 lakhs for Bhubaneswar Branch Press is proposed during the Seventh Plan period for extension purpose.

44.6. During Sixth Plan period 40 posts were created on the Plan side for the Government Press in the year 1979-80. According to the present instructions, it has been proposed to transfer this liability to the non-plan committed side. Therefore, the requirement of funds for the staff component of the State Plan Scheme has not been projected during the Seventh Plan period. In case this liability is to be entertained in the Plan side, the requirement for the Seventh Plan period for continuance of these posts will be of the order of Rs. 21.00 lakhs starting with Rs. 3.80 lakhs in the year 1985-86.



44.7. A tentative outlay of Rs. 175 lakhs has been proposed for this Scheme during 1985-86. The following items of works are proposed to be taken up:—

(a) Purchase of machines and equipments—	
(i) Web-Offset (Two Colour) Dominant (HMF) Stop Cylinder	.. Rs. 10.00 lakhs
(ii) Kalaymani Printing Machine	.. Rs. 5.00 lakhs
(iii) O. M. II Printing Machine	.. Rs. 3.00 lakhs
(iv) Dark Room Process Camera Retouching Desk for Photo plate making system.	Rs. 2.00 lakhs
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Total	.. Rs. 20.00 lakhs
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(b) Purchase of Oriya 2,700 Typewriters	.. Rs. 135.00 lakhs
(c) Construction Programme—	
(i) Extension of 188 Type-II quarters	.. Rs. 3.08 lakhs
(ii) Construction of one R. C. C. Hall of 150' × 30' for expansion of Branch Press at Bhubaneswar.	Rs. 5.00 lakhs
(iii) Construction of 36 Nos. of 'F' type quarters for the Main Press at Cuttack	Rs. 11.92 lakhs
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Total	.. Rs. 155.00 lakhs
Grand Total	.. Rs. 175.00 lakhs

**(b) Public Works**

**Paradeep Area Development**

44.8. Paradeep Port was built in Third Five-Year Plan to handle initially two million tonnes of iron-ore. It is located in an isolated place away from modern towns. Although the activities of the port has grown considerably and a fertiliser plant besides a few ancillary industries are coming up around the port not much head-way has been made in providing infrastructural facilities, such as developed land with roads and housing facilities. The main impediment for speedy development is heavy cost required to reclaim swampy and low lying lands that exist around the port. During the Sixth Plan period, the State Government have already set up an organisation under a Special Officer in the rank as A. D. M. who is also the Special Planning Authority to identify, demarcate and develop vast stretch of Government land that has been kept reserved for development and provision of infrastructure to attract commercial and industrial community. This will also help to provide civic amenities to the port to meet their increasing activities. During the Sixth Plan, due to paucity of funds only 10 acres of land could be developed on which the State Housing Board is proposing to put up multistoried housing complex to house essential services of the State Government operating in the port area.

44.9. During the Seventh Plan, it is proposed to develop 10 acres of land at an estimated outlay of Rs. 20.00 lakhs. Besides, a few staff quarters are required to be constructed to provide accommodation to the staff of the office of the Special Officer. An office-cum-residence for the Special Officer is under construction at an estimated cost of Rs. 3.79 lakhs for which a sum of Rs. 1.00 lakh is required during the Seventh Plan to complete the building. In all, a provision of Rs. 43.00 lakhs is required in the Seventh Plan of which a sum of Rs. 15.00 lakhs will be utilised during 1985-86.

44.10. Other regulatory Departments like Revenue, Home, Police, Finance, Law, etc., have a very large number of offices and staff. Due to present administrative needs there are proposals for expansion of offices in many of these Departments. Due to constraints of resources, it has not been possible to provide adequate buildings for office accommodation as well as residential quarters for the staff in the past. In some cases the old buildings have been declared unsafe and they are to be provided with new buildings. State Government have set up a Police Housing and Welfare Corporation, which takes up construction of quarters for Police personnel and some non-residential buildings in remote areas of the State.

44.11. For Building Construction Programme of all these Departments an outlay of Rs. 2,078.00 lakhs and Rs. 510.00 lakhs has been proposed in the State Plan for the Seventh Plan and Annual Plan, 1985-86 respectively as follows :—

		(Rs. in lakhs)	
		Seventh Plan	Annual Plan (1985-86)
1.	Revenue Department ..	350.00	75.00
2.	Home (Police) Department ..	650.00	150.00
3.	Home (Jail) Department ..	125.00	30.00
4.	Home (Fire Service) Department ..	125.00	30.00
5.	Home (Protocol) Department ..	165.00	60.00
6.	Home (Courts) Department ..	100.00	25.00
7.	Finance Department ..	250.00	45.00
8.	Commerce (Port) Department ..	43.00	15.00
9.	C. A. (Vigilance) Department ..	70.00	30.00
10.	Law Department ..	200.00	50.00
<b>Total</b>		<b>2,078.00</b>	<b>5,10.00</b>

### (C) Civil Supplies

#### Share Capital to Orissa State Civil Supplies Corporation Ltd.

44.12. The State has a net work of 19,265 fair-price shops by the end of March, 1984 which include 5,091 shops in the co-operative sector. 16,370 such shops are located in the rural areas and 2,895 shops in the urban areas. The average number of units per fair-price shop works out to 1,115 for the rural areas and 1,471 for the urban areas. The State Civil Supplies Corporation which started functioning on 3-9-1980 with paid up share capital of Rs. 500 lakhs, has taken over the lifting and distribution of rice, wheat, levy sugar and imported edible oils for supply in the public distribution system. The experience of 1983-84 revealed that the Corporation on a monthly basis had to lift the Central allocation of 20,000 tonnes of rice, 20,000 tonnes of wheat, about 11,209 tonnes of levy sugar and more than 3,000 tonnes of imported edible oil. The value of these commodities is about Rs. 14 crores. The Corporation has availed of food credit at concessional rate of interest for lifting the Central allocation of rice and wheat. One of the factors which determines the volume of this credit is the stock of wheat and rice held by the Corporation. This stipulates deployment of its own capital by the Corporation to the maximum extent. Commercial credit has also been availed of by the Corporation

for lifting levy sugar and imported edible oil. Here again, certain quantity of own capital has to be deployed. The State Government have recently authorised the Corporation to deal with other commodities like vanaspathi, mustard oil, razor blades, toilet soaps, matches and torch cells, etc., for which the Corporation has to deploy capital. The capital base of the Corporation has been enhanced by Rs. 50 lakhs only in the year 1984-85. Besides, the Corporation has to maintain reasonable buffer stocks of essential commodities to meet emergency requirement on account of abnormal price rise, natural calamities, etc. The monthly requirement of capital has been assessed at Rs. 25.00 crores as against which the present availability is as follows :-

(a) Share Capital	..	Rs. 5.50 crores
(b) Food credit of the R. B. I.	..	Rs. 4.50 crores
(c) Commercial credit	..	Rs. 4.00 crores
		-----
Total	..	Rs. 14.00 crores
		-----

The shortfall of Rs. 11.00 crores needs to be met in the shape of share capital to enable the Corporation to discharge its responsibility. Besides, the Corporation has necessarily to have reasonable godown facility at sensitive places for which commercial credit may be available against margin. Taking all these facts into consideration it has been felt that additional equity support of Rs. 10.00 crores during the Seventh Plan in a phased manner should be extended to the Corporation at the rate of Rs. 5.00 crores per annum during the years 1985-86 and 1986-87.

#### Quality Control Cell

44.13. In order to strengthen the Food and Civil Supplies Department of the State Government for exercising better quality control during procurement, storage, handling, processing and sale of food-grains by different agencies and also to undertake training of the field staff, a Quality Control Cell has been set up with assistance from the Government of India. As per the present pattern of financing, a part of the expenditure is being met by the Central Government, Central Government's participation will end at the close of the Sixth Plan. Thereafter the scheme has to continue and has to be funded out of the State budget. The cell consists of two Assistant Directors, one Analyst and one Stenographer. With the present staffing pattern it is proposed to strengthen the Laboratory and introduce a mobile laboratory. The total expenditure during the Seventh Plan is estimated at Rs. 8 lakhs. Requirement for 1985-86 will be Rs. 1.00 lakh.

#### Modernisation of rice hullers

44.14. At present, there are about 6,500 rice hullers functioning in the State. Single huller units like all other rice mills are established and their functioning regulated under the provision of Rice Milling Industry (Regulation) Act, 1958. The pace of modernisation of these conventional hullers has been extremely slow. Modernisation of the hullers is a very important aspect of the post-harvest technology, as a substantial quantity of rice can be saved by using improved equipments in place of the out dated machinery. The concept of modernisation of rice mills was introduced in 1970 through suitable amendment of the Act. Three main objectives are sought to be achieved through modernisation. These are (a) increase the recovery percentage of rice, (b) extraction of edible oil from bran, (c) availability of fuel out of the husk.

44.15. Government of India have a scheme of modernisation of single rice hullers licensed prior to 1976 according to which subsidy of Rs. 5,000 representing 50% of the cost of modernisation of one unit is given to the huller owner. It is proposed to cover 150 units during 1984-85.

44-16. Since a large number of single huller units will still remain to be modernised and many of the huller owners would not have enough resources, it is proposed to have a subsidy scheme during the Seventh Plan under which 100 units per year will be extended financial help up to Rs. 6,000 per unit representing 50% of the cost of modernisation. The total requirement of funds during the plan has been assessed at Rs. 30 lakhs. During the year 1985-86 an amount of Rs. 6.00 lakhs will be required.

#### **Building Programmes**

44-17. Since 1976 Food and Civil Supplies Department has not taken up any scheme for the construction of buildings for the district establishment. Out of the thirteen districts only five districts namely, Halasore, Dhenkanal, Kalahandi, Koraput and Sambalpur are having independent office accommodation. Due to constraint on resources, it has not been possible to take up construction work in the remaining districts. Further, the works undertaken in the district of Kalahandi (Bhawanipatna) and Dhenkanal are in incomplete sitage for want of funds. External water-supply and sanitary installation are yet to be completed to the buildings newly constructed at these places and further funds required for completion of these works has been estimated at Rs. 1.62 lakhs. Similarly, for the building programme at Phulbani, Administrative approval for Rs. 3.80 lakhs has since been accorded but it has not been possible to take up the work for want of funds. It is estimated that Rs. 40.00 lakhs would be required during the Seventh Plan period. Further the department is required to strengthen the Public Distribution System (PDS) and the existing district establishment are likely to be reinforced by further staff there is urgent need for reasonable accommodation. The constructions are proposed to be taken up in a phased manner. For the year 1985-86, an outlay of Rs. 8.00 lakhs has been proposed.

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